

OBSOLETE
Rec'd from Res.
Admin

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104

Office of the Secretary

Bill, Did you receive a copy
of this? It would provide
funds for Equipment & Supplies,
but I guess that the
competition would be
severe. Beth

To: Deans, Directors, and Department Chairmen
From: Committee on Research
Date: October 15, 1975
Subject: New NSF Program

Enclosed is a draft description of a new NSF Program for research initiation and support for graduate students and post-doctoral fellows. One proposal per institution will be entertained by NSF. The Committee on Research will be pleased to initiate action which will lead to a response by the University of Pennsylvania. It is assumed that the proposal will be developed by faculty from interested departments. If your department is interested in participating, please advise me by October 31 of the name(s) of your faculty who will attend a briefing and kick-off meeting during the first week of November.

Bernard D. Steinberg (Chairman)
Moore School/D2

rm 302

Brookhaven equip.
Laser - tunable dye laser
etc.
Mass Spec - ~ 40 K.

6352

DRAFT

GUIDE FOR PREPARATION OF PROPOSALS

Research Initiation and Support Program for 1976-1977

I. Summary and Introduction

The Research Initiation and Support (RIAS) program being initiated in Fiscal Year 1976 has, as its primary objective, to improve the effectiveness, efficiency and quality of programs of training and research for young scientists at the graduate and postgraduate level. To achieve this objective, the Foundation will provide support for up to 4 years in response to well-defined plans from single institutions or groups of institutions which currently have graduate level research and training programs in science and engineering. Grants are expected to range from \$25,000 to \$250,000.

This document provides guidance for preparing proposals to be submitted for consideration under the RIAS program. In preparing proposals, care should be taken to provide all of the information requested to ensure meaningful and complete evaluation of the project design.

Different projects will have different levels of complexity and organization consistent with the needs and strategies proposed to meet those needs. Consequently, applicants should address the requirements called for in these guidelines in a manner appropriate to the size, complexity and expected outcomes of the proposed effort.

II. General Information

As part of its effort to assist U.S. colleges and universities in strengthening research and training programs at the graduate and postdoctoral levels, the Foundation is conducting the Research Initiation and Support Program (RIAS). The major objective of RIAS grants is to improve the effectiveness, efficiency, and quality of programs of training and research for young scientists at the graduate and postgraduate level. Institutions eligible to participate are those which currently have graduate level research and training programs in science and engineering. Sufficient strength should exist to serve as a basis for significant further improvement through a single coherent plan.

RIAS grants will provide support for elements such as for exploratory research for young investigators, for the acquisition of instruments, equipment, and facilities directly relevant to the institutions' overall plan for strengthening such research and training programs, and for other approaches aimed at meeting institutionally identified needs for training of young scientists. Grants will be made to address departmental, interdepartmental, or institution-wide training and research needs which are part of the proposals' primary improvement thrust. RIAS grants are not intended to encourage expansion nor to replace established support but to effect significant incremental improvements in quality or a measure of increased effectiveness and efficiency which can be expected to be sustained beyond the period of the grant.

Fields of Science Covered

"Science" as used in the RIAS program means any or all of the mathematical, physical, medical, biological, engineering, interdisciplinary and social sciences, but does not include the clinical areas of medicine, dentistry, public health, law, education or business, nor history or social work.

Institutional Eligibility

This program is open to U.S. institutions now offering graduate training leading to an advanced degree in any of the above fields of science. There are no limitations placed on the size or type of institution eligible to apply. Before expending the effort necessary to prepare a RIAS proposal, the prospective applicant, because of the anticipated severity of the competition, should make a careful and realistic estimate of its scientific training base and potential for improvement.

Limitations on Proposals

Only one proposal may be submitted in a given RIAS competition by any one institution. An institution is not, however, prohibited from being included in proposals submitted by other institutions involving cooperative arrangement, provided such proposed plans do not conflict with or directly duplicate the purpose of a

proposal which the institution may itself submit. To be competitive, proposals must clearly identify a central improvement area to which all aspects of the proposal are coherently related.

No restriction is placed on the type of proposal (e.g. departmental, interdepartmental, institution-wide or interinstitutional). An institution may include as few or as many academic sub-units, departments, or areas as can be justified under the single coherent improvement plan.

Proposals may request support from the Foundation for up to four years. However, depending on the complexity of the proposed plan, the Foundation may fund only a portion of the proposed program at the onset. In such cases, subsequent funding will be dependent upon evaluation of the program accomplishments of the initial award period and on funds availability. Under no circumstances, will Foundation funds exceed \$250,000 for any single RIAS project. Renewal requests to continue any particular project beyond a four-year period will not be considered. Further, no single institution may have more than 2 RIAS-supported activities on-going at any given time.

Definition of Young Scientist

The principal emphasis of RIAS grants is on the improvement of research and training programs focused on the training of young scientists. The term "young scientist" embraces individuals in the formative stages of their scientific careers, and, thus, is limited to graduate students and postdoctoral appointees.

Terms of Grants

Grants may provide support for a period of up to four years. It is expected that awards will range from \$25,000 to a maximum of \$250,000. Since RIAS awards, provide assistance to the grantee institution in strengthening its training and research programs, indirect costs will not be provided. Proposals will obviously be strengthened by meaningful demonstrations of institutional commitment but explicit levels of institutional matching or contribution to RIAS projects are not stipulated.

Activities Plan

In general, any activity which directly enhances a research and training program (either basic or applied) for young scientists may be proposed. Such activities may involve a single department, a combination of specific departments, an institutional-wide science program, or, if desirable, cooperative interinstitutional arrangements. The effectiveness of the proposed plan in upgrading training programs for young scientists, the promise of substantial incremental improvement, and the potential to sustain the strength achieved will be the major factors in evaluating RIAS proposals. While innovative or experimental arrangements may be proposed, neither evidence of innovation by itself nor evidence of current excellence of a training program by itself will constitute sufficient justification for a RIAS award. Proposals submitted under the RIAS program must argue that the improvement achieved during the grant will be substantial and is likely to continue.

Activities that may be proposed include, but are not limited to, exchange and release-time programs designed to bring about an increase in the quality and breadth of the graduate or postdoctoral student's research or training; research initiation opportunities; provision of scientific equipment and support services required in connection with the research of young scientists; limited strengthening of central facilities and support services used by young scientists; and development of seminars or other training activities designed to enhance research experience of young scientists. The institution must identify and focus on a critical need area around which the proposal is structured.

Proposed activities centering primarily on the development of additional degree programs, the evaluation of existing degree programs (e.g., master's level to Ph.D.), or the replacement of existing faculty and major facilities, will require especially thorough and complete justification.

