New Business Models for Research - Letter

Author: Katharina Phillips

Published Date: 10/01/2003
Dear Dr. Holland:

The Council on Governmental Relations (COGR) is an association of 150 research-intensive universities, including several affiliated hospitals and research institutes. COGR seeks to foster a government-university relationship that achieves appropriate stewardship while minimizing the administrative burden of compliance, in order to focus the nation’s critical resources on maximizing the public benefits of scholarly and scientific progress. Given that perspective, we have a strong interest in the notice of September 5, 2003, in which the Office of Science and Technology Policy (OSTP) calls for advice on policies and procedures relating to business models. We commend OSTP for involving the public in this discussion.

Based on the universities’ long and mutually beneficial relationship with the federal government, we see this initiative as an invitation to a constructive dialogue. Since OSTP chose to begin with a call for data gathering, to help set the future agenda, we provide such material in the attached Appendix, directed to COGR’s areas of expertise. We believe, however, that it is most important to place this material in the context of the larger framework in which the discussions should take place. The following paragraphs offer observations on key areas that are important to our membership.

**Support of Research as a Business Model**

The term “business model”, although prevalent in commercial enterprises, could be misleading in the context of federally funded, not-for-profit academic research. This new discussion must remain framed by the recognition that the unique “products” of universities are new
knowledge, trained students and research investigators. Vannevar Bush clearly defined a model based on these goals fifty years ago that has reaped tremendous benefits for the United States. Over the past several decades Bush’s model has evolved into a social contract bringing together universities as the intellectual core of basic science research for the nation and the government as the representative of society at large. The social contract has been reaffirmed many times over the decades. Thus, even though at times the parties may have different short-term interests, it is important to maintain the vibrancy and the ability of universities to be research performers. Changes to “business models” should carefully weigh potential consequences.

A look at the government’s role in this business relationship, might suggest that a sound business model would require that the federal agencies become more willing to manage their R&D as a portfolio of interconnected activities to optimize scientific discovery. As projects grow larger and reach across disciplinary boundaries, interagency coordination becomes more urgent and should be part of the discussion. We note that, looking ahead to FY 2005, the Science Advisor has supported this concept in his message to agencies.

A good business model also needs to include a fair assessment of instrumentation and facilities needs. Over the past decades, the universities have witnessed a painful decrease in federal programs to support these needs. The consequences of such developments and potential remedies should be on your agenda.

Most importantly, a good business model cannot tolerate a hybrid of conflicting goals. The government appears to follow different, conflicting models in funding university research. In a model based on cost reimbursement principles, the key question becomes what the country can afford to fund to assure the best science is supported. By contrast, models based on straight procurement principles seek to buy more products at the lowest bid. We believe that many of the recent disagreements between universities and federal agencies about cost reimbursement stem from a blurring of the distinctions between these different models for government support of university research. We believe that both parties must strive to return to a costing and regulatory system that is equitable, consistent, effective, and that appropriately reflects the diversity and the needs of the individual research providers. In our view, this is a higher priority and of more pressing need than attempting to articulate a set of new research business models.

**Major Concerns for Universities**

The OSTP notice asks how performers can best demonstrate results or returns on federal research investments. However, federally supported fundamental research projects, by definition, may produce results with no apparent immediate benefits, or even “negative” findings. Yet, negative results often are vitally important for the progress of science. Government reviews such as those done by NSF or NIH consistently have traced important scientific discoveries and technological innovations back to basic research done many years earlier that at the time had no apparent applications. Efforts to quantify returns at the individual research project level are inherently
misguided. There needs to be a tolerance for research “failures” and a greater understanding of the nature of basic research on the part of public decisionmakers.

With regard to the government-university business relationship, the two central considerations for universities are costs, including how they are charged and compensated, and administrative regulations, including how they are imposed and complied with. For most university research, the current regulatory models for costs and administrative compliance are based on the respective OMB Circulars. In their original form they reflected much discussion with the university community, were well designed, capable of providing adequate accountability and demonstrating responsible use of public funds. As such, they could continue to be a solid basis for the interaction between universities and the federal government. However, lack of uniform implementation by federal agencies and several seemingly arbitrary changes made by the government call for review of Circulars A-21 and A-110.

