

biological organization (from molecules to cells to tissues to organisms) and from observations *in vitro* to biological responses *in vivo*.

Applicants should demonstrate knowledge of and expertise in risk modeling. They should discuss general strategies for, or demonstrate expertise in the use of, biological mechanistic data in the development of risk models. Ideally, the application should exhibit some familiarity with relevant radiation biology literature, but prior work in this field is not a prerequisite. *The Project Description must contain the following:*

1. A proposal to develop a biologically-based model taking account of one or more phenomena such as adaptive response, bystander effects, genetic susceptibility, or genomic instability. A hierarchical scheme may be proposed for developing a series of simple to complex biologically-based risk models that include successively higher numbers of biological parameters.

2. A discussion of model validation strategies, as well as a general discussion of error estimation strategies, should be included. (Of great importance will be the determination of how much error can be tolerated in each of the critical inputs.)

3. Briefly, the applicant's ideas on how one would begin to design a "biological archetype" that could be used to compare different models. (What type of biological archetype would be most useful at the present time—single cell, cell culture, tissue, mouse, man? In the future? Which characteristics of the biological archetype should be defined? Which characteristics are known at the present time?)

Information on the Low Dose Radiation Research Program can be found on the Web site: <http://lowdose.tricity.wsu.edu>.

Program Funding: It is anticipated that up to \$1,500,000 will be available for approximately 8 two-year awards, contingent upon the availability of funds. Each award will be no more than \$200,000, total costs per year. If the exercise is judged productive by administrative review, some or all awards may be extended an additional year.

Merit and Relevance Review: 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 the Department's programmatic needs. 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.

The Application

(Please Note Information Below On Page Limits)

Information about the development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in the Application Guide for the Office of Science Financial Assistance Program and 10 CFR Part 605. Electronic access to the Guide and required forms is made available via the World Wide Web: <http://www.science.doe.gov/production/grants/grants.html>. DOE is under no obligation to pay for any costs associated with the preparation or submission of applications if an award is not made.

Adherence to type size and line spacing requirements is necessary for several reasons. No applicants should have the advantage of providing more text in their applications by using small type. Small type may also make it difficult for reviewers to read the application. Applications must have 1-inch margins at the top, bottom, and on each side. Type sizes must be 10 point or larger. Line spacing is at the discretion of the applicant but there must be no more than 6 lines per vertical inch of text. Pages should be standard 8 1/2" x 11" (or metric A4, i.e., 210 mm x 297 mm). Applications must be written in English, with all budgets in U.S. dollars.

Applicants are asked to use the following ordered format:

- Face Page (DOE F 4650.2 (10-91))
- Project Abstract Page; single page only, should contain title, PI name, and abstract text
- Budget page for the one year project period (using DOE F 4620.1)
- Budget Explanation

• Project Description; ten (10) pages or less. The application should contain the following:

a. A proposal to develop a biologically-based model taking account of one or more phenomena such as adaptive response, bystander effects, genetic susceptibility, or genomic instability.

b. A discussion of model validation strategies, as well as a general discussion of error estimation strategies, should be included.

c. Briefly, the applicant's ideas on how one would design a biological archetype that could be used to compare different models (approximately one page).

- Literature Cited
- Collaborative Arrangements (if applicable)
- Facilities and Resources
- Biographical Sketches
- Current and Pending Support
- Letters of Collaboration (if applicable)

The Office of Science, as part of its regulations, requires at 10 CFR 605.11(b) that a recipient receiving an award to perform research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules shall comply with the National Institutes of Health "Guidelines for Research Involving Recombinant DNA Molecules", which is available via the World Wide Web at: <http://www.niehs.nih.gov/odhsb/biosafe/nih/rdna-apr98.pdf>, (59 FR 34496, July 5, 1994), or such later revision of those guidelines as may be published in the **Federal Register**.

DOE requirements for reporting, protection of human and animal subjects and related special matters can be found on the World Wide Web at: <http://www.science.doe.gov/production/grants/Welfare.html>.

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

Issued in Washington, DC on February 6, 2003.

John Rodney Clark,

Associate Director of Science for Resource Management.

[FR Doc. 03-3939 Filed 2-18-03; 8:45 am]

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY

National Energy Technology Laboratory; Notice of Availability of a Financial Assistance Solicitation

AGENCY: National Energy Technology Laboratory, Department of Energy (DOE).