



Designing Multi-Party Research Foundations

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I. RESEARCH METHODOLOGY

Project Challenge

Leadership at a member university approached the Council with the following questions regarding research foundations:

- *What are the functional roles of research foundations?*
- *How do universities benefit from establishing research foundations?*
- *How do research foundations operate to support on-campus research and how is the flow of resources coming back to campus structured?*
- *How are multi-party research foundations organized to support research and related activities?*
- *Taking into consideration an imbalance in the size of partnership entities at multi-party research foundations, how is the foundation structured to "protect" the smaller entity's rights?*

Project Sources

- Advisory Board's internal and online (www.educationadvisoryboard.com) research libraries
- National Center for Education Statistics (NCES): <http://nces.ed.gov/>
- Research foundation websites
- Articles of incorporation, bylaws, and other documents for several profiled institutions are available through the respective websites.

Research Parameters

- The Council reached out to administrators heading research foundations affiliated with public universities identified by the requesting member.

I. RESEARCH METHODOLOGY

A Guide to Institutions Profiled in this Brief			
Institution	Location	Enrollment (Total / Undergraduate)	Classification
University A	Southeast Suburb: Large	38,300 / 31,400	Research University High Research Activity
University B	Midwest City: Midsize	25,100 / 22,400	Research University High Research Activity
University C	Southeast City: Midsize	33,800 / 25,300	Research University Very High Research Activity
University D	Midwest City: Large	38,200 / 28,300	Research University High Research Activity
University System E (Multi-University System)	Northeast	N/A	<i>Each university in the system is independently classified.</i>
University System F (Multi-University System)	Midwest	N/A	<i>Each university in the system is independently classified.</i>

Source: National Center for Education Statistics, Carnegie Foundation for the Advancement of Teaching

II. EXECUTIVE SUMMARY

Key Observations

- ❖ **Public universities establish non-profit corporations referred to as research foundations primarily to commercialize intellectual property and administer research funding independently of state bureaucracy.** Because public universities are state-run institutions, they must comply with regulations that govern state expenditure, a practice which severely limits the ways in which research money may be spent. Research foundations are able to circumvent these strict regulations because they are private entities.
- ❖ **The major benefits of establishing research foundations are realizing efficiency gains, attracting research dollars, and acquiring business acumen.** Through economies of scale and by avoiding regulations governing state institutions, research foundations can more efficiently manage research and related activities. Funding sources are attracted to this efficiency, making foundations a preferred venue to give research dollars.
- ❖ **Revenue that a foundation earns through intellectual property is distributed between the inventor, the inventor's lab, the university, and the research foundation.** Research foundations work to find a balance between encouraging innovation and supporting the foundation and the university.
- ❖ **The majority of research foundations are affiliated with single institutions, and none of the profiled foundations are composed of different types of legal entities.** However, the University System E and University System F research foundations each serve a large number of institutions and are therefore more relevant to the requesting member's inquiry.
- ❖ **University System E and University System F research foundations look to balance the demands of differently sized institutions by working to ensure representation on the foundation's board of directors and by providing proportional services to each campus.** Institutions with higher research activity are more involved with the research foundation, but smaller institutions are also involved in decision making processes.

III. OVERVIEW OF PROFILED RESEARCH FOUNDATIONS

Overview of Profiled Research Foundations

All profiled research foundations are registered with the IRS as private, non-profit corporations with 501(c)(3) status, making them separate legal entities from their affiliated institutions. Contacts suggest that despite this independence, research foundations function as a department within the university. The **University System E** and **University System F** research foundations are exceptional as they each serve multiple institutions.

As demonstrated in the table below, profiled research foundations vary significantly in scale and scope, managing research budgets that range from \$18.5 million to \$900 million and performing a range of functions.

Background Information on Profiled Research Foundations				
Research Foundation	Year Created	University Research Expenditure (2008)	Number of Dedicated Employees	Primary Functions
University A Research Foundation	1997	\$68 million	0 (several employees are shared with the university)	<ul style="list-style-type: none"> Attract research dollars Commercialize intellectual property
University B Research Foundation	2001	\$18.5 million	Several employees are shared with the university	
University C Research Foundation	1980	\$286 million	0 (approximately 50 FTE are shared with the university)	<ul style="list-style-type: none"> Attract research dollars Commercialize intellectual property Provide research related legal services Administer sponsored programs
University D Research Foundation	2001	\$20 million	3 FTE (several employees are shared with the university)	<ul style="list-style-type: none"> Attract research dollars Commercialize intellectual property
University System E Research Foundation	1963	\$340 million*	Approximately 150 FTE at the central office	<ul style="list-style-type: none"> Commercialize intellectual property Develop affiliated corporations Administer sponsored programs Provide human resources management for research staff at system institutions
University System F Research Foundation	1951	\$1.3 billion**	Approximately 100 FTE at the central office	

* 2007 figure.

