

UT System Response to the WAG Report

May 13, 2004

The U.T. System is very grateful to the distinguished scientists and engineers from the Washington Advisory Group who participated in a detailed assessment of the research potentials of our campus. We believe objective, third-party reviews of our research efforts are key to our competitiveness in the national arena of peer-reviewed research.

Each of the eight campuses will analyze the WAG report and prepare responses. What follows are actions that the U.T. System plans to help implement the recommendations of the report.

Priority 1: Recruitment of additional researchers to the U.T. System

Because of the rapid enrollment growth in our System, hiring additional faculty is a critical priority for the next decade. For the sake of our students, it is essential that the faculty hired be of the highest quality. To expand research on our campuses, emphasis must be placed on encouraging existing faculty and recruiting new faculty to pursue externally funded research. Competition is intense for the limited number of top candidates in the market each year. U.T. schools must be in a position to compete successfully, to recruit, and to retain the best candidates available.

If this priority is not addressed immediately, then the anticipated decade-long expansion of the faculty will not lead to greater research prominence. The U.T. System has a once-in-a-generation opportunity to enhance its faculty.

Strategy 1: The U.T. System will convene a system-wide workshop to disseminate best practices in faculty hiring in competitive markets. It is important that our faculty understand how best to recruit new faculty. For campuses that will be recruiting in new areas, different approaches to assembling hiring committees may be necessary. The WAG report suggests some areas for additional hiring at each campus; the campus leadership needs to consider not only how many faculty to hire, but also their distribution among disciplines and the potential for research from each additional hire.

The U.T. System is planning to develop a program to offer some financial assistance in purchasing the equipment and renovating the laboratory space that will be needed to recruit and retain faculty.

Strategy 2: The U.T. System will develop an accountability measure for reviewing the success of the new faculty hires. As part of our accountability program, the U.T. System will review the progress and success of new faculty hires.

Priority 2: Build leadership and infrastructure for research-intensive departments, colleges, and institutions.

Successful research institutions have strong leaders who help faculty identify, pursue, and successfully complete funded research. Strengthening the research infrastructure of each campus is important to greater research capability.

Strategy 1: The U.T. System will encourage each component president to review his or her executive management team and develop additional appropriate expertise where necessary. Some campuses have executive teams with adequate preparation in research, but others may need to develop the appropriate expertise in grant management, facilities, and equipment. As the research portfolio for a campus grows, it may become appropriate to add a vice president for research.

Strategy 2: The U.T. System will convene a system-wide seminar for deans and for department chairs to disseminate best practices for research management. This seminar will cover issues such as building strategic research partnerships, faculty development, and protection of intellectual property rights. Research collaborations among U.T. institutions will be a particular focus of this seminar. Presentations from this seminar will be recorded to develop eventual on-line tutorials for campus leaders.

Strategy 3: The U.T. System will facilitate the development of a peer-review support process for campus offices that process grant applications and provide research services. Campus research offices face many complex issues of federal, state, and local regulations, as well as many deadlines for timely submission of grant applications and reports. Every campus faces common tasks in terms of notifying faculty of research opportunities, ensuring timely

applications, ensuring the appropriate protections for human or animal subjects, accounting for grant funds, and training graduate students in research ethics and intellectual property issues. The use of peer review teams has proven to be effective with other administrative offices as a way to find solutions to common problems.

Strategy 4: Appoint a Vice Chancellor for Research with responsibilities for nurturing research throughout the System. A search for a Vice Chancellor is already underway at the U.T. System.

Strategy 5: Develop effective plans for the best uses of returned indirect costs. The decision by the legislature to allow U.T. academic institutions to keep 100% of returned indirect costs offers an opportunity for each campus to think purposefully about the best uses of these indirect costs, with the understanding that the indirect costs must be used to support research. Each campus should develop a clear policy concerning its use of indirect costs.

Strategy 6: Supplement the campus research infrastructure with regional infrastructure where feasible, and facilitate the development of shared core resources where feasible. Particularly in the Metroplex, Tyler, San Antonio, and the Rio Grande Valley, it might be possible for U.T. institutions to collaborate in providing services to multiple institutions (e.g., a pool of technicians to maintain equipment; IRB services; bulk buying of common research supplies, etc.) Such practices have the potential to increase the efficiency of research dollars. Shared resources may also be possible on a statewide basis through the System.