III. Preparation of Proposals

A proposal to the RIAS program should include a profile and plans of the unit or sub-units involved and be prepared in such a way as to provide a clear understanding of the improvement plan from an educational, scientific, administrative and financial point of view. Proposals should clearly describe the present and anticipated future status of the particular department(s) or sub-unit(s) for which support is requested, and the relationship of each unit or area to the institution and to other units in the proposal should be shown. Proposals submitted to the RIAS Program must include a Cover Sheet, Institutional Forms, Abstract, Narrative, Budget, and Appendix.

Each proposal, excluding the appendices, should not exceed fifty (50) pages, double-spaced, nonreduced, printed on one side, stapled in the upper left-hand corner and unbound.

Cover Sheet and Institutional Forms

The Cover Sheet and Institutional Forms are shown at the end of this Guide. One copy of the proposal cover sheet must be signed by both the authorized institutional official empowered to commit the proposing organization to the conduct of the project and by the proposed project director responsible for technical direction of the project. In the case of cooperative arrangements involving more than one institution, the cover sheet must carry the signatures of the authorized institutional official and assisting project director from each institution.

In all cases the proposal must be approved by the principal academic officer of the proposing institution(s). Such approval is regarded by the Foundation as a statement that the proposed strategies for improvement, are consonant with accepted institutional goals and needs, and that resources necessary to effect the proposed RIAS plan will be made available and are within

the anticipated financial capability of the proposing organization.

Abstract

A brief one-page summary of the proposal should be given which describes the activities plan to be covered, the objectives of the activities plan, the proposed means for achieving them and the relationship of the project to institutional needs and goals. Budget information should not be included. If the proposal is supported, this page will be used to provide information to the public.

Table of Contents

Proposals should contain a Table of Contents to facilitate locating the elements outlined in these guidelines.

Narrative

The narrative should not exceed forty (40) pages and should address:

1) a description of the objectives of the project and an exposition of the central improvement theme.

2) a presentation of the institution's existing strengths in the areas of the proposal, including a description of current training and research capabilities for young scientists. Supporting services such as computer center, library, shops, etc. should be described, where appropriate. This section should contain brief biographical resumés of the major personnel associated with the project.

3) the proposed activities plan for achieving the project objectives and the means for tracking and evaluating progress. A discussion of the department(s) involved in the proposal and its (their) relationship to the activities plan is essential.

4) a justification of the proposed plan, including a description of any institutional study which has identified the institutional needs being addressed. This section should show the connection of the activities plan to the overall institutional goals and to national needs.

5) the means by which the institution expects that the increment of improvement achieved by this project will be sustained beyond the period of the grant.

6) a description of the administrative and financial commitment to the project, as well as plans for identifying and selecting particular young scientists that are to be the ultimate beneficiaries of funds.

7) a description of the specific arrangement established for the direction, coordination and monitoring of the project. The roles and responsibilities of individuals involved in the plan should be delineated and a schedule of activities and events, including the duration, sequence, and timing of principal events shown. Include here the proposed plans for periodic evaluation of progress on the programmatic, administrative and financial aspects of the project.

8) a description and discussion of currently supported activities, pending proposals, etc., which are related to and may impact upon the areas proposed. For example, if other related proposals have been or are being

submitted to another Foundation program or another Federal agency for consideration, this section should provide a brief summary of such proposals.

Budget

An estimated budget of expenditures required for accomplishment of the project objectives that reflects the narrative portion of the proposal is required. Budget Forms on page 0 are to be used for this purpose. Support for all discrete activities should be identified by function and appropriate page reference to the narrative portion of the proposal shown. Each activity listed should specify **for each year of the proposed project's duration**, the support requested from the Foundation and that to be obtained from other sources. In proposals involving more than one department and/or institution, the budgetary information should make explicit the extent of each unit's involvement.

Allowable budget items eligible for RIAS support include, but are not limited to:

- summer salaries,
- incremental institutional salary costs associated with exchange or release-time programs,
- permanent equipment,
- supplies, materials and expendable equipment,
- computer time,
- printing, publication and travel costs,
- field study and associated research expenses,
- minor alteration and renovation,
- technician and other support services, including services that may be supplied by part-time employment of students or other individuals,
- other direct costs, including audio-visual materials, books and periodicals, communication costs, consultant services.

Support may not be requested under RIAS for:

- academic-year faculty salary and fringe benefits, or academic-year stipends for students or postdoctorals,
- overhead, indirect costs, or tuition and fee charges,
- new construction or major renovation.

Appendix

The appendix should contain biographical and bibliographical data of the major personnel in the project, and any other tabular or report information which the institution feels may contribute to establishing the merits of its proposal. In view of the anticipated workload of reviewing panelists, however, voluminous appendices should be strictly avoided.

IV. Submission of Proposal

Fifteen copies of the complete proposal, including the original with the signatures referenced above of in-

stitutional officials, should be mailed as a single package to:

Central Processing Section
Research Initiation and Support Program
National Science Foundation
Washington, D.C. 20550

The closing date for receipt of proposals is March 1, 1976.

V. Evaluation and Selection of Proposals for Support

The evaluation of all proposals will be carried out by a panel of scientists and users of scientific manpower advising the program staff of the National Science Foundation and will be designed to identify the most promising proposals from comparable institutions of size and type.

Panelists will be asked to consider the criteria listed below, in evaluating RIAS proposals:

- coherence of project plan to institutional goals and needs and to research and training needs of young scientists.
- existence of sufficient academic and financial strength to serve as a realistic base for subsequent improvement.
- existence of general administrative and financial commitment to improvement and to the specific project proposed.
- scientific and educational merit of the project plan.
- effectiveness and efficiency (e.g., cost-effectiveness) of the project plan in meeting identified needs.
- feasibility of project plan within current fiscal capabilities.
- quality of key personnel involved in the plan.
- availability of associated laboratory and other related facilities necessary to carry out the project plans.
- adequacy of the management arrangements for monitoring progress and evaluating outcomes of the project plan.
- potential for sustaining incremental improvement.

VI. Awards

The Foundation will announce awards under the RIAS program in late June, 1976. Awards will be subject to applicable provisions of the NSF Grants Administration Manual (NSF 73-26). An approved budget will accompany each award. After an award is made, substantive changes in the activities plan must receive the prior approval of the Foundation.

VII. Additional Information

Proposal Information

While the Foundation's program staff will discuss proposers' plans informally prior to the submission of a proposal to ascertain their eligibility for support, informal or preliminary proposals will not be considered.

Inquiries are welcome at the program offices, room 464, 5225 Wisconsin Avenue, NW, Washington, DC (NOT a mailing address) or by telephone at (202) 282-7595.

Information & Privacy

Proposals which result in award become a part of the public record. Other proposals are treated as the property of the proposing institution and are treated as confidential to the extent permitted by law. Any information in a proposal which the proposing organization wishes to have treated as confidential should be separated from the proposal and clearly identified as such.

NSF Evaluation

The National Science Foundation will, as part of its own program assessment activities, carry out evaluations of all projects. Thus, proposers should be prepared to cooperate with the Foundation in such evaluations.