** 2009 figure. Of the \$1.3 billion research budget, the Research Foundation administers \$900 million. The remaining \$400 million is directly administered by individual campuses.

IV. BENEFITS OF ESTABLISHING RESEARCH FOUNDATIONS

There are several avenues through which universities benefit by establishing research foundations.

Efficiency Gains

Contacts explain that non-profit corporations are far more efficient at managing research activities than universities. The following are some of the specific ways in which a research foundation streamlines intellectual property commercialization and research administration:

- **Purchasing Efficiency:** Research foundations are not bound by state laws dictating purchasing procedures, allowing for greater bargaining power and thus lower prices. The **University System E** and **University System F** research foundations also benefit from economies of scale as they can purchase equipment for several institutions at a time.
- **Human Resource Management:** The **University System E** and **University System F** research foundations are responsible for providing human resource services for lab technicians, post-doctoral researchers, faculty members working during summers through research grants, and other research related employees. The **University System E** and **University System F** research foundations respectively issue 12,000 and 17,000 W2 forms each year, allowing for significant economies of scale in procedures like payroll management and contract design. In addition, because many state employees are unionized, administering human resources through a private corporation allows for greater flexibility. This flexibility is especially desirable as it pertains to temporary hires.
- **Project Timelines:** Research foundations allow for significant improvements in project completion rates as compared to government bureaucracy. A contact at **University D** explained that procuring funding and building a residence hall through the state and federal apparatus was a thirteen year process, while a very similar project run by a real-estate foundation took twenty months. Similarly, researchers working under private corporations are able to avoid much of the bureaucratic hoop-jumping that government work entails, resulting in timelier project completion.

Attracting Funding

Contacts explain that because funding sources are sensitive to how their grant money will be spent, they are more likely to provide funding for projects administered through efficient research foundations rather than inefficient public institutions. One contact noted that certain funding sources refuse to provide research grants to public universities but are happy to work with research foundations. Foreign funding sources are especially biased toward providing funding to private research foundations rather than state institutions.

As a result of being a more attractive destination for research dollars, **University D** has doubled its research budget from \$30 million to \$60 million since the research foundation was established in 2006. Another profiled research foundation received a \$28 million grant from a foreign government, which the university would not have been legally unable to accept.

Contacts explain that the larger research budgets allow universities to build more sophisticated facilities, thus attracting top researchers and experts. **University B** and **University D** developed research foundations in order to become major research institutions, and contacts suggest that by attracting more research funding and researchers, significant progress toward this goal has been made.

