

UNIVERSITY OF WYOMING

OFFICE OF RESEARCH AND ECONOMIC DEVELOPMENT

Relevant background

As the only four-year research university in Wyoming, the University of Wyoming has a responsibility to foster research and economic development not just on the campus but on behalf of the entire state.

The traditional core mission of the Office of Research and Economic Development is to serve UW researchers by providing assistance in submitting proposals for external funding and providing support in accounting and compliance with award requirements. In addition the office is increasingly involved in the state's economic development. Changes in the global economy have led to a fundamental shift in the strategies needed for economic success. Wyoming will succeed in the new economy by increasing the educational attainments of its people, and helping them in developing new products, services and business models, through research, and by transforming existing businesses to make them more productive. UW assists in all these endeavors through the research office's Economic Development Outreach Program in partnership with the Wyoming Business Council and through work with academic colleges.

The Office of Research and Economic Development is composed of a number of units that enable it to fulfill both its research and economic development missions. Many of these units (identified in italics) receive no Section I funds:

- Office of Sponsored Programs
- Wyoming Natural Diversity Database
- UW-National Park Service Research Station
- Wyoming EPSCoR/IDeA Programs (*with significant Section II funding*),
- *Manufacturing Works,*
- *Research Products Center,*
- *Office of Water Programs,*
- *Wyoming Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Initiative,*
- *WyomingEntrepreneur.Biz Network (including the Small Business Development Center, Gro-Biz, and Market Research Center), and*
- Wyoming Technology Business Center, (*with significant section II funding*).

Mission and values:

The core mission of the Office of Research and Economic Development is to:

- enhance a culture of research and development at the University of Wyoming;
- provide support and regulatory services for externally-funded research, including educational opportunities and grants administration;
- provide support for faculty research through start-up funding, core facilities, seed funding and major equipment matching programs;

- foster and celebrate the research accomplishments of undergraduates, graduates and faculty, including sponsorship of the President's Speaker Series and Undergraduate Research Day; and
- provide service and education to Wyoming small businesses so they can increase employment and build wealth.

5% and 10% Budget Reduction Scenarios: The Office of Research and Economic Development, while having major responsibilities, carries these forward with a relatively small Section I budget (\$2.04M) most of which is committed to salaries.

Many units of Research and Economic Development are primarily or totally supported on Section II funds (indicated above); however, we have identified several areas where Section I cuts could be made.

5% of our Section I budget is equivalent to \$101,988. To meet this level of reduction we would reduce the Wyoming Technology Business Center (WTBC) support budget by \$11,661; the Wyoming Natural Diversity Database (WYNDD) personnel budget by \$13,261; and the Climatology Research support budget by \$77,066.

10% of our Section I budget is equivalent to \$203,976. To meet this level of reduction we would reduce the Wyoming Technology Business Center (WTBC) support budget by \$11,661 and their personnel budget by \$11,661; the Wyoming Natural Diversity Database (WYNDD) personnel budget by \$26,412; and the Climatology Research support budget by \$154,242.

Both WTBC and WYNDD would seek to increase Section II revenue to offset the reductions. There is not Section II funding available for the Climatology Research support budget and the decrease will significantly impact our ability to support this program.

Other Recommendations (not in priority order):

- **Combine staff support** – does every department on campus need a full-time department secretary and/or bookkeeper? Efficiencies would be gained and specialization could occur instead of expecting one person to do everything. Two models to consider:
 - ✓ Centralize staff support by college/administrative unit instead of having dedicated staff in each department.
 - ✓ Combine support for smaller departments within a college/administrative unit.
- **Indirect costs** - During the next negotiation period for Indirect Costs (FY10), attempt to negotiate a higher indirect cost rate. Be consistent in the application of the rates; do not allow waivers for indirect costs unless it is required by the sponsor (i.e. U.S. Department of Education, Private Foundations). Do not allow reduced rates for industry sponsors.

- **Start-up funding for new faculty –**

General.

Start-up funds are granted to those incoming faculty who require specific equipment or support items to establish programs of scholarship. While all faculty typically are provided with fundamental items such as desktop computers, furnished offices, etc., some faculty, typically in science, technology, engineering and mathematics (STEM) areas, require considerably more in order to establish research programs. In universities nationwide, start-up has become a major budgetary item oftentimes outstripping the annual salary and benefits paid to a faculty member several-fold.

Philosophy.

