NATIONAL SCIENCE FOUNDATION 4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230

OFFICE OF THE ASSISTANT DIRECTOR, COMPUTER AND INFORMATION SCIENCES AND ENGINEERING

March 2002

SUBJECT: RESEARCH EXPERIENCE FOR TEACHERS (RET)
SUPPLEMENT TO CURRENT NSF AWARDS

Dear Colleague:

This letter is to call your attention to a new activity that will support active participation by K-12 teachers of science and mathematics in research and education projects funded by the Directorate for Computer and Information Sciences and Engineering (CISE) at the National Science Foundation. The intent of this activity is to facilitate professional development of K-12 teachers through strengthened partnerships between institutions of higher education and local school districts. CISE strongly encourages its grantees, including grantees from the Small Business Innovative Research (SBIR) and the Small Business Technology Research (STTR) programs, to make special efforts to identify talented teachers for participation in this RET-supplement opportunity.

Encouraging active participation of teachers in on-going NSF projects is an excellent way to reach broadly into the teacher talent pool of our nation. The goal of the RET-supplements is to help build long-term collaborative relationships between K-12 teachers of science and mathematics and the NSF research community. CISE is particularly interested in encouraging the researchers it supports to build mutually rewarding partnerships with teachers at inner city schools and less well endowed school districts.

A request for funding of an RET supplement should be made under an existing NSF/CISE award or within a proposal for a new or renewal NSF/CISE award. The description of the RET activity should clearly articulate in some detail the form and nature of the prospective teacher's involvement in the Principal Investigator's ongoing or proposed research. For example, the teacher may participate in the design and analysis of algorithms, development of software systems and networks, modeling of knowledge and data bases, and other activities that will result in intellectual contributions to the project. It is expected that the RET supplement experience will also lead to transfer of new knowledge to classroom activities.

Therefore, the RET supplement description should also indicate what type of sustained follow-up will be provided to help in translating the teacher's research experience into classroom practice. A brief biographical sketch of the teacher should also be included.

The duration of the RET Supplement will be one year and the project may be carried out during summer months, academic year, or both. The total cost of the supplement is limited to \$10,000 per teacher. The budget includes a teacher's stipend and up to \$1,000 for the cost of materials, equipment, software and other supplies for developing classroom instructions and experiments. An administrative allowance (limited to 25% of the teacher's stipend only) is allowed in lieu of indirect costs. Normally, funds may be available for one to two teachers, but exceptions will be considered. Participation of teachers who are members of underrepresented groups (women, underrepresented minorities, and persons with disabilities) is strongly encouraged. An award decision will be based on internal review by the cognizant CISE Program Director and availability of funds in a particular program. An application for an RET Supplement must be submitted via the NSF FastLane and the procedure is the same as described in the Research Experiences for Undergraduates (REU) Program Announcement, NSF 01-121, (http://www.nsf.gov/pubs/2001/nsf01121/nsf01121.htm), for the submission of an REU Supplement request. For guidance concerning the RET Supplement, the Principal Investigator should consult with the Program Director of his/her particular NSF award. An RET Supplement request is due by May 15, 2002.

The National Science Foundation encourages you to visit K-12 teachers in your local school district and region to make them aware of this RET opportunity as well as other NSF research and educational projects.

Information on current NSF awards is readily available on http://www.nsf.gov/home/grants/grants_awards.htm. We trust that your time and efforts will open and facilitate new avenues for collaboration and innovations in the teaching of mathematics, science and engineering and enhance the development of the U.S. science and engineering workforce.

Sincerely,

George O. Strawn Acting Assistant Director Inquiries regarding RET Supplements and Sites should be directed to one of the following CISE staff:

Carl Smith, CISE/RET Coordinator Division of Experimental and Integrative Activities (EIA) (703-292-8980; chsmith@nsf.gov)

Xiaodong Zhang

Division of Advanced Computational Infrastructure and Research (ACIR) (703-292-8970; xzhang@nsf.gov)

Gregory Monaco

Division of Advanced Networking Infrastructure and Research (ANIR) (703-292-8948; gmonaco@nsf.gov)

S. Kamal Abdali

Division of Computer-Communications Research (CCR) (703-292-8910; kabdali@nsf.gov)

Caroline Wardle

Division of Experimental and Integrative Activities (EIA) (703-292-8980; cwardle@nsf.gov)

William Bainbridge

Division of Information and Intelligent Systems (IIS) (703-292-8930; wbainbri@nsf.gov)

NSF 02-102 Electronic Dissemination Only

Background Information

The Research Experiences for Teachers (RET) Supplements program was started by the Directorate of Engineering in FY 2001. The purpose of the program is to encourage research activity in middle and high school teachers by creating opportunities for them to work with NSF-funded researchers. In FY 2002, the program has been extended to include K-12 teachers and to also support RET sites.

The Directorate of Computer and Information Sciences (CISE) feels that RET is a good program that can result in engaging a large, talented populace in research. Through the involvement of teachers, the program can introduce students to the state-of-the-art research results, raise the standard of scientific and engineering education, and potentially involve students themselves in research. For these reasons, CISE would like to offer RET supplements in FY 2002 to CISE awardees. These supplements can be used for K-12 teachers. Depending on this year's outcome, CISE might continue and expand the program in future years.

For FY 2002, CISE is allocating from the AD reserve \$800K which will suffice for 80 supplements. Selection of supplement for award will be made by a CISE RET coordinator upon recommendation of the program officer receiving the supplement request. Individual CISE programs can make additional supplements from their own funds.