Office of Energy Research

Notice 97-13

Centers of Excellence for Laser Applications in Medicine

Department of Energy Office of Energy Research

Energy Research Financial Assistance Program Notice 97-13: Centers of Excellence for Laser Applications in Medicine

AGENCY: U.S. Department of Energy

ACTION: Notice inviting grant applications

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE) announces its interest in receiving research applications from potential applicants for funding of Centers of Excellence for Laser Applications in Medicine (Centers). These Centers are intended to carry out research that will advance the application of laser technology in the clinical practice of medicine. A Center must have existing advanced capabilities for fundamental research in the medical application of lasers, is to be based in a hospital with a close tie to a school of medicine, is to offer a strong program of research that covers a wide range both of scientific disciplines and of fields of medicine, and is to place emphasis on training and dissemination of developments in this field of research.

DATES: Preapplications should be received by May 30, 1997. However, earlier submissions will be gladly accepted. Formal applications in response to this notice must be received by 4:30 p.m., E.D.T., August 15, 1997.

ADDRESS: Preapplications referencing Program Notice 97-13 should be forwarded to: Dr. Roland F. Hirsch, Medical Applications and Biophysical Research Division, ER-73, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, Attn: Program Notice 97-13. Fax submissions are acceptable, fax number (301) 903-0567.

Formal applications referencing Program Notice 97-13 should be forwarded to: U.S. Department of Energy, Office of Energy Research, Grants and Contracts Division, ER-64, 19901Germantown Road, Germantown, MD 20874-1290, Attn: Program Notice 97-13. This address also must be used when submitting applications by U.S. Postal Service Express Mail, or any commercial mail delivery service, or when hand-carried by the applicant. An original and seven copies of the application must be submitted. Applicants are required to follow the formal instructions given in the SUPPLEMENTARY INFORMATION Section of this Notice.

FOR FURTHER INFORMATION CONTACT: Dr. Roland F. Hirsch, Medical Applications and Biophysical Research Division, ER-73, 19901 Germantown Road, Germantown, MD 20874-1290, telephone (301) 903-3213; E-mail roland.hirsch@oer.doe.gov.

SUPPLEMENTARY INFORMATION: The Centers of Excellence for Laser Applications in Medicine were established in 1991 upon the recommendation in the Conference Report for the Fiscal Year 1991 Energy and Water Development Appropriation Act. There has been substantial progress in the field since that time. Therefore, potential applicants are encouraged to propose Center programs that are appropriate for the current state of the art in fundamental areas of laser research relevant to clinical research, that will enable progress toward new areas of clinical use of lasers, and that will increase the application of lasers through training and dissemination activities. There is particular interest in research leading to new laser applications for noninvasive medicine and, in general, to new medical procedures that are consistent with the national need to control the costs of health care.

Applicants are encouraged to utilize the extensive fundamental scientific expertise that is available at the National Laboratories supported by the Department through formal and informal arrangements for consultation and collaboration. Applicants are also encouraged to identify objectives of the proposed research program that complement the aims of other programs which are supported by the Medical Applications and Biophysical Research Division such as research in radiopharmaceuticals and molecular nuclear medicine, biomedical imaging instrumentation, Boron Neutron Capture Therapy (BNCT), structural biology, analytical chemistry, and genome instrumentation.

Organizations with existing Centers of Excellence for Laser Applications in Medicine grants must submit with their renewal application the required Progress Report, which should include a section describing research accomplishments that have been carried over into clinical research and practice.

It is anticipated that up to \$1,500,000 are expected to be available for grant awards in FY 1998, contingent upon availability of appropriated funds. The actual magnitude of the funds available and the number of awards which can be made will however depend on the budget process. It is anticipated that up to four awards of up to \$600,000 each annually for a three year period will be made, with out-year support contingent on availability of funds, progress of the research, and programmatic needs.

Potential applicants are encouraged to submit a brief preapplication describing the proposed Center and its major activities. The intent in asking for a preapplication is to save the time and effort of applicants in preparing and submitting a formal project application that may be inappropriate for the program. The preapplication should consist of a three-to-five-page concept paper on the program contemplated for an application to the Centers of Excellence for Laser Applications in Medicine program. The concept paper should focus on the scientific objectives and significance of the proposed research, including an outline of the approaches planned, should briefly describe the organization of the proposed center and its setting, and should provide information relating to other aspects of the planned program, including collaborations with the DOE National Laboratories and other research organizations. The preapplication gives an opportunity to advise potential applicants on the suitability of their concept and research program to the mission of the Centers of Excellence program. A response to timely preapplications indicating the appropriateness of submitting a formal application will be communicated by June 20, 1997. Please note that notification of a successful preapplication is not an indication that an award will be made in response to the formal application. ER's preapplication policy for submitting preapplications can be found on ER's Grants and Contracts Web Site at: http://www.er.doe.gov/production/grants/preapp.html.

Applications will be subjected to formal merit review (peer review) and will be evaluated against the following evaluation criteria listed in descending order of importance codified at 10 CFR 605.10(d):

- 1. Scientific and/or Technical Merit of the Project;
- 2. Appropriateness of the Proposed Method or Approach;
- 3. Competency of Applicant's personnel and Adequacy of Proposed Resources;
- 4. Reasonableness and Appropriateness of the Proposed Budget.

The evaluation will include program policy factors such as the relevance of the proposed research to the terms of the announcement and an agency's programmatic needs. Note, external peer reviewers are selected with regard to both their scientific expertise and the absence of conflict-of-interest issues. Non-federal reviewers will often be used, and submission of an application constitutes agreement that this is acceptable to the investigator(s) and the submitting institution.

Applicants are expected to use the following format in addition to following instructions in the Office of Energy Research Application Guide.

- ER standard face page (DOE F4650.2)
- Table of Contents
- Project abstract (no more than one page)
- Budgets for each year of the three-year project period (using DOE F 4620.1)
- Written explanation of the budget items
- Budgets and budget explanations for each collaborative subproject, if any
- Project narrative (recommended length is no more than 40 pages):
- Goals
- Research plan for each major component of the research program
- Preliminary studies (if applicable)
- Research design and methodologies
- Plans for training
- Plans for dissemination of new concepts and techniques
- Literature cited
- Description of existing facilities for research into laser applications in medicine (up to five pages)

- Description of hospital setting and medical school ties for the proposed Center, including support proposed to be offered to the Center's program by these units (up to five pages)
- Collaborative arrangements (if applicable)
- Biographical sketches (limited to 2 pages for each senior investigator)
- Current and pending funding for each senior investigator
- All required information for any activities involving human subjects (see ER Application Guide)
- All required information for any activities involving vertebrate animals (see ER Application Guide)

Information about development and submission of applications, eligibility, evaluations and selection processes, and other policies and procedures may be found in 10 CFR Part 605 and the Office of Energy Research Application Guide for the Financial Assistance Program. Access to ER's Financial Assistance Application Guide is possible via the World Wide Web at: http://www.er.doe.gov/production/grants/grants.html. Printed copies of the Guide are available from the Medical Applications and Biophysical Research Division for potential applicants who are unable to access the Web version.

The Catalog of Federal Domestic Assistance number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

John Rodney Clark Associate Director for Resource Management Office of Energy Research

Published in the Federal Register March 28, 1997, Vol. 62, No. 60, pages 14894-14895.