UW’s philosophy is that a start-up grant is made to support an incoming faculty member’s program of scholarship with the expectation that this will aid them in securing future external funding. As such, start-up funds are made available typically over a two year period. Provision of a start-up grant typically is the responsibility of three entities, the Research Office, and the College and the Department of the incoming faculty member. These three-part arrangements serve two major purposes. First and foremost by combining budgets from all three entities, funding can be aggregated to provide for the large start-up grants oftentimes encountered. Second, each entity is invested in the success of a new faculty member. At times other entities also are involved in providing elements of a start-up grant; these include the Office of Academic Affairs, the School of Energy Resources and various institutional awards including EPSCoR, and IDEa grants to the University.

The following table lists the items typically requested in a start-up grant and indicates what entity has historically contributed to a start-up grant. The number of “X’s” in each box attempts to describe the entity with major responsibility.

ITEM	RESEARCH OFFICE	COLLEGE	DEPARTMENT
Equipment	XX	X	X
Supplies	XX	X	X
Graduate Students		XX	XX
Post Doctorals		XX	X
Office Equipment			X
Office computers		X	X
Renovation*	?	?	?

- ✓ Equipment: because start-up equipment is front loaded (meaning that it is purchased typically in the first year) the Research Office holds the major financial responsibility equipment. Colleges and departments also provide some funding for equipment.

- ✓ Supplies: the Research Office plays a major role in this start-up area with colleges and departments participating
- ✓ Graduates Students: Colleges and departments provide graduate students
- ✓ Post Doctorals: Colleges and Departments provide funding for post doctorals
- ✓ Office Equipment: unless significant circumstances exist, the Department is responsible for office equipment.
- ✓ Computing Equipment: Colleges and Departments are responsible for routine computing equipment for faculty and graduate students. At times equipment requires computers for operational interface; this is a component of the equipment acquisition.
- ✓ *Renovation: this is a special circumstance associated with start-up and ranges from something as simple as the placement of a 220 volt power line in an existing space to major renovation. In the latter case other entities must be involved in the discussion such Physical Plant. Thus this item is negotiated prior to any commitment being made regarding renovation.

Institutional Awards – EPSCoR/IDeA.

EPSCoR/IDeA programs, for which UW is eligible, may be a potential source of start-up assistance in some cases. These programs support hiring of new faculty in specific areas and the award budget carries specific funds for the purposes of start-up. This is true for both IDeA programs (INBRE and COBRE) and the EPSCoR programs (NSF, DOE, EPA, DOD and USDA). With major institutional awards position requests and associated start-up are pre-negotiated with the appropriate College Deans as part of the grant application preparation. It should be remembered that the purpose of EPSCoR/IDEA programs is to support institutional infrastructure building (personnel, equipment and space) certainly start-up is a major component; but because these awards are tied to the grant application and the specific research described therein they do not represent an open fund for start-up.

Core Facilities.

Over the past several years, core facilities have been developed housing major equipment and other technology and personnel. One function of the core facilities is to reduce the proliferation of certain commonly used equipment on campus and to create a mechanism for management and general use of such equipment. Continued use and enhancement of core facilities should serve to reduce start-up costs and at the same time support research across the campus. Thus as start-up requests are considered it is important to determine if a specific item requested by a new colleague already exists in a core facility and whether the requested item should be placed in a core facility. Use fees for core facilities are an appropriate expense that may be requested in a start-up grant for a new faculty member.

The Research Office's Role.

Without doubt, the ability to provide start-up to faculty plays a major role UW's ability to attract the highest quality faculty. As budgets become constrained, it is possible that the research office will pick up more of the funding responsibility in start-up. If this occurs, then other programs supported by the research office will diminish accordingly.

Specifically, if we shift resources to support a greater financial role in start-up, then our ability to match equipment grants for single-investigator equipment grant proposals and institutional-level proposals such as NSF's Major Research Instrumentation program will be lessened.

Perspective.

We foresee that the number of start-up grants made per year may decrease. Fewer start-up grants overall may help offset any increased financial role which may be taken on by the research office. It is important that deans and departments provide start-up requests that are as accurate as possible in the CPM process. We expect that the initial amount of start-up envisioned for the position during the CPM process will be within 15% of the actual negotiated amount. We remind deans and department heads that the Research Office tracks the recovery of start-up awards by indirect cost returns from faculty research grants and this data partially informs our decisions on the size of start-up awards that are appropriate in a given research field. Although the idea of placing a cap on start-up requests is tempting, due to huge range in start-up costs encountered across the campus, such a cap probably is not workable.

Budgets are made to be managed. The research office far prefers to work with deans and department heads in arranging the hiring to fit the probable amount of start-up that will be requested. This may mean that a position could be delayed for a year or two while the start-up accumulates or existing commitments are met.