

**Office of Science**  
**Notice 00-03**

***Fundamental Plant and Microbial Research in Carbon  
Management***

**Department of Energy**  
**Office of Science**

**Office of Science Financial Assistance Program Notice 00-03: Fundamental Plant  
and Microbial Research in Carbon Management**

**AGENCY:** U.S. Department of Energy (DOE)

**ACTION:** Notice inviting grant applications.

**SUMMARY:** The Office of Basic Energy Sciences (BES), of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications for research grants in the area of fundamental research underlying potential strategies to reduce or limit gaseous carbon production from fossil fuel use. Research-related activities in areas of interest to the Division of Energy Biosciences include biochemical, molecular genetic, and cellular mechanisms of carbon fixation metabolism in plants and microbes.

**DATES:** Applicants are strongly encouraged to submit a brief preapplication. All preapplications, referencing Program Notice 00-03, should be received by DOE by January 12, 2000. A response regarding the potential program relevance of the preapplication and encouraging or discouraging a formal application will be communicated to the applicant by January 31, 2000.

The deadline for receipt of formal applications is March 1, 2000, in order to be accepted for merit review and to permit timely consideration for award in Fiscal Year 2000.

**ADDRESSES:** All preapplications, referencing Program Notice 00-03, should be sent to Dr. Gregory L. Dilworth, Division of Energy Biosciences, SC-17, Office of Science, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290.

Formal applications, referencing Program Notice 00-03, should be sent to: U.S. Department of Energy, Office of Science, Grants and Contracts Division, SC-64,

19901 Germantown Road, Germantown, MD 20874-1290, ATTN: Program Notice 00-03. This address must also be used when submitting applications by U.S. Postal Service Express Mail or any other commercial overnight delivery service, or when hand-carried by the applicant.

**FOR FURTHER INFORMATION CONTACT:** For questions concerning research topics in specific technical areas, contact: Dr. Gregory L. Dilworth, Division of Energy Biosciences, SC-17, Office of Science, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone (301) 903-2873, fax (301) 903-1003, e-mail: [greg.dilworth@science.doe.gov](mailto:greg.dilworth@science.doe.gov)

The full text of Program Notice 00-03 is available via the Internet using the following web site address: <http://www.sc.doe.gov/production/grants/grants.html>.

**SUPPLEMENTARY INFORMATION:** Conversion of sunlight to fuels and chemicals by plants and microorganisms and the interconversion of greenhouse gases requires a better understanding of plant and microbial biochemistry, physiology, molecular biology, and the structure and function of enzymes and sub-cellular components. Areas of specific interest include fundamental understanding in photosynthesis, photochemistry, photosynthetic and nonphotosynthetic carbon fixation, plant and microbial carbon biochemistry, regulatory control of plant assimilate allocation and transport, molecular regulatory mechanisms controlling carbon metabolism, and related areas of bioscience.

### **Program Funding**

It is anticipated that up to \$4.8 million will be available for multiple grant awards to be made in FY 2000. Multiple year funding of grant awards is expected, and is also contingent on the availability of appropriated funds, progress of the research, and continuing program need. Applications received by the Office of Science under its normal competitive application mechanisms may also be deemed appropriate for consideration under this announcement and may be funded under this program.

Applicants may collaborate with researchers in other institutions, such as industry, non-profit organizations, federal laboratories and Federally Funded Research and Development Centers (FFRDCs), including the DOE National Laboratories. A parallel announcement with a similar potential total amount of funds will be issued for DOE Federally Funded Research and Development Centers. All projects will be evaluated using the same criteria, regardless of the submitting institution.

Applications will be subjected to scientific merit review (peer review) and will be evaluated against the following evaluation criteria listed in descending order of importance as 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 this 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 may be used, and submission of an application constitutes agreement that this is acceptable to the investigator(s) and the submitting institution.

Information about the development, submission of applications, eligibility, limitations, evaluation, the selection process, and other policies and procedures may be found in 10 CFR Part 605, and in the Application Guide for the Office of Science Financial Assistance Program. Electronic access to the Guide and required forms is made available via the World Wide Web at:

<http://www.sc.doe.gov/production/grants/grants.html>. On the SC grant face page, form DOE F 4650.2, in block 15, also provide the PI's phone number, fax number and e-mail address. The research description must be 10 pages or less, exclusive of figure illustrations, and must contain an abstract or summary of the proposed research (to include the hypotheses being tested and the proposed experimental design). Attachments include curriculum vitae, a listing of all current and pending federal support, and letters of intent when collaborations are part of the proposed research.

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 of Science  
for Resource Management

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