TO: Deans, Department Chairmen & Principal Investigators
FROM: Reagan Scurlock
DATE: February 13, 1976
SUBJECT: National Science Foundation Important Notice
No 61 - Reconsideration of Proposals Declined by
NSF

The subject Important Notice, reprinted herewith in its entirety, outlines the procedures for reconsideration of an NSF grant proposal which has been declined.

1. *Purpose.* The processes by which the National Science Foundation determines whether or not to award a grant for funding a proposal have been designed to result in funding of the highest quality science. To ensure the fairness of the design, the Foundation has for many years provided methods by which such processing could be reviewed at the request of a proposer who questioned the validity of the evaluation.

This Important Notice, effective immediately, makes uniform the methods for reconsideration which have heretofore varied in different parts of the agency. The Notice describes the types of reconsideration which the Foundation makes available to individuals and institutions concerning proposals.

This Notice does not apply to procurements governed by the Federal Property and Administrative Services Act or to applications for fellowships or travel grants.

2. *Policy.* Although award of NSF grants is discretionary, it is the policy of the Foundation that an applicant for NSF grant assistance whose proposal has been declined shall have an opportunity to receive an explanation from the appropriate Program Director, and reconsideration where the applicant has reason to believe that the proposal did not receive a fair and impartial initial evaluation. Where a proposal has been declined following review by the National Science Board, only an explanation will be available. Reconsideration is not an adversary process and a formal hearing will not be provided. The Foundation cannot assure applicants that reconsideration will result in the making of a grant award even if error is established in connection with the initial evaluation.*

3. *Definitions.*

a. "Declination" is a written notice by the Foundation advising that grant assistance will not be provided to the applicant in response to a proposal application, a renewal application or a continuing application.

* NOTE: Evaluation of proposals usually includes subjective professional judgments by peer scientists concerning scientific merit, relevance, significance to the discipline or to the problem being addressed, scientific competence and experience of the investigators, and adequacy of facilities and available support. Since funds available are usually insufficient to support all meritorious proposals, selection of proposals for funding must include consideration of the merit of a particular proposal relative to other proposals and availability of funds. Other factors considered include programmatic choices such as the relevance and significance to the NSF program from which the funds are to be allocated, and the need both to strengthen research and education in the sciences throughout the United States and to avoid undue geographical concentration.

b. "Principal Investigator" or "PI" means the individual designated by the applicant and approved by NSF to be principally responsible for the scientific or technical direction of the work described in a proposal. In some instances, the title "Project Director" is used instead of Principal Investigator.

c. "Applicant" or "Institution" means the academic, scientific, or other organization which submits a proposal. A Principal Investigator is, in most instances, affiliated with or employed by the applicant institution which submits a proposal. In rare instances, an individual may be both the applicant and the Principal Investigator.

d. "Authorized Institutional Representative" means the administrative official who is empowered to commit the applicant to the conduct of a project if NSF agrees to support it and who, by his or her signature on the proposal, is responsible for the prudent administration of the grant by the grantee institution if NSF awards a grant.

4. *Explanation by Program Director.* A Principal Investigator desiring information concerning a declination should request an explanation from the appropriate Program Director by letter, by telephone, or in person. The Program Director will furnish information concerning the basis for the NSF action including, when requested, verbatim comments of peer reviews with the names and other identifying data of the individual reviewers deleted where such reviews were solicited by NSF after January 1, 1976. Reviewer comments solicited before that date will be paraphrased. The Program Director will afford the PI an opportunity to present the PI's point of view and will take such action as is appropriate. If, after declination of award, changes are made to the proposal, such changes will not be considered in connection with reconsideration of the earlier proposal. However, the PI should be informed that a revised proposal may be submitted for consideration as a new proposal under the usual review and evaluation procedures. If the PI is dissatisfied with the Program Director's explanation, he or she may request reconsideration as provided in paragraph 5, below.

5. *Reconsideration.* The Principal Investigator may request in writing that the Foundation reconsider its action provided such request:

- follows the explanation by the Program Director; and
- is postmarked or received by the Foundation no later than 180 days following the date of the declination.

Such request shall be directed to the Assistant Director of the Directorate that handled the proposal and must set forth facts on which the Principal Investigator bases his or her belief that reconsideration is warranted. The Assistant Director may conduct the reconsideration personally or may designate another NSF official to do so provided that no official so designated shall have participated in the initial evaluation.

The Assistant Director or other official designated by the Assistant Director shall reexamine the procedures followed in the initial evaluation to determine whether the proposal had received fair consideration. Such official may request additional information from the PI and may, if deemed necessary, obtain additional peer review comments.

Within 30 days following the date of the request, the Assistant Director shall furnish to the PI in writing the results of the reconsideration. If more time is necessary, the PI will be notified in writing of the reasons therefor and of the date by which the written report is expected to be provided. If reconsideration reaffirms the declination, the Assistant Director will inform the PI of the availability of further reconsideration by the Deputy Director of the National Science Foundation and of the requirements for submitting such a request as provided in paragraph 6, below.

6. *Further Reconsideration by Deputy Director.* Within 180 days following reconsideration pursuant to paragraph 5, above, further review may be obtained by the applicant as follows:

a. *Who may request further reconsideration.* Such request may be submitted only: (1) by the institution which filed the proposal for grant assistance, or (2) where the proposal was submitted by an individual or individuals not connected with an institution, by such individual(s).

b. *Time for submitting request.* A request for further reconsideration must be postmarked or received by the Foundation within 180 days following the date of the written results of reconsideration provided for in paragraph 5, above.

c. *Form of request.* A request for further reconsideration need not be in any particular format, but it (1) must be in writing and signed by the Authorized Institutional Representative and by the PI(s), (2) must state the proposal number (if any), and the title of the proposal, and (3) must set forth the reasons why it is believed that an error occurred in the initial evaluation and all pertinent facts and circumstances in support thereof.

d. *Address request for further reconsideration to:*

The Deputy Director
National Science Foundation
1800 G Street, N.W.
Washington, D.C. 20550

e. *Who shall conduct further reconsideration.* The Deputy Director may conduct the reconsideration personally or may designate one or more NSF officials to do so provided that no official so designated shall have participated in the initial evaluation or in the earlier reconsideration.

f. *Scope of reconsideration.* The Deputy Director or the official(s) designated by the Deputy Director shall review the request and the prior NSF actions concerning the proposal. Administrative judgments previously made concerning award or declination for the proposal will be reexamined. Where such reexamination indicates that administrative judgments as to scientific merit of the proposal may have been influenced significantly by an inadequate or unfair peer review, additional peer review will be obtained.

g. *Report.* A written report of the results of the further reconsideration shall be prepared for submission to the requestor by the Deputy Director within 30 days following the date of the request. If more time is necessary, the requestor will be notified in writing of the reasons therefor and of the date by which the written report is expected to be issued.

h. *Finality.* Once reconsideration by the Deputy Director has been completed, no further reconsideration will be made of the proposal or of a substantively identical proposal submitted thereafter. This does not preclude the submission of a substantially revised proposal in the same program area for consideration as a new proposal under the usual review and evaluation procedures.



H. Gufford Stever
Director

004
RALPH, ELIZABETH K
BW4 DRL E1

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 4

The College

DEPARTMENT OF PHYSICS

February 21, 1976

Professor Donald N. Langenberg
Vice Provost for Research
106 College Hall/CO

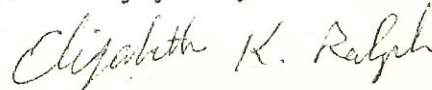
Dear Professor Langenberg:

Our proposal entitled "Research Initiation and Education in Application of Physical Science to Archaeology, Anthropology, and Geology" is submitted for consideration by you and the Committee on Research. It was written somewhat hastily and may contain gaps, omissions, etc. We shall be glad to revise it as required or suggested.

If this proposal is in conflict with our request for participation in the Consortium, we prefer to drop that request or let Stanford Research Institute be the principal investigator.

Thank you for your advice and consideration of this proposal.

Sincerely yours,



Elizabeth K. Ralph

NATIONAL SCIENCE FOUNDATION

WASHINGTON, D.C. 20550

Directorate for Science Education
Division of Science Education Resources
Improvement

Re: 76-18169

JUN 23 1976

Dr. Elizabeth K. Ralph
Department of Physics
University of Pennsylvania
Philadelphia, Pennsylvania 19174

Dear Dr. Ralph:

We regret to inform you that your proposal for a Research Initiation and Support project did not place among those eventually determined to be supportable by the National Science Foundation.

The Foundation bases its decisions primarily on the published program criteria related to the scientific and educational merit of the project activity as described in the proposal. In this regard, we seek and obtain advice from members of the scientific community. On occasion, when there are proposals of substantially equal merit, other factors such as geographic distribution and subject matter balance are considered. Upon request, we will provide you the reviewers' comments and information which led to the Foundation's decision concerning this particular proposal.

Although the Foundation is unable to support this proposal, we thank you for submitting it, and assure you that we shall be pleased to consider future proposals which you may wish to submit.

Sincerely yours,



Walter L. Gillespie
Division Director

Copy to:
Dr. Martin Meyerson
President

NATIONAL SCIENCE FOUNDATION

news

Nathan Kassack
(202) 632-5722
Home: (301) 593-0240

FOR RELEASE:
June 25, 1976
NSF PR76-55

AWARDS TO COLLEGES AND UNIVERSITIES TO IMPROVE GRADUATE RESEARCH TRAINING PROGRAMS FOR YOUNG SCIENTISTS

Young scientists will benefit from improved quality of instruction in research as the result of 18 awards made today by the National Science Foundation (NSF). A total of \$3,721,100 granted through the Foundation's new Research Initiation and Support (RIAS) Program will assist institutions in upgrading the quality, effectiveness, or efficiency of their programs for graduate students, postdoctorals, and nontenured faculty with recently completed graduate training.

RIAS projects are designed to meet individual institutional needs in upgrading the training and research opportunities provided young scientists. Funds will be used for the support of exploratory research, the acquisition of instruments, equipment and facilities for research training, and other programs and activities aimed at meeting the needs of this target group. Projects supported through these awards respond to a variety of institutional situations. Some concentrate on a given discipline and involve a single department;

-more-



1800 G STREET • WASHINGTON, D. C. 20550

some concern themselves with a number of scientific disciplines, still others bring together several natural and social sciences within the context of an institution-wide effort.

Examples of projects funded are the following:

At the University of Colorado the Department of Chemistry, with the assistance of RIAS funds, will provide specialized training for young chemists pursuing research on such pressing technological problems as oil shale development, industrial catalysis, and nitrogen fixation.

Young engineers and geologists at Brown University will combine their efforts to develop expertise in tectonophysics, an interdisciplinary specialty growing out of recent developments in theories on the evolution of the earth's structure. The project will provide improved research facilities, help defray costs of travel to field sites, and assist in bringing outside experts to Brown for colloquia and symposia. Brown University, which has made a strong commitment to its young staff for developing strength in this interdisciplinary area, will bear a substantial share of project costs.

The Alabama A and M University will create a research support program to encourage young investigators in biology, chemistry, mathematics, physics, and the environmental and food sciences to initiate and develop ideas with scientific potential. Subsequent support for the program is expected to be derived from the general university budget, various philanthropic organizations and other research support groups.

At Iowa State University graduate students will be specially trained to utilize with maximum efficiency new resources in data handling and processing made available by linking separate minicomputers in a special campus-wide computer network. Through joining NSF and institutional support, young scientists in the several colleges on the campus will have available on a regular basis a very powerful and vital tool for facilitating and strengthening their research activities.

The 18 awards in this first year of the RIAS program were selected from among 260 proposals that requested \$59 million. The awards go to institutions in 16 different states.

-END-

<u>State/Institution City, Zip</u>	<u>Project Director Academic Address</u>	<u>Discipline(s)</u>	<u>Award Amount</u>
MICHIGAN			
Michigan Techno- logical Univ. Houghton 49931	Darrell W. Smith Dept. of Metallurgical Engineering	EN	\$185,800
NEVADA			
Univ. of Nevada, Reno Reno 89507	Ronald S. Pardini Div. of Biochemistry	BC	\$233,200
NEW YORK			
CUNY-Lehman College New York, New York 10018	Dominick V. Basile Department of Biological Science	BO	\$234,700
OREGON			
Portland State Univ. Portland 97207	Karl Dittmer College of Science	CH,EN,PY	\$224,400
PENNSYLVANIA			
Lehigh University Bethlehem 18015	Edward K. Levy Dept. of Mechanical Engineering & Mechanics	CH,EN,PY	\$218,400
RHODE ISLAND			
Brown University Providence 02912	Terry E. Tullis Dept. of Geological Sciences	EN,GE	\$225,300
SOUTH DAKOTA			
Univ. of South Dakota Vermillion 57069	Frank Einhellig Dept. of Biology	BZ,CH	\$103,300

NATIONAL SCIENCE FOUNDATION
 Research Initiation and Support
 1976

<u>State/Institution City, Zip</u>	<u>Project Director Academic Address</u>	<u>Discipline(s)*</u>	<u>Award Amount</u>
ALABAMA			
Alabama A & M Univ. Normal 35762	Jacob Savage Department of Biology	BZ,CH,EC,MA, NF,PY	\$204,200
CALIFORNIA			
Univ. of California, Los Angeles Los Angeles 90024	R. John Collier Dept. of Bacteriology	BZ	\$236,500
COLORADO			
Univ. of Colorado Boulder 80302	Charles H. DePuy Department of Chemistry	CH	\$130,100
ILLINOIS			
Univ. of Illinois Urbana 61801	James Heath Dept. of Physiology	BZ	\$236,200
IOWA			
Iowa State Univ. Ames 50010	Clair G. Maple Computation Center	AH,BZ,EN,PZ	\$246,800
MASSACHUSETTS			
Harvard University Cambridge 02138	Harrison C. White Dept. of Sociology	IN,BZ,MA,SZ	\$190,900
Massachusetts Institute of Technology Cambridge 02139	Raymond F. Baddour Dept. of Chemical Eng.	EK	\$243,800
Worcester Poly- technic Institute Worcester 01609	Imre Zwiebel Dept. of Chemical Eng.	BZ,CH,EK,SZ	\$199,800

*Code Key on last page of listing.

