



OFFICE OF RESEARCH & GRADUATE STUDIES

155 Administration Building
University of California, Irvine
Irvine, CA 92697-3175
(949) 824-5796
Fax (949) 824-2095
<http://www.rgs.uci.edu/>

October 6, 2003

Dr. Michael J. Holland
Office of Science and Technology Policy
1650 Pennsylvania Ave., NW
Washington, DC 20502

RE: NSTC Research Business Models Comments

Dear Dr. Holland:

I am writing on behalf of the University of California, Irvine and its faculty in response to your request for comments appearing in the August 6, 2003, Federal Register (pages 46631-46632). We appreciate the opportunity to offer our perspective as a public research university that has grown dramatically in size of student population, faculty and staff ranks, and sponsored projects volume in a relatively short 38 years since the campus opened its doors in 1965. We also are proud to be part of the larger University of California system, which has guided our support of important research activities.

At the end of our most recent fiscal year, the Federal government provided over 70% of our extramural support for research, education and public service projects. Nonetheless, many have found the complexities of the Federal research support program to be daunting relative to the search for funding and post-award administration. Thus, we appreciate the interest of your office in evaluating and improving the research support enterprise across all Federal agencies and offer the following comments in hopes of guiding future discussions.

We wish to begin by mentioning two issues that fall outside of the categories outlined by the request. The first relates to the unique environment that exists within a research university. Our faculty are both researchers and teachers, involving undergraduate and graduate students and post-doctoral fellows in discussions and investigations to prepare them for work in industry, government, academic institutions or other private enterprise. It is important to recognize and appreciate that this dual mission creates intertwined activities that amplify the benefits to the individuals, the institution and society. Our second comment concerns the inappropriate use of the term "research business models" to this exercise. While some management systems within universities are similar to those within industry, applying a business model raises questions of products, accountability, and profitability. None of which easily fit a non-profit enterprise engaged in research, teaching and public service.

A. **Accountability.** Universities and their government sponsors have long been attentive to the issue of accountability. But, one must consider accountability on a number of levels in order to assess whether more or less is needed in this area. Universities have instituted and maintained a number of systems

following OMB Circular A-110 to demonstrate accountability for financial and other project management actions. Federal recipients are also required to demonstrate accountability and oversight for the animal and human subjects programs instituted under federal guidelines. However, accounting for the performance of research is not and cannot be easily documented other than through quantified reporting or publication of results. The true measure of the research activity, and thus accountability for research, should be the evaluation by other researchers through the scientific process and discussions within the scientific community.

B. Inconsistency of policies and practices among Federal agencies. Noted differences among agencies include the restriction of inflationary increases used by recipient institutions in multi-year budgets, the restriction of federally-negotiated F&A (indirect cost) rates, the use of a variety of billing and payment procedures, and the demand for redundant institutional certifications. Another prime example on this topic is the lack of coordination and progress on a federalwide electronic proposal submission and research administration system, which has forced universities to confront hardware, software and training issues at a time when resources could be diverted to other research support issues.

C. Inconsistency of policies and practices among universities. Most policies and practices are similar among federal award recipients, but inconsistencies are apparent when funding is transferred from a prime recipient to a subrecipient. We occasionally are asked to reduce our negotiated F&A rate because another university has accepted a lesser rate. We have also been given unacceptable publication restrictions that have been accepted by the prime recipient. In both examples, it was not the prime recipient, but the funding agency, that insisted on deviating from what are widely recognized as standard university terms.

D. State and institutional requirements. We have found that state subawards of federal funding are usually issued to subrecipients, such as our university, with the more restrictive state requirements incorporated. These additional requirements include detailed documentation for expenses, restrictive rights to work products, lower threshold for the definition of equipment, and rebudgeting restrictions. A simple solution would be to mandate flowdown terms no more restrictive in the subawards than those required by the federal prime award.

E. Regulatory requirements. With every simplification of regulations or processes, there seems to be an equal or greater issuance of regulations to replace them. The burden of implementing new or revised policies and procedures is an obvious unfunded mandate imposed upon universities. The costs associated with revising internal procedures and policies, publishing new policies on the campus website, and training administrative staff and researchers can be considerable. Many universities, such as UC Irvine, have a capped administrative component of the F&A rate, so recovery of actual costs is not possible.

F. Research support. While universities have benefited greatly from Federal support of research and the evolution to funding mechanisms such as modular grants, many still are outspoken in their criticism of the conservative nature of funding decisions made by the agencies. Indeed, some researchers now believe that a significant amount of pilot data must be provided to prove an idea works before a grant is awarded. This requirement to fund pre-proposal work has a chilling effect on large, exploratory basic research projects. We suggest federal agencies be more willing to fund projects that are uncertain, speculative and imaginative based solely on the principal investigator's record of innovative work. The National Institutes of Health is taking a step in the right direction by establishing the High-Risk Research-NIH Director's Innovator Award. We applaud this visionary program and urge other federal agencies to adopt similar grant programs. In addition, we suggest that agencies could waive the requirement for competing continuation proposals and provide automatic renewal of funding to successful projects.

Regardless of the emphasis on collaborative research in Section G., the Federal government also should make a commitment to fund individual projects at a level that provides adequate resources. This would relieve investigators of the continuing pursuit of funding from other agencies in order to assemble a research team and the capabilities to tackle the scientific questions. The apportionment of funding between individual and multidisciplinary projects should be studied and balanced, with no one type consuming all resources. Other support models beyond modular grants should be explored and evaluated as to the effectiveness and efficiencies of each.

G. Multidisciplinary/collaborative research. More Federal agencies could follow the lead of NIH in supporting multidisciplinary projects. Directing funds in this fashion should be recognized as updating the funding model and making an investment in the progress of science, which is occurring in large part at the intersections of scientific disciplines today. Another suggestion in this area is to require Federal agencies to institute a preliminary proposal process that would narrow the competition for large research programs. This would alleviate the burdens of preparing complete, detailed proposals from a large group of potentially noncompetitive applicants. We also recognize that changes may be needed in the academic advancement process in order to recognize the contributions of co-investigators on such projects, but we believe that a solution can be achieved to support a seamless cooperative model

H. Research Infrastructure. Inadequate research infrastructure is a problem that has plagued universities for decades, and it is especially challenging at UC Irvine, a growing campus with many facility needs and a young alumni support base contributing to a modest endowment. We rank the need for buildings and equipment as paramount in attracting new faculty and larger research programs. The equipment grants offered by NIH and NSF are promising, but highly competitive and requiring significant cost-sharing. Recognizing the ever-increasing costs of research equipment, these programs should consider funding more core facilities at higher levels with smaller and more achievable cost sharing commitments.

One critical area of need is trained staff to facilitate the maximum use and functioning of the equipment. We would like to see Federal agencies offering to support technical staff for core facilities along with the cost of equipment. Many of these individuals are highly skilled and in high demand by research facilities across the country. Support of this kind would protect Federal investment in equipment and increase its impact on research.

In addition to technical staff, UC Irvine recognizes administrative support staff as an important component of the research support infrastructure. Unfortunately, Federal regulations have capped the administrative component of the overhead rate and restricted the recovery of the actual costs of doing research. This erosion of funding for staff is having a detrimental effect upon projects in those departments that lack funds to maintain a core administrative group. It also makes it more difficult to maintain the necessary level of administrative support to project personnel. A minor revision to OMB Circular A-21 should allow administrative support as direct costs on awards.

Thank you for this opportunity to provide input and for scheduling regional workshops which will allow university representatives to participate in a dialogue with your staff.

Sincerely,

William H. Parker
Vice Chancellor for Research