These developments in the government’s implementation of the existing circulars may be a more serious source of the problems universities face today rather than the inability to adjust to changes in research. In effect, the government has inappropriately shifted cost burdens, creating stresses in the academic infrastructure, both in terms of facilities as well as administrative costs. Consequently, the universities have to draw funds from a number of unrelated sources of revenue to cover these costs, which is detrimental to the overall health of universities in the long run. The government should recognize that such cost shifting ultimately increases the burden on other university stakeholders.

Problems with Current OMB Circulars

While clarification of some definitions in OMB Circular A-21 has been useful over the years, that document is now changed from its original design far beyond simply eliminating these “gray areas”. A combination of changes now prevents universities from charging some costs directly, while at the same time, restricting the recovery of administrative costs. The government expects universities to adhere faithfully to the cost principles, but its facilities and administrative rate negotiation process seems to reflect the government’s short term financial needs rather than the long-term health of the research infrastructure. The Appendix to this letter provides comments, illustrations and data on this issue.

OMB Circular A-110 establishes principles that provide a reasonable approach to the management of research, but the circular’s guidance has not been implemented uniformly by the agencies. Moreover, the agency implementing regulations have remained inconsistent in spite of experience demonstrating no increased risk from simplification of administrative requirements permitted by the circular. In an environment where available resources are limited, both partners in the research enterprise should agree to simplify procedures that can save administrative costs. Such inconsistencies have expanded exponentially and have become a tremendous administrative
burden, especially with the addition of unfunded mandates (e.g. HIPAA provisions and select agent rules).

The notice rightly calls for comment on accountability by the parties involved in the business interaction. Unfortunately, the government appears to define accountability primarily in terms of financial/administrative compliance rather than scientific outcomes. This compliance focus raises the issue of the appropriate level of risk in federal audit and oversight activities (e.g. effort reporting and subrecipient monitoring) as well as the acceptable risk/benefit ratio. Universities also experience frequent divergences between audit findings and regulatory interpretations by government auditors and the award terms and their interpretations by the research funding agencies. This leaves universities in the middle often having to bear the cost of the audit disallowance. The issue of subrecipient monitoring is of particular concern in this context, since collaborative research has increased markedly during the past five years. Management and audit issues all feed back to the central question of costs in relation to benefits. The Appendix discusses this issue in more detail.

The Impact of Technology and Collaboration With Industry

Two other areas of concern to COGR involve forces that undeniably impact the way modern research is conducted, and about which the notice invites comment. One is the rapid development of computational power. Although anxious to engage in electronic administration, universities have been hampered by the slow movement of agencies in developing a common interface that would allow easy access to the agencies for proposal submission, notification of awards and post award administrative reporting. In fact, the proliferation of dissimilar systems implemented by funding agencies, tends to increase the cost and complexity of research administration. Although individual universities have data on the cost of building up their technology infrastructure, data regarding the effectiveness of the system do not exist, largely because there is no workable uniform federal system in place. The Appendix references recent Congressional testimony on these issues by the representative of a COGR member university.

The other topic area is university-industry interaction and technology transfer. The interaction between universities and industry has accelerated during the past twenty years and underscores the important role of universities in achieving cutting edge, fundamental research productivity. However, it is easy to misunderstand the significance of university-industry collaboration for university research if one looks only at the financial rewards derived from licensing of inventions. The value of these collaborations and the required oversight is firmly grounded in the conduct of research as a primary objective, with technology transfer principally embedded in the university’s role of research and education rather than commercialization of research outcomes. The government itself has begun the process of inquiring about models to measure the effectiveness of different approaches. Recent data and reports on this issue are summarized in the Appendix.
Conclusion

We agree with OSTP that research needs have changed. At the same time, societal expectations on universities are growing. A reconsideration of, and improvements in, the current hybrid cost and regulatory structure for the business relationship between the government and universities in research is essential. COGR has longstanding concerns about some of the areas singled out in the notice. We believe that significant improvements are needed in the federal management of the business relationship between federal agencies and university research performers.

We appreciate the opportunity to provide comment and are eager to work with the Subcommittee. Treating the cost of research as a fair business relationship could launch many fruitful discussions between our communities.

Sincerely,

Katharina Phillips

Appendix