<u>State/Institution City, Zip</u>	<u>Project Director Academic Address</u>	<u>Discipline(s)</u>	<u>Award Amount</u>
TEXAS			
Univ. of Texas, Austin Austin 78712	Raymond T. Yeh Dept. of Computer Sciences	CO,EN	\$242,200
VIRGINIA			
Univ. of Virginia Charlottesville 22903	James Deese Dept. of Psychology	BZ,PS	\$204,800
WISCONSIN			
Univ. of Wisconsin, Green Bay Green Bay 54302	Charles R. Rhyner Dept. of Science and Environmental Change,	BZ,EN,PZ,SZ	\$160,700

Discipline Codes

AH	Animal Science	GE	Geology
BC	Biochemistry	IN	Interdisciplinary
BO	Botany	MA	Mathematics
BZ	Biological Sciences	NF	Foods
CH	Chemistry	PS	Psychology
CO	Computer Sciences	PY	Physics
EC	Ecology	PZ	Physical Sciences
EK	Chemical Engineering	SZ	Social Sciences
EN	Engineering		

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19174

The College

DEPARTMENT OF PHYSICS

July 15, 1976

Dr. Walter L. Gillespie, Director
Division of Science Education
Resources Improvement
National Science Foundation
Washington, D.C. 20550

Re: 76-18169

Dear Dr. Gillespie:

Thank you for your letter of June 23rd and for the NSF news release PR75-55 in regard to the RIAS grants.

For guidance with future grant proposals, I should appreciate it if you would send me some of the reviewers' comments, etc. I should like to know, especially, whether or not the experimental part of the proposal was weak, or whether it was criticized mainly on the basis of its contribution to education.

Thank you in advance.

Sincerely yours,

Elizabeth K. Ralph

EKR:KS

NATIONAL SCIENCE FOUNDATION

WASHINGTON, D.C. 20550

Directorate for Science Education
Division of Science Education Resources Improvement

21 JUL 1976

RE: Research Initiation and
Support (RIAS) Program
Proposal No. 76-18169

Dr. Elizabeth K. Ralph
Department of Physics
University of Pennsylvania
Philadelphia, Pennsylvania 19174

Dear Dr. Ralph:

This is to acknowledge receipt of your recent request for information concerning the declination of the above proposal.

You may be interested to know that the RIAS program received 260 proposals requesting \$59 million. Nineteen of these were supported with the \$4 million available to the program. Consequently, many meritorious proposals had to be declined.

We shall be pleased to provide you with the reasons leading to the Foundation's decision. Although we have received many such requests, we shall do our best to provide such information as soon as possible. When time permits, hopefully within the next four weeks, a member of the program staff will respond to your inquiry.

Sincerely yours,



Walter L. Gillespie
Division Director

UNIVERSITY INTRAMURAL CORRESPONDENCE

Office of the Vice Provost for Graduate Studies
and Research

July 22, 1976

Dr. Elizabeth K. Ralph
Department of Physics
BW4 Rittenhouse Laboratory/El

Dear Beth:

I was sorry to hear that the RIAS proposal was not funded. Wouldn't it be useful to ask NSF for the reviewers' comments for future use?

Sincerely yours,

Don Langenberg/slg

D. N. Langenberg
Vice Provost for Graduate
Studies and Research

DNL:slg

NATIONAL SCIENCE FOUNDATION

WASHINGTON, D.C. 20550

Directorate for Science Education
Division of Science Education Resources Improvement

20 AUG 1976

RE: 76-18169

Dr. Elizabeth K. Ralph
Department of Physics
University of Pennsylvania
Philadelphia, Pennsylvania 19174

Please return

Dr. Stephens
Dr. Langenberg
Thanks, Both
We may want to
review this again
next year.

Don

Dear Dr. Ralph:

This is in response to your request for details of our review of the above-referenced proposal to the Research Initiation and Support (RIAS) Program.

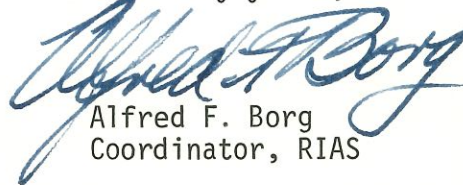
As a result of a recent change in Foundation policy, all reviews solicited after January 1, 1976, are being made available upon request in the form of verbatim, but anonymous, comments by reviewers. Therefore, we have enclosed copies of the individual panelists' evaluation and summary sheets, chairman summary sheets, and the staff recommendation form. Also enclosed is a description of the review procedures.

Much of the success of any proposal depends upon the extent to which the quality of the project is transmitted to a group of your peers. In your case you will notice that reviewers perceived significant flaws in the proposal as submitted. You may judge for yourself whether these flaws represent weaknesses in the project, or in the proposal.

As you are probably aware, responding to comments in areas judged to be weak by those who reviewed your proposal is in no way an assurance of success for a future proposal. The evaluation of any future proposal will necessarily reflect the judgment of those who review it and the nature of the new competition.

I hope these comments will prove useful to you in your planning for improvement in graduate and postgraduate science education. Your continued interest in our program is appreciated.

Sincerely yours,


Alfred F. Borg
Coordinator, RIAS

Enclosures

RESEARCH INITIATION AND SUPPORT (RIAS)

REVIEW PROCEDURES

Proposals were initially separated into science discipline groups, and reviewed in four categories defined by proposer type, that is, "research universities"; other doctoral granting institutions; institutions whose graduate training is conducted, for the most part, at the Master's level; and consortia. Each proposal was reviewed by two separate and independent panels composed of practicing scientists, research administrators, "young scientists", and evaluation specialists having a science background.

Panelists were instructed to review the assigned proposals individually and evaluate each of seven criteria by assigning a score of 7 to 1, which corresponds to a rating of excellent to unacceptable, respectively. Following individual evaluations, panel members met for discussion and were given the opportunity to assign a second and final score, based on their own judgment and insights gained from the discussion.

Some explanation of score values shown on the staff proposal recommendation form is needed. You will note two evaluation entries. One, headed "raw score", is the sum of the total number of points assigned to each proposal by the ten reviewers operating as two, independent panels. In a very few cases it includes numerical adjustments where, for one reason or another, less than ten panelists reviewed the proposal. The other entry, labeled "standard score", represents a conversion of the panel "raw score" into a standardized score for the purpose of statistically minimizing the effects of variability present between pairs of panels. A mean of 100 and a standard deviation of 20 were used in calculating the standard score distribution. Merit ranking of proposals was based on the standard score calculated for each.

RESEARCH INITIATION AND SUPPORT PROGRAM

Please return to E.K. Ralph

Proposal Recommendation Form

E# 18169 INSTITUTION UNIV OF PENNSYLVANIA
STANDARD SCORE 100 RAW SCORE 301

Program Recommendation

- Award
- Award with modification
- Decline for lack of funds
- Decline

Basis for Recommendation

- Review indicated proposal to be of sufficiently high merit to justify funding on the basis of merit alone.
- Review indicated proposal to be of high merit, but program recommendation depends on other criteria in addition to merit. Program decision to award/decline is based on additional considerations:

- Review indicated proposal to be of merit; however limited program funds will not allow support.
- Review established the proposal to be of insufficient merit to justify support.

Program Officer Alfred F. Borg Date JUN 1 1976

INSTITUTION <i>University of Pennsylvania</i>	PROPOSAL NO. SER 76- 18169
--	--------------------------------------

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

*This is not a well designed
project. Connections to
the improvement of the quality
of young scientists are unclear.
No evaluation plan.*

CRITERIA	FINAL SCORES
1	4 ✓
2	3 ✓
3	4 ✓
4	4 ✓
5	1 ✓
6	5 ✓
7	4 ✓
TOTAL	25 ✓

[Signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet Panel Proposing Institution University of Pennsylvania Proposal No.: SER76-

CRITERIA/CONSIDERATIONS

1 8 1 6 9

1. Planning/Assessment

Consider:

Institutional goals and objectives.

Appropriateness of proposal objectives with respect to institutional objectives.

Appropriateness of proposal objectives from the standpoint of RIAS objectives.

Clarity, specificity and measurability of proposal objectives.

Needs assessment evidence.

Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

No real strength

INITIAL SCORE

3

FINAL SCORE

4

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

INITIAL SCORE
3

FINAL SCORE
3

Unclear
Not really a plan

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
4

Nothing unusual

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

Ordinary provision

INITIAL SCORE
<i>4</i>

FINAL SCORE
<i>4</i>

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

There is no evaluation plan

INITIAL SCORE
<i>1</i>

FINAL SCORE
<i>1</i>

Reviewer Initials

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

Adequate

INITIAL SCORE
5

FINAL SCORE
5

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities.
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period.
Significance of probable project outcomes.

Explanation of Rating:

Will be there when project ends.

INITIAL SCORE
4

FINAL SCORE
4

INSTITUTION

U of Pennsylvania

PROPOSAL NO.

SER 76- 18169

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

Primarily a request for equipment and fellowship support. Not as much a plan as a scientific content discourse. No plan for evaluation

CRITERIA	FINAL SCORES
1	4 ✓
2	3 ✓
3	5 ✓
4	3 ✓
5	1 ✓
6	5 ✓
7	5 ✓
TOTAL	26 ✓

[Handwritten signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet 4 Panel 2 Proposing Institution U of PENNSYLVANIA Proposal No.: SER76-18169

CRITERIA/CONSIDERATIONS

18169

1. Planning/Assessment

Consider:

Institutional goals and objectives.

Appropriateness of proposal objectives with respect to institutional objectives.

Appropriateness of proposal objectives from the standpoint of RIAS objectives.

Clarity, specificity and measurability of proposal objectives.

Needs assessment evidence.

Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

INITIAL SCORE

4

FINAL SCORE

4

Note request for $\approx 30,000$ for Research Fellowships

Primarily a request for equipment for general use (carbon dating) and fellowships support

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

INITIAL SCORE
3

FINAL SCORE
3

Primarily a scientific discourse

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

Does involve a number of departments

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of ~~internal~~ and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

INITIAL SCORE
3

FINAL SCORE
3

Neblom

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

INITIAL SCORE
1

FINAL SCORE
1

No plan for evaluation

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

Adequate

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities.
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period.
Significance of probable project outcomes.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

Equipment would continue to be useful; impact limited.

INSTITUTION

Univ of Pennsylvania

PROPOSAL NO.

SER 76- 18169

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

*Method of Student support is not consistent
with RIAS objectives
Evaluation methods are poor
Long range plans not developed.
Objectives unclear for research*

CRITERIA	FINAL SCORES
1	4 ✓
2	3 ✓
3	4 ✓
4	4 ✓
5	2 ✓
6	5 ✓
7	5 ✓
TOTAL	27 ✓

[Signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet _____ Panel _____ Proposing Institution University of Pennsylvania Proposal No.: SER76- _____

CRITERIA/CONSIDERATIONS

18169

1. Planning/Assessment

Consider:

- Institutional goals and objectives.
- Appropriateness of proposal objectives with respect to institutional objectives.
- Appropriateness of proposal objectives from the standpoint of RIAS objectives.
- Clarity, specificity and measurability of proposal objectives.
- Needs assessment evidence.
- Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
4

The basic objectives seem consistent with RIAS objectives. There is some question of the support of graduate students. Objectives unclear for research.

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

Proposal has fairly good objectives

INITIAL SCORE
5

FINAL SCORE
3

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

Educational content is fair

INITIAL SCORE
5

FINAL SCORE
4

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

Adapted

INITIAL SCORE
5

FINAL SCORE
4

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

*internal evaluation ok but
external is lacking*

INITIAL SCORE
4

FINAL SCORE
2

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

Adequate

INITIAL SCORE
5

FINAL SCORE
5

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities.
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period.
Significance of probable project outcomes.

Explanation of Rating:

Long range plans not developed, Program is of value.

INITIAL SCORE
4

FINAL SCORE
5

INSTITUTION <i>Univ of PA</i>	PROPOSAL NO. SER 76- 18169
----------------------------------	--------------------------------------

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

Proposal is to acquire equipment. No real plan for young faculty or postdoctor supervision or opportunity other than to use the facility. Will have university wide use.

CRITERIA	FINAL SCORES
1	4
2	3
3	4
4	4
5	3
6	5
7	5

TOTAL **28**
[Signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Package Panel Proposing Institution Univ PA Proposal No.: SER76-

18169

CRITERIA/CONSIDERATIONS

1. Planning/Assessment

Consider:

- Institutional goals and objectives.
- Appropriateness of proposal objectives with respect to institutional objectives.
- Appropriateness of proposal objectives from the standpoint of RIAS objectives.
- Clarity, specificity and measurability of proposal objectives.
- Needs assessment evidence.
- Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
4

Proposal is to buy specialized research equipment for use of several departments. No educational program is proposed. Benefits to young faculty or post doctoral students will be simply a new tool available.