Priority 3: Recruitment of graduate students

The WAG report lays great emphasis on the recruitment of graduate students to become junior researchers and later to become the working scientists and engineers of the next generation.

Strategy 1: Intensify efforts to identify talented undergraduates in U.T. System schools and persuade them to attend graduate school. Texas is missing an opportunity to grow its own scientific work force. The WAG reports notes that several component institutions without extensive graduate programs of their own are nevertheless producing many undergraduates who would be qualified for graduate study. Linkages between U.T. System graduate departments and UTS undergraduate programs should be encouraged and formalized. Summer programs, supplemental grants, and other mechanisms could help provide undergraduates with the experience and ambition to consider graduate study.

Strategy 2: Seek ways to improve the competitiveness of U.T. System institutions for the best graduate students. The competition for talented graduate students is nearly as intense as that for talented faculty researchers. U.T. System institutions have been less competitive in the national market because of lower stipends and inadequate health benefits for graduate students. On the other hand, many departments that could be competitive for national training grants have not yet pursued those opportunities. Every campus should develop a plan for increasing its competitiveness and attractiveness to graduate students. U.T. System administration can assist by sharing best practices.

Strategy 3: Consider carefully the development of new graduate programs. WAG consultants suggested some additional graduate programs. These suggestions should be seriously considered on the campuses. Campuses with current planning authority for masters or doctoral degrees should be moving forward aggressively to develop those programs. The development of professional masters programs in applied science should receive particular attention. The U.T. System will work closely with the campuses to obtain Texas Higher Education Coordinating Board approval of new programs.

Priority 4: Pursue external research funding more aggressively. The research reputation of each campus ultimately relies upon its success in peer-reviewed competitions for research funding. Studies by the Texas Comptroller's Office show that every research dollar has a multiplier of 3.3 in the Texas economy, a further indicator that external funding benefits the state and the community. Each campus needs to have a plan, developed in close consultation with the faculty, to increase its funded research.

Strategy 1: Consider some overlooked funding mechanisms for jump-starting research programs. Five of the eight institutions studied by WAG are Hispanic Serving Institutions (HSI) and eligible to compete for special funding from many federal agencies. This funding includes programs aimed at undergraduate institutions and at collaborative efforts of graduate and undergraduate institutions. Possible mechanisms include supplemental awards for researchers

(faculty and students) at smaller institutions. Campuses should look for opportunities to expand such relationships, especially with NIH-funded research programs at the six health institutions.

National workshops provide information on these opportunities. Each campus should send one or two faculty representatives to such workshops and then ask them to share what they have learned with the faculty.

Strategy 2: Collaborations are often critical to larger federal projects. Each institution should consider collaborations that would provide larger concentrations of researchers to undertake larger projects. The existing geographic concentrations of U.T. schools in the Metroplex, Tyler, San Antonio, and the Rio Grande Valley should be one avenue to collaboration. Virtual collaborations should also be pursued. Where there are obstacles to collaboration within the System, U.T. System officers should help to remove them.

Strategy 3: Expanded philanthropy can make campuses more competitive for research. Most federal grants today required some matching or cost-sharing by the institution. By providing start-up costs, some equipment, and facilities, private philanthropists can make campuses more competitive for federal grants. Expanded development activities are needed on every campus to help their local communities understand the potential pay-back from an improved research position. The U.T. System should work with each campus to improve the strength and effectiveness of its development efforts.

Strategy 4: Encourage the state of Texas to provide competitive, peer-reviewed money. State funds, such as the excellence funds provided under H.B. 1839, or the ARP/ATP program of the Texas Higher Education Coordinating Board, can provide the funding necessary to conduct pilot studies, acquire equipment, and in other ways prepare for larger federal grants. The U.T. System should educate state officials on the value of such funds, especially if the funds are awarded within the context of a competitive, peer-reviewed process and with appropriate accountability for how the funds are spent and what results are achieved.