IV. BENEFITS OF ESTABLISHING RESEARCH FOUNDATIONS

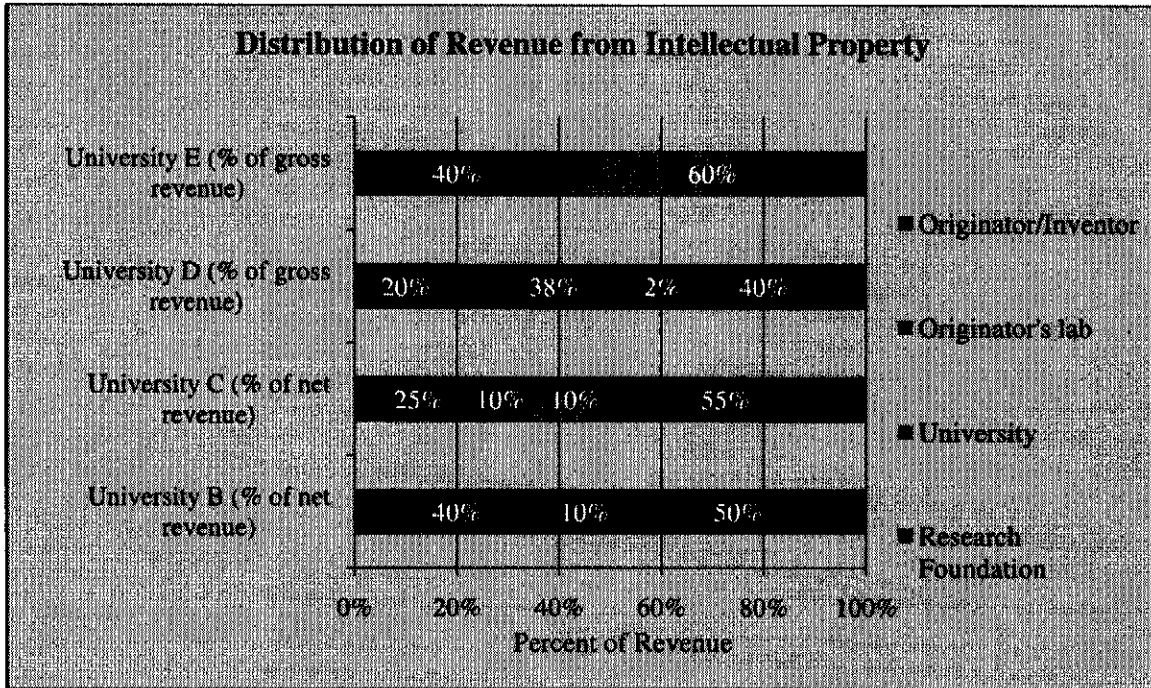
Business Acumen

Contacts across profiled institutions explain that because university administrators are tied down by state regulations, it is more difficult for them to be entrepreneurial. Research foundations, however, have the ability to be more business-savvy. Below are examples of how profiled institutions have increased their entrepreneurship via their research foundation.

- In order to introduce a more entrepreneurial spirit to its research foundation, **University A** often appoints representatives from local businesses on its board of directors. At present, the President and CEO of a local bank is a member of the research foundation's board. The **University System E** and **University System F** research foundations also have board members from the business world.
- **University C** has established a Technology Commercialization Office that works closely with the research foundation to market intellectual property. **University B's** licensing revenue increased from \$270,000 in 2001, when the research foundation was established, to \$6.3 million in 2007, demonstrating the commercialization prowess of research foundations.

V. DISTRIBUTING REVENUE FROM INTELLECTUAL PROPERTY

All profiled research foundations manage intellectual property created by the university's researchers. Research foundations use revenue from intellectual property to encourage innovation, support the inventor's lab and department, and maintain the research foundation's activities. The following graph demonstrates the ways in which four profiled foundations distribute revenue:



The **UNIVERSITY SYSTEM F** research foundation charges every institution in the system an annual fee, and therefore does not retain any revenue from intellectual property (see page 9 for further information). Every university in the system autonomously determines how the sixty percent of revenue it receives is distributed.

In order to incent innovation, **University C** allocates all of the first \$10,000 earned in net revenue to the originator, with additional revenue being distributed in the proportions outlined in the above graph above. For a similar purpose, **University D** transfers a significant amount of the revenue to the originator and lab responsible for the invention; only two percent of revenue is transferred to the university and forty percent remains with the research foundation.

VI. MULTI-PARTY RESEARCH FOUNDATIONS

Managing Multiple Campuses

Fee Structure at University System F Research Foundation

The individual schools within **University System F** each contribute an annual fee, which is assessed as a percentage of the previous year's research expenditure. As such, larger universities are charged a higher amount.

Despite this current model, contacts at University System F suggest that there are preliminary plans to introduce a fee-for-service model for certain activities performed by the foundation, such as market analysis for intellectual property. A fee-for-service model would allow universities to more carefully monitor how dollars are spent. In the coming years, a fee will be levied on certain provided services, while the annual fee will fund the remainder of research foundation activities.

Administrative Organization

The University System F research foundation has an office at each University System F campus, where day-to-day support is offered to faculty members and other research staff. The central office manages functions where economies of scale are possible.

University System E institutions have smaller research operations, and as such only the two largest system campuses have on-site research foundation representation (one FTE at each campus).

Managing Sponsored Programs

All external funding at **University System E** and **University System F** campuses is administered by the respective system's research foundation.

The pre-awards process at the University System E system is decentralized, with each campus' Grants Officer working with faculty members to prepare proposals. Once funding is awarded, the research foundation manages equipment purchases, hiring temporary staff, and legal matters such as complying with state and federal laws dictating work with human or animal subjects.

The University System F research foundation is similarly organized to administer sponsored programs, with the only difference being that pre-awards processes are performed by the on-site research foundation office, instead of campus-specific grants officers.

Balancing Small and Large Institutions

The University System E and University System F systems serve institutions that vary greatly in terms of size and research expenditure.

- **University System E:** Contacts at the University System E research foundation explain that larger institutions tend to be more involved with the research foundation because they perform more research and related activities. As such, the opinions of universities with larger research programs are regularly sought after when major changes to the research foundation are being discussed. However, there is no pushback from smaller campuses as they appreciate the benefits of participating in a collaborative enterprise with major research institutions.
- **University System F:** The University System F research foundation's fifteen-member board of directors consists of members from several campuses as well as five members from outside of the system. Regardless of the entity the member represents, each board member has an equal say in running the research foundation. While ensuring representation from differently sized universities is not codified in the research foundation's charter, contacts stress that, in practice, an effort is always made to have board representation from smaller campuses. As an example, **University X in System F**, with a student population of 28,000, and **University Y in System F**, with an enrollment of 3,000, each has a representative on the board.

Professional Services Note

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