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

*Really no plan of significance
No cost effectiveness.*

INITIAL SCORE
3

FINAL SCORE
3

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

For those in need of such a facility the merit is high. Am not sure faculty is a critical need.

INITIAL SCORE
4

FINAL SCORE
4

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

No management

INITIAL SCORE
<i>4</i>

FINAL SCORE
<i>4</i>

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

Just faculty evaluation of research

INITIAL SCORE
<i>3</i>

FINAL SCORE
<i>3</i>

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

Adequate

INITIAL SCORE
5

FINAL SCORE
5

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities.
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period.
Significance of probable project outcomes.

Explanation of Rating:

*Facility will be there
and so used and maintained*

INITIAL SCORE
5

FINAL SCORE
5

INSTITUTION

Pennsylvania

PROPOSAL NO.

SER 76- 18169

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

PANEL DISCUSSION

Please summarize the major highlights of the panel discussion related to the proposed project. Include significant observations on the strengths and weaknesses of the proposal.

Feel that technical merit sounds good.
Some felt this proposal too equipment oriented relative to RIAS goals.
Overall, better than average.
Methods seem to be continuation of usual techniques.

PLEASE RECORD FINAL SCORES ASSIGNED BY EACH MEMBER OF YOUR PANEL; TOTAL EACH COLUMN AND ROW.

PANEL MEMBER (NAME)	Criteria							ROW TOTAL
	Score	1	2	3	4	5	6	
	5	5	6	5	5	5	4	35 ✓
	5	4	5	4	4	5	4	31 ✓
	4	4	6	5	6	5	7	37 ✓
	5	4	7	5	4	5	5	35 ✓
	3	6	5	6	2	6	2	30 ✓
								TOTAL PANEL GRADE
								168

APB

INSTITUTION

University of Pennsylvania

PROPOSAL NO.

SER 76-18169

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

The proposal is good. The evaluation section should be stronger and more innovative

CRITERIA	FINAL SCORES
1	5 ✓
2	5 ✓
3	6 ✓
4	5 ✓
5	5 ✓
6	5 ✓
7	4 ✓
TOTAL	35 ✓

ATP

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet Panel Proposing Institution Univ of Penn. Proposal No.: SER76-

CRITERIA/CONSIDERATIONS

18169

1. Planning/Assessment

Consider:

Institutional goals and objectives.

Appropriateness of proposal objectives with respect to institutional objectives.

Appropriateness of proposal objectives from the standpoint of RIAS objectives.

Clarity, specificity and measurability of proposal objectives.

Needs assessment evidence.

Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

The planning shows some thought and is in harmony with the stated objectives of the University

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

The plan of activities is consistent with the project activities and appropriate to achieve the objectives

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

INITIAL SCORE
6

FINAL SCORE
6

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

The evaluation could be strengthened by going beyond the usual traditional methods.

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

more of the regular staff could be involved

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities.
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period.
Significance of probable project outcomes.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
4

Proposal did not give enough details to demonstrate continuous impact

INSTITUTION <i>UNIVERSITY OF PENNSYLVANIA</i>	PROPOSAL NO. SER 76- 18169
--	--------------------------------------

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

A good proposal in an fascinating area of science which involves the talents of an array of professional from a broad range of disciplines. The heavy emphasis upon expenditures for equipment far overshadows the expenditures for personnel, particularly young personnel.

CRITERIA	FINAL SCORES
1	5 ✓
2	4 ✓
3	5 ✓
4	4 ✓
5	4 ✓
6	5 ✓
7	4 ✓
TOTAL	31 ✓

[Handwritten signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet Panel Proposing Institution UNIV. OF TEXAS Proposal No.: SER76-

18169

CRITERIA/CONSIDERATIONS

1. Planning/Assessment

Consider:

Institutional goals and objectives.

Appropriateness of proposal objectives with respect to institutional objectives.

Appropriateness of proposal objectives from the standpoint of RIAS objectives.

Clarity, specificity and measurability of proposal objectives.

Needs assessment evidence.

Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

INITIAL SCORE

4

FINAL SCORE

5

A good proposal in that it combines the interdisciplinary talents of a range of disciplines. It may result in genuine breakthroughs in the archaeological area.

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

INITIAL SCORE
3

FINAL SCORE
4

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
5

A very relevant scientific topic, in that the approach proposed has allowed for giant forward steps in the science of archeology.

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

INITIAL SCORE
3

FINAL SCORE
4

Good management scheme presented with considerable thought being given into the organizational structure of the effort.

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
4

In general, these factors are clearly delineated.

Reviewer Initials

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

An excellent interdisciplinary team

INITIAL SCORE
5

FINAL SCORE
5

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities.
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period.
Significance of probable project outcomes.

Explanation of Rating:

The content of the proposal is rather fuzzy.

INITIAL SCORE
3

FINAL SCORE
4

INSTITUTION <i>U. OF PENNSYLVANIA</i>	PROPOSAL NO. <i>SER 76- 18169</i>
--	--------------------------------------

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

This proposal has great merit. I believe the effects of the project will be far reaching and sustained on young scientists.

CRITERIA	FINAL SCORES
1	4 ✓
2	4 ✓
3	6 ✓
4	5 ✓
5	6 ✓
6	5 ✓
7	7 ✓
TOTAL	37 ✓

[Signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet 10 Panel 5 Proposing Institution V. F. FENN Proposal No.: SER76-18169

CRITERIA/CONSIDERATIONS

18169

1. Planning/Assessment

Consider:

- Institutional goals and objectives.
- Appropriateness of proposal objectives with respect to institutional objectives.
- Appropriateness of proposal objectives from the standpoint of RIAS objectives.
- Clarity, specificity and measurability of proposal objectives.
- Needs assessment evidence.
- Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

The expressed goals were "unty" in the university. I am not totally convinced that this proposal will accomplish this to the degree implied.

INITIAL SCORE
4

FINAL SCORE
4

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

Agree, this is a request for equipment mainly, probably need to justify this more (ie. mass spectrometer)

INITIAL SCORE
5

FINAL SCORE
4

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

Since the facility will have a long life time the effects should continue for a long time. The technical aspects appear feasible.

INITIAL SCORE
6

FINAL SCORE
6

E.

4. Project Management

Consider:

- A sound analysis of management scheme for proposed project.
- Identification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

adequate

INITIAL SCORE
<i>5</i>

FINAL SCORE
<i>5</i>

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

The possibilities for continued evaluation are great

INITIAL SCORE
<i>6</i>

FINAL SCORE
<i>6</i>

6. Personnel

Consider:

- Performance record of key project personnel: (a) scientific, (b) administrative.
- Use of external consultants and/or visiting staff.
- Extent of staff commitment.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

7. Maintenance/Impact Potential

Consider:

- Extent of institutional commitment to project.
- Potential for institutionalization of program activities.
- Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
- Plans for continuing self-assessment and planning in post-award period.
- Significance of probable project outcomes.

Explanation of Rating:

In total the equipment will last
the project will be self sustaining.
I believe the project will provide an excellent
opportunity for young scientists to grow and
develop

INITIAL SCORE
7

FINAL SCORE
7

INSTITUTION

PROPOSAL NO.

SER 76- 18169

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

Overall I believe the proposal to be above average, but not to the "excellence" level. Probably the weakest point is in lack of a detailed evaluation plan.

CRITERIA	FINAL SCORES
1	5 ✓
2	4 ✓
3	7 ✓
4	5 ✓
5	4 ✓
6	5 ✓
7	5 ✓
TOTAL	35 ✓

[Handwritten signature]

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet _____ Panel _____ Proposing Institution _____ Proposal No.: SER76- _____

18169

CRITERIA/CONSIDERATIONS

1. Planning/Assessment

Consider:

- Institutional goals and objectives. *Good*
- Appropriateness of proposal objectives with respect to institutional objectives. *Good.*
- Appropriateness of proposal objectives from the standpoint of RIAS objectives. *Fair.*
- Clarity, specificity and measurability of proposal objectives.
- Needs assessment evidence.
- Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally. *Good*

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

*Good goals match.
shows needs*

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
4

Adequate resources.
Really they wrote of scientific merit rather than plan & strategies

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

INITIAL SCORE
7

FINAL SCORE
7

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

Covered well here.

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes. *None*
- Explanation of cost-effectiveness strategy. *None*
- Identification of evaluation personnel and their responsibilities. *Given*

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
4

No modifications plans given and probably not needed.

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative.
Use of external consultants and/or visiting staff.
Extent of staff commitment.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project.
Potential for institutionalization of program activities. *Good*
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period. *None given*
Significance of probable project outcomes.

Explanation of Rating:

INITIAL SCORE
5

FINAL SCORE
5

INSTITUTION <i>Univ. of Pennsylvania</i>	PROPOSAL NO. SER 76- 18169
---	--------------------------------------

Verbatim but anonymous copies of reviews will be sent only to the principal investigator/project director on request. Subject to this NSF policy and applicable laws, including the Freedom of Information Act, 5 USC 552, reviewers' comments will be given maximum protection from disclosure.

FINAL CUMULATIVE RATING

Please consider the proposal as a whole. Comment on the overall quality of the proposed project; include suggested changes which might improve areas in the proposed project which you judge to be weak. If, in the opinion of the reviewer, the overall view represents a major deviation from the cumulative final score, please document the seeming inconsistency.

Local Review Statement not signed!
Limited market for graduates of proposed program.
Proposed research area is very narrow with respect to Institutional goals.
Proposed activities are well defined, maybe too detailed.
Well-qualified personnel.
Proposed evaluation (formative and summative) are very weak.
Equipment oriented rather than people centered.

CRITERIA	FINAL SCORES
1	3 ✓
2	6 ✓
3	5 ✓
4	6 ✓
5	2 ✓
6	6 ✓
7	2 ✓
TOTAL	30 ✓

AM

PROPOSAL EVALUATION FORM

RESEARCH INITIATION AND SUPPORT (RIAS)

DIRECTIONS: After studying the subject proposal, please assign a numerical rating to each of seven criteria listed on this and the following pages and enter it in the space provided on the Reviewer Summary Sheet for the Initial Score. The rating is based on a seven-point scale in which 7 indicates that the treatment of the elements listed under the criterion under consideration is outstanding, 1 that it is unacceptable, and 4 that it is of an average nature. Following this initial assessment, discuss the merits of each proposal relative to the seven criteria with your colleagues on the panel. You may wish to alter your rating in view of any insights gained during the discussion. In any event enter a second rating on the Summary Sheet under Final Score at the conclusion of your discussion. If this rating differs from the initial one, please include the reason(s) for the change in your explanation of the rating you have assigned to that particular criterion.

Packet Panel Proposing Institution Univ. of Pennsylvania Proposal No.: SER76-

18169

CRITERIA/CONSIDERATIONS

1. Planning/Assessment

Consider:

Institutional goals and objectives.

Appropriateness of proposal objectives with respect to institutional objectives.

Appropriateness of proposal objectives from the standpoint of RIAS objectives.

Clarity, specificity and measurability of proposal objectives. *weak*

Needs assessment evidence. *weak*

Potential value to proposing institution(s) in particular, and to graduate and postgraduate education in the sciences generally.

Explanation of Rating:

INITIAL SCORE

3

FINAL SCORE

3

Local Review Statement not signed!

Proposed research area is very narrow with respect to Institutional goals.

2. Proposed Plan/Strategies and Activities

Consider:

- Consistency of planned activities with project objectives.
- Adequacy of resources available for implementation of proposed plan.
- Appropriateness of time allocation.
- Provision for the collection of appropriate project data.
- Cost-effectiveness of proposed activities and provision for collection of cost analysis data.

Explanation of Rating:

INITIAL SCORE
6

FINAL SCORE
6

Well documented, but too detailed, activities.

3. Educational Merit/Scientific Content

Consider:

- Accuracy and currentness of scientific content.
- Significance of proposed project to training and research programs for young scientists.
- Potential long term effects on participating individuals and departments or other cooperating units.

Explanation of Rating:

INITIAL SCORE
4

FINAL SCORE
5

Limited market for graduates of proposed program.

4. Project Management

Consider:

- Appropriateness of management scheme for proposed project.
- Specification of internal and external monitoring plans.
- Provision for communication among students, faculty and administrators.
- Designation of staff responsibilities for various major program activities.

Explanation of Rating:

INITIAL SCORE
6

FINAL SCORE
6

Well-qualified personnel, but specific organization is missing.

5. Project Evaluation Plan

Consider:

- Plans for making project modifications during its operation (formative evaluation).
- Plans for evaluation at conclusion of project (summative evaluation).
- Identification of expected outcomes.
- Consideration of other outcomes.
- Explanation of cost-effectiveness strategy.
- Identification of evaluation personnel and their responsibilities.

Explanation of Rating:

INITIAL SCORE
2

FINAL SCORE
2

Difficult to ascertain since melded into other categories.

Proposal No.: SER76-_____

6. Personnel

Consider:

Performance record of key project personnel: (a) scientific, (b) administrative. *excellent*
Use of external consultants and/or visiting staff. *none*
Extent of staff commitment.

Explanation of Rating:

INITIAL SCORE
<i>6</i>

FINAL SCORE
<i>6</i>

7. Maintenance/Impact Potential

Consider:

Extent of institutional commitment to project. *— "motherhood" statement*
Potential for institutionalization of program activities. *good*
Project's potential for influencing institution plans for the improvement of science training and research programs for young scientists.
Plans for continuing self-assessment and planning in post-award period. *missing*
Significance of probable project outcomes. *missing*

Explanation of Rating:

INITIAL SCORE
<i>2</i>

FINAL SCORE
<i>2</i>