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# Research and the Bottom Line in Today's University

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# Research and the Bottom Line In Today's University

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*Citing examples of corporate involvement in university research and decision making, the authors argue that today's university is characterized by a web of symbiotic relationships which may turn them away from other important priorities, particularly teaching. When universities are scrambling for corporate support, the missions that become most important are conducting research that attracts corporate sponsors, developing marketable products and technologies, maintaining and cultivating ties with the private sector, and fashioning imaginative partnerships with corporate patrons. —Editors*

Today, public colleges and universities are facing a nearly unprecedented cutback in state funding resulting from the recent recession and lower tax revenues. Even before the current crisis began, however, state funding for higher education was already declining as a share of state budgets. State funding is also declining as a percentage of institutional revenues and as a percentage of institutional budgets. As a result of all this, public colleges and universities around the country have been actively seeking other sources of support to make up for the unpredictability of public contributions. These include sponsored research, licensing agreements, telemarketing, credit cards, capital campaigns and more. Data show that university revenues from outside sources increased by 155 percent between 1992 and 2000.<sup>i</sup>

There is no doubt that this revenue-generation strategy has led to an increase in institutional budgets. Even though state funding has declined, general revenues and expenditures for public universities have increased in current dollars over the last 25 years.<sup>ii</sup> This trend is particularly noticeable at research universities. Proponents of corporate funding suggest that the monies resulting from private contracts have a beneficial effect on the overall university because the revenues and overhead of sponsored programs allow universities to finance non-subsidized academic programs, although some recent analyses have called this claim into question.

This paper will look at examples which suggest that public colleges and universities, particularly research institutions, are becoming permeated with corporate involvement—involvement which is likely to shape the research conducted on campus, the content of the academic curriculum, the university's staffing patterns and the way it makes decisions. We perceive a growing “bottom line” mentality in higher education. At the same time, we want to make clear that it is beyond the scope of this paper to systematically chart the causal relationships between specific corporate-related activity and university practices. We invite further research that explores the corporate vs. quality debate in college and university programming.

## **The University of Michigan**

We begin at a major public university with two very different examples of academic practices—the vigorous promotion of corporate research support on the one hand and the de-valuing of classroom instruction on the other.

## **The Preferred Place of Sponsored Research**

The increased focus on research and corporate ties on campus is reflected dramatically at the University of Michigan. The University's research budget increased five-fold during the last two decades, going from \$89.0 million in 1980-1981 to \$499.7 million in 1999-2000. In addition to obtaining traditional research grants and contracts as part of this increased emphasis, the University of Michigan opened an array of research centers funded by, and conducting research for, public and private sector institutions. These include the Center for Venture Capital and Private Equity Finance, the Transportation Research Institute, the Automotive Research Center, the Tauber Manufacturing Institute, John M. Olin Center for Law and Economics, and the Samuel Zell and Robert H. Lurie Institute for Entrepreneurial Studies. These centers provide seed money for research, pool the talents of professors and provide secretarial assistance for affiliated faculty, making it easier to write articles and proposals for corporate and government funding.

In one sense, corporate-sponsored centers may not appear very different from other, more traditional university centers that concentrate, for example, on a particular academic specialty or ethnic studies. Problems may arise, however, if the center is based more on furthering the benefactor's ideological agenda or achieving a profitable outcome for the funding source, rather than furthering sound scholarship that can withstand professional review.

The John M. Olin Center for Law and Economics at Michigan is just one of many university centers and programs across the United States funded by the politically conservative John M. Olin Foundation. The Center promotes a conservative legal philosophy called “law and economics,” as do similar Olin-funded programs at the University of California at Berkeley, the University of Virginia, and the University of Chicago. Kevin Phillips, a Republican critic of the far right, has described “Law and Economics” as a neo-Darwinist philosophy reminiscent of the doctrines of Herbert Spencer, preaching that commercial selection processes in the marketplace could largely displace government decision making.<sup>iii</sup>

We are not arguing that conservative philosophies have no place in higher education or that this particular program has no academic value. We do argue, however, that programs like the law and economics projects—promoted with research grants, underwritten seminars and funded courses—show how easily university research, even programs of instruction, can be swayed by hefty grants and contracts.

Research universities in other states are following a similar pattern of taking on research that seems based less on a scholarly agenda than on promoting their funder’s agendas. The University of Maine at Orono houses the Lobster Institute, an industry-funded center that “identifies practical problems of concern to the industry and seeks solutions to the problems.” The computer-industry-funded Center for VDT and Health Research at Johns Hopkins University conducts research on repetitive stress injuries in a way, according to at least one observer, that “tilts toward studies that investigate the role of ‘psychosocial’ factors, such as on the job stress,” rather than factors related to equipment problems.<sup>iv</sup>

The University of Missouri at Kansas City houses the National Center for Responsive Gaming, a research center funded by the gambling industry. The Center sponsors research and conferences exploring the genetic or chemical basis of compulsive gambling, but according to Bernie Horn of the National Coalition Against Legalized Gambling, the center steers research “into areas that can’t hurt [the industry].”<sup>v</sup>

To attract corporate grants and research contracts, other research centers at the University of Michigan, such as the Center for Venture Capital and Private

Equity Finance and the Transportation Research Institute, admit that their *raison d'être* is to advance the interests of business. The Center for Venture Capital and Private Equity Finance reports that it conducts “research, teaching and involvement with practitioners. . . to encourage the channeling of equity capital to build companies, and to harvest and recycle capital in new, emerging fields of opportunity.” In addition to the University, the center defines its constituents as “entrepreneurs and owner/managers of fast growth-oriented companies” and “venture capital and private equity investors, oriented to equity-based financing for entrepreneurial firms at all stages of growth. . . ”<sup>vi</sup>

When it comes to corporate ties and grants, the Transportation Research Institute is one of the University of Michigan’s crown jewels. The institute has a staff of more than 150 people and an annual budget exceeding \$13 million, which comes primarily from government and automobile manufacturers and suppliers. The University of Michigan’s alumni magazine, *Michigan Today*, acknowledges the university’s close ties with the auto industry.<sup>vii</sup> Again, the research conducted by industry-focused centers and institutes may (or may not) be of high quality. However, since the motivation behind projects like these is to achieve profitable results for particular industries or companies, while using university money, we believe they should receive very close scrutiny by the academic community.

### **The Lower Priority of Instruction and Instructional Faculty**

As we noted earlier, one of the arguments for university-based corporate research is that the funding derived from this activity benefits the university as a whole. That presumed effect, however, is not reflected in the conditional status of instructional faculty at the University of Michigan. As research at the University is thriving on outside funding, there seems to be a decline in the priority placed on instruction at the institution.

This declining priority is exhibited by the proliferation of part-time/adjunct professors hired in place of full-time tenured faculty. Part-time faculty, along with graduate employees and full-time (but non-tenure track) lecturers, are increasingly responsible for carrying out the instructional mission of universities, often teaching as many or even more courses than full-time tenured professors. However, part-time faculty are typically denied the salary, office space and other benefits accorded to the full-time research faculty.

Recently, part-time faculty at the University of Michigan voted to collectively bargain, selecting the American Federation of Teachers as their union.<sup>viii</sup> The unionization vote was important because part-time professors represent an ever-higher percentage of the faculty at the University of Michigan, as they do at most universities. At the University of Michigan, the number of full-time

**TABLE 1: University of Michigan Faculty**

	1980-1981		1999-2000	
	full-time	part-time	full-time	part-time
Literature, Science and Arts	781	113	694	425
Other Schools	301	55	223	163

SOURCE: *American Universities and College*, 12th and 16th editions.

professors has declined while the number of part-time professors has increased over three-fold since 1980-1981 (Table 1).

Plainly, we can see that there are winners and losers in a university increasingly dependent on outside sources of funding—research faculty who bring in corporate dollars are the winners while the teaching function has a lower priority. More important, it appears, are the missions of conducting research, developing marketable products and technologies, maintaining and cultivating ties with the private sector, and fashioning imaginative partnerships with corporations.

### **Corporate-Sponsored Faculty**

Research professors who are successful can also be rewarded with highly paid endowed chairs, in addition to center appointments. The University of Michigan’s corporate chairs include the Ernst & Young Professor of Accounting, the Charles R. Walgreen, Jr. Professor of Pharmacy, the S.S. Kresge Professor of Marketing, and the Sparks Whirlpool Corporation Research Professorship. Most universities have similar executive or corporate-funded professorships.

California State University Northridge’s history department is home to the Whitsett Chair of History, an endowed professorship named for William Paul Whitsett, a San Fernando Valley real estate developer and chairman of the Metropolitan Water District who died in 1965. The professorship is funded by

Whitsett's heirs through the W. P. Whitsett Foundation, which initially asked that the Whitsett professor have "an understanding" of the late developer's beliefs in individualism, personal discipline, faith in God and devotion to community and family. "These are the traits we wanted to perpetuate," said Eleanore Robinson, a Whitsett heir and foundation board member, about the endowed chair. Although University administrators who negotiated with the Whitsett Foundation initially agreed to the request, it was later dropped when a majority of professors in the history department, who were kept in the dark about the contents of the agreement, publicly complained.<sup>ix</sup>

This is part of a trend. Often, contracts with outside funders are drafted by administrators, lawyers and those providing the funding, and faculty are kept ignorant about the terms of the agreements for as long as possible. For example, at the University of Wisconsin at Madison, administrators publicly extolled the benefits of an agreement reached by the University with Reebok, but were silent about the agreement's Orwellian clause stating that the "university will not issue any official statement that disparages Reebok. . . [and] will promptly take all reasonable steps to address any remark by any university employee, including a coach, that disparages Reebok." As at CSUN, faculty complaints forced the university to renegotiate this part of the agreement.<sup>x</sup>

Cases like these are very troubling. True, the faculty was ultimately successful in beating back the unacceptable restrictions imposed by the prospective funding source. However, these cases clearly highlight the need for openness and faculty participation in the grant-seeking and chair-endowment process. One way to accomplish this is to press for the establishment of professor-dominated oversight boards that scrutinize contracts, prohibit restrictions on the dissemination of research findings, and establish policies concerning the securing of research funding. Another would be to require that a percentage of all research dollars entering the university be earmarked for noncommercial research projects.<sup>xi</sup>

## **Federal and Corporate Grants to the University**

Despite cuts in many domestic programs, federal dollars for research have actually increased during the past decade, even during President George W. Bush's administration. For example, federal research funding rose from \$78.66 billion in 2000 to \$111.59 billion in 2003.<sup>xii</sup>

Increasingly, these monies are devoted to encouraging university/business partnerships. For example, the U.S. Department of Commerce's Advanced Technology Program (ATP) funds the lion's share of the research costs for companies conducting risky and innovative technological research on university campuses. The ATP's appropriation in 1999 increased to over \$203 million, up from \$192.5 million in 1998.<sup>xiii</sup>

Although not earmarked for specific corporations like ATP grants, much research funding from the National Institutes of Health and the National Science Foundation that goes to universities also winds up benefiting corporations. This is because Congress in 1980 passed the Dole-Bayh Act, also known as the University-Small Business Patents Procedure Act, which allows universities to license to the private sector research discoveries made with federal grants. Sometimes this can be a bad deal for taxpayers, especially when the licenses are issued on an exclusivity basis, allowing the company to charge monopolistic prices for products, such as newly-developed drugs.

The benefits that corporations obtain from federally-funded research may explain why, after several Republican budget cutters suggested that funding for scientific research be cut in 1996, university representatives and executives from pharmaceutical and biotech companies, including Biogen Corp., Bristol-Myers Squibb, Chiron Corp. and Pioneer Hi-Bred International, met with then-House Speaker Newt Gingrich to collectively lobby against the cuts. After the meeting, Gingrich wound up backing a \$175 million *increase* in funding for the National Institutes of Health, rather than the proposed cut.<sup>xiv</sup> Compare this to funding for the national endowments for the humanities and the arts, which suffered repeated cutbacks from Congress over the past ten years.

Federally-funded, as opposed to corporate-funded, research generally comes with fewer restrictions concerning the dissemination of findings. By contrast, a study published in the *New England Journal of Medicine* reported that the majority of companies signing research agreements with universities require that the findings be "kept confidential to protect [their] proprietary value beyond the time required to file a patent."<sup>xv</sup> Under the terms of a financial agreement with biomedical executive Alfred Mann, the University of Southern California has agreed to withhold publication of research findings for six months or more, three times longer than allowed for federally-funded research.<sup>xvi</sup> Some contracts even give corporate sponsors veto power over



publication of the over research they funded. Professors at the University of California San Francisco, the University of Toronto and Brown University had to beat back corporate attempts to halt the release of research results because of secrecy agreements in contracts.<sup>xvii</sup>

### **Corporate-Style Decision Making**

Nearly all governing boards at universities are dominated by corporate CEOs, Wall Street attorneys and politicians. From prestigious private research institutions such as Columbia University to smaller private universities like the College of St. Thomas in St. Paul, boards are dominated by business executives. The situation is not much different at public universities. Typical of public university governors is the board of trustees of the California State University system, which includes executives from Pacific Family Investment Co., two real estate firms and Pantronix Corporation.

Corporate involvement on boards of trustees is not a new phenomenon, but over the last thirty years a new crop of corporate leaders has proven to be more assertive in directing university curricula and research in a business-oriented direction. This trend began in the 1970s, when many conservative corporate executives became alarmed at what they perceived as an anti-business bias on college campuses.

Hoping to reverse this trend, they began “investing in a variety of academic projects, including professorships of free enterprise, executive-in-residence programs, faculty business forums, direct support for students and company designed courses”. The purpose was to make the campus more hospitable to business ideas because, as Alan Greenspan observed, “What is being taught in the universities today will be the generally accepted concept ten years from now.”<sup>xviii</sup>

With government funding becoming more precarious for state institutions, we have already seen how successful corporations have been in bringing money onto campuses for business-oriented research, centers and endowed professorships. Anecdotally, many higher education observers have noted the increasing tendency of boards of trustees to pick university presidents and administrators with a business background, often in place of an academic background. It is commonplace today to hear university presidents referred to a CEOs.

Inevitably, this mindset is affecting the way in which universities are managed. This tendency was represented in the lead story in the October 2000 issue of the *American Association of Higher Education Bulletin*, which read: “Leading Colleges and Universities as Business Enterprises: Six CEO lessons for success.”<sup>xix</sup> This approach is even extending to curriculum decisions. For example, faculty members who work in the humanities or liberal arts disciplines (not generally funded through government or corporate contracts) are increasingly charged with justifying their expense through the full-time equivalent enrollments of their classes. In 2001, Ohio State University (OSU) revealed a new “game show-like” system in which all academic departments will compete for resources.<sup>xx</sup> Under this system, the most profitable departments are to be rewarded with more resources. The OSU system illustrates a number of trends—the trend away from academic decision making to corporate-style decision making and an emphasis on meeting consumer demand in curriculum, with the risk of educational quality taking a back seat.

## Conclusion

Corporate involvement in the university has become pervasive. We are not arguing that research which benefits business is *always* academically unsound, or that trustees from corporate backgrounds are *inherently* bad trustees, or that professors holding endowed chairs are all sell-outs. However, we believe there are reasons for real concern about an academy permeated with corporate influence.

For example, as corporate dollars are funneled into universities, we see the danger of a reduced focus on research that returns dividends, not in dollars, but in human understanding, democratic advancement and social justice. Grants that further a benefactor’s political ideology or financial interests should be examined very carefully. Finally, there is cause for concern that the corporate approach to economically useful information—that is, to hold onto it in a proprietary way—could ultimately challenge the academic practice of keeping information open, available and subject to challenge.

In terms of instruction, there is a danger of adopting curricula more focused on occupational success and pleasing student “consumers” than on furthering the liberal arts and intellectual growth. Marketing pressures are positioning education as a product that is sold.<sup>xxi</sup> In this environment, “the teacher produces a product which the customer [student] buys and expects to get what was paid

for.”<sup>xxii</sup> This producer-consumer trend reflects part of a larger societal trend that “reconstructs organizations in ways that are commercial and customer focused.”<sup>xxiii</sup>

With the proliferation of business-oriented trustees, presidents, administrators and projects, business models of management proliferate as well. This paper has described examples of faculty being bypassed in academic decision making and of an upsurge in corporate-like approaches to accountability. The growing use of part-time faculty, and the poor treatment they receive, is a good example of a practice that might make sense in traditional management terms, but which may, at the same time, be destructive in academic terms. As part-time teachers are marginalized in the university system, shifting the bulk of teaching to these individuals casts teaching as secondary to the aims of the institution. Since most of these part-time instructors do not engage in research, the implication is that research is severed from teaching.

The message in this is that teaching is about a direct transfer of skills and not about discovery and engagement with ideas. As such, faculty have little recourse other than to find ways to define who they are and what they do in terms of the corporate vocabulary of outputs and quantitative measurements.

The challenge for those who value independent scholarship and teaching is to find ways to respond. A number of possibilities were noted earlier. For example, faculty members need to examine corporate contracts with special vigilance, and if necessary, voice their opposition to corporate contracts with little academic value. The university needs to support and sponsor more diverse research. Universities should be asking legislatures to increase support for a wider array of research, rather than lobbying legislative leaders in tandem with corporate leaders only to increase scientific funding. Lastly, just as individual support of core academic principles is important, collective action may be equally if not more important. Organizing for collective bargaining is an effective approach to representing, and simultaneously protecting, faculty in their attempts to maintain a democratic campus. Most important of all, every element of the university community must mobilize to convince the public that higher education is more than an economic machine that should be ruled entirely by the laws of the market.

## ENDNOTES

- <sup>i</sup> U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Finance Survey Data, various years.
- <sup>ii</sup> U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS). Financial Statistics of Institutions of Higher Education surveys; Integrated Postsecondary Education Data System (IPