TM D—

The names from Deborah Johnson to check with [illegible]

Keith Miller @ Sangamon St somewhere

+ Diane Martin @ GWU in DC ("Computing + Public Trust").

Also FYI Lin Peters (from D[illegible]) who I know [illegible] and has written on formation of a discipline/profession. [illegible] 4:30

MD - See p.1 inside Viv 11/30/95

RESEARCH ADMINISTRATION FAX COVER SHEET

ILLINOIS INSTITUTE OF TECHNOLOGY

Office of Research Administration

3300 S. Federal Street

Room 306, M.B.

Chicago, IL 60616

Tel. No. 312/567-3035

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Thomas Jacobius	**Bill Enright**	**Beatrice Brooks**
Director	**Associate Director**	**Administration Assistant**

DATE: 1-30-95

NAME: VIVIAN WELL

COMPANY: CSEP

FAX NO. 73016

NO. OF PAGES: (including cover) 4 RE: YOUR REQUEST W.R.T. NSF.

COMMENTS:

* FIRST PAGE IS P. 91 OF "GUIDE TO PROGRAMS '95"

* 2ND + 3RD PAGES ARE PP. 10, 11 FROM "GRANT PROPOSAL GUIDE (94-2)"

~~(We have complete copies of you need them.)~~

(I will get in mail to you today.)

sites. These awards are not fellowships and no stipend is included. Support is not provided for everyday personal expenses of the doctoral student. However, the student may concurrently receive such support from other sources.

Dissertation proposals are judged on the basis of scientific content, importance, and originality. In addition, the doctoral candidate must show that the award will in fact improve the quality of the research.

Note: Dissertation improvement awards are available only in certain disciplines. These include the social and behavioral sciences and certain biological sciences. No dissertation improvement awards are made in the mathematical and physical sciences, the geosciences, engineering, cellular and molecular biology, or physiology.

Eligibility/For More Information

Each division that administers these grants treats applications in a different way. Doctoral students who wish to apply for a dissertation improvement grant should write directly to the appropriate research division(s).

SMALL GRANTS FOR EXPLORATORY RESEARCH

The Foundation funds small-scale exploratory work in all fields of science, engineering, and education supported by NSF, through brief proposals without the usual external review. Such work includes preliminary research on untested and novel ideas; ventures into emerging research areas; research requiring urgent access to specialized data, facilities, or equipment; or similar exploratory efforts likely to catalyze innovative advances.

Programs may use up to 5 percent of their budgets for SGER awards. SGER proposals are normally for one year and may not exceed $50,000, with the average amount depending on the particular program; they are not renewable. Only one copy of a brief proposal is required. NSF program officers are not required to seek advice from external reviewers before making their recommendations; thus, principal investigators are strongly encouraged to contact the appropriate program officer to see if the proposed research would be suitable for SGER support or if a fully reviewable proposal should be submitted.

For More Information

Further information can be found in the NSF *Grant Proposal Guide (GPG)* (NSF 94-2). Order from Forms and Publications, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230, (703) 306-1130. For additional information, contact the appropriate research division.

INFORMATION FOR SMALL BUSINESSES

NSF programs are of interest mainly to small businesses with strong capabilities in scientific or engineering research or in science-based innovative technology. Competition for awards from NSF is intense, and only high-quality research proposals are supported.

Most NSF funds are obligated through grants to support unsolicited research proposals that are judged scientifically meritorious in merit review. Note that these are grants, not procurements. Small firms may submit proposals under most of the programs identified in this *Guide*.

Although NSF programs mainly fund research in academic institutions, proposals from the commercial sector, including those from small research firms, are also supported.

Most NSF research awards to small businesses are those grants made through the Small Business Innovation Research (SBIR) Program, described in the Chapter "Engineering." SBIR is conducted pursuant to the Small Business Research and Development Enhancement Act of 1992, P.L. 102-564. Grant proposals under this program are solicited by a formal SBIR program solicitation issued annually.

When compared with those at other Federal departments and agencies, procurement or contract opportunities at NSF are quite limited. The Foundation generally does not maintain bidders' lists, and competitive procurement opportunities are normally publicized in the *Commerce Business Daily*. Opportunities for small companies exist in the subcontracting activities of the NSF prime contractors that manage other major research facilities. Some of these facilities are identified elsewhere in this *Guide*.

NSF has two offices that provide information and serve as referral points for small businesses interested in the Foundation's research or procurement opportunities. Note that these offices do not administer any individual grant, contract, or procurement program.

The *Office of Small Business Research and Development* offers information and guidance on NSF programs and research opportunities to research- and technology-based small firms.

The *Office of Small and Disadvantaged Business Utilization* also provides information and guidance to small, minority-, and women-owned companies seeking procurement opportunities to provide NSF or its major contractors with goods or services.

The address for both these offices is the Directorate for Engineering, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230, (703) 306-1390.

pport from whatever source (for example, Federal, state or local vernment agencies, private foundations, industrial or other mmercial organizations) must be listed. The list must include the oposed project and all other projects requiring a portion of time the Principal Investigator and other senior personnel, even if y receive no salary support from the project(s). The number of rson-months to be devoted to the projects must be stated, gardless of source of support. Similar information must be ovided for all proposals already submitted or submitted ncurrently to other possible sponsors, including NSF.

If the project now being submitted has been funded eviously by a source other than NSF, the information requested the paragraph above should be furnished for the last period of nding.

If the proposal is being submitted to other possible onsors, all of them must be listed. Concurrent submission of a oposal to other organizations will not prejudice its review by SF. Note the Biological Sciences Directorate exception to this licy identified on page 1.

Facilities, Equipment and Other Resources – Proposal Section H

A model format, *Facilities, Equipment and Other Resources*, NSF Form 1363, is shown in Section IX, Proposal rms Kit. Information on NSF Form 1363 is used to assess the equacy of the institutional resources available to perform the fort proposed in the Project Description. Proposers should scribe only those resources that are applicable to the effort oposed. The instructions provided on the form should be llowed.

Special Information and Supplementary Documentation – Proposal Section I

Except in the areas indicated below, special information d supplementary documentation should be included in the oposal as part of the 15-page project description (or as part of the dget justification) where it is relevant to determining the quality the proposed work. Information in the following areas should be cluded in Section I of the proposal and not counted as part of the -page Project Description limitation. This Special Information d Supplementary Documentation Section is not considered an pendix. Specific guidance on the need for additional cumentation may be obtained from the organization's sponsored search administration office or the *Grant Policy Manual*.

Rationale for performance of all or part of the project off-mpus or away from organizational headquarters.

Documentation of collaborative arrangements of gnificance to the proposal through letters of commitment.

Environmental impact statement for activities that have an tual or potential impact on the environment.

- Work in foreign countries. Some governments require nonresidents to obtain official approval to carry out investigations within their borders and coastal waters under their jurisdiction. Investigators are responsible for obtaining the required authorizations and for advising NSF that they have been obtained or requested. Advance coordination should minimize disruption of the research.

Projects involving the following are subject to supplemental documentation:

- Research in the Antarctic and Greenland.
- Research in a location designated, or eligible to be designated, a registered historical place.
- Research involving field experiments with genetically engineered organisms.
- Research involving the use of human subjects, hazardous materials, vertebrate animals, or endangered species.
- Projects that involve technology utilization/transfer activities require a management plan which should identify special reports or final products.
- Projects containing a special component, such as Research Opportunity Awards or Facilitation Awards for Scientists and Engineers with Disabilities.

In addition, Section I should alert NSF officials to unusual circumstances that require special handling, including, for example, proprietary or other privileged information in the proposal, matters affecting individual privacy, required intergovernmental review under E.O. 12372 for activities that directly affect state or local governments, or possible national security implications.

11. Appendices – Proposal Section J

All information necessary for the review of a proposal should be contained in Sections A through I of the proposal. Appendices may not be included unless a deviation has been authorized. Section II. A. contains information on deviations.

12. Special Guidelines

a. Small Grants for Exploratory Research (SGER)

Proposals (one copy only) for small-scale, exploratory, high-risk research in the fields of science, engineering and education normally supported by NSF may be submitted to individual programs. Such research is characterized as:

- preliminary work on untested and novel ideas;
- ventures into emerging research areas;

application of new expertise and new approaches to "old" arch topics;

multi-disciplinary work, particularly crossing NSF gram boundaries;

research having a severe urgency with regard to lability of or access to data, facilities or specialized equipment;

efforts of similar character likely to catalyze rapid and vative advances.

The project description should be brief (two to five s) and include clear statements as to why the proposed rch should be considered particularly exploratory and high the nature and significance of its potential impact on the field why an SGER grant would be a suitable means of supporting ork.

Brief biographical information is required for the ipal and Co-Principal Investigators only, and should list no than five significant publications or other research projects.

This type of proposal will not be subject to external review and the award amount will be substantially less than a program's average amount. In any event, the amount will xceed $50,000. The project's duration will normally be one but may be up to two years. Renewed funding may be ested only through submission of a non-SGER proposal, which e subject to full merit-review. Processing of SGER proposals be assisted by checking the box for "Small Grant For oratory Research" on the *Cover Sheet for Proposal to the nal Science Foundation*, NSP Form 1207.

Investigators are strongly encouraged to contact the NSF am(s) most germane to the proposal topic before submitting an t proposal to determine whether the proposed work meets the lines described above and SGER funding is likely to be ible, or whether the idea should be considered for initial ission as a fully-reviewed proposal. (See Appendix A for ams.)

Group Proposals

A group proposal is a proposal that is submitted by 3 or investigators and combines into one administrative anism several projects that ordinarily would be funded ately. A single individual bears primary responsibility for the distration of the grant and discussions with the Foundation, gh several investigators may be designated as Co-Principal igators. These grants support groups of scientists or eers who themselves judge that the effectiveness of their work l be enhanced by group funding.

In submission of a group proposal, the institution has mined that the proposed activity is administratively geable. However, NSP may request a revised proposal if it considers that the project is so complex that it will be too difficult to review or administer. Processing will be assisted by checking the box for "Group Proposal" on the *Cover Sheet for Proposal to the National Science Foundation*, NSP Form 1207. In addition, group proposals should be indicated as such in a cover letter accompanying the proposal and in the project description.

Where multiple organizations are involved, the proposal can be submitted by only one of them. It should describe clearly the role to be played by the other organizations and specify the managerial arrangements contemplated. In some instances, simultaneous submission of related proposals from each organization might be appropriate, in which case parallel awards would be made.

Investigators wishing to submit group proposals that might exceed the 15-page limit on the project description because of the number of investigators should discuss that possibility with the appropriate Program Officer prior to submission. In general, group proposals that contain up to ten pages of overall project description (including overall progress under the appropriate prior award) plus up to five pages *per person* of individual project description (including description of progress under prior awards) will be acceptable.

c. Equipment Proposals

Proposals for specialized equipment may be submitted by an organization for: (1) individual investigators; (2) groups of investigators within the same department; (3) several combined departments; (4) an institution; (5) any components of an institution; or, (6) a region. One individual should be designated as Principal Investigator. Investigators may be working in related areas or their research may be multidisciplinary.

Note: Many organizations within NSF have formal instrumentation programs with customized guidelines. It is important to use the applicable guidelines in these competitions. Consult with the appropriate program.

Instrumentation and equipment proposals should follow the format of research proposals. Each potential major user should describe the project(s) for which the equipment will be used. These descriptions should be succinct, not necessarily as detailed as in a regular grant proposal, and should emphasize the intrinsic research or educational merit of the activity and the importance of the equipment to it. A brief summary will suffice for auxiliary users.

Equipment proposals should also describe comparable equipment already at the proposing organization and explain why it cannot be used. This includes comparable government-owned equipment that is on-site. Equipment to be purchased, modified or constructed should be described in sufficient detail to allow comparison of its capabilities with the needs of the proposed activities.

Equipment proposals should discuss arrangements for maintenance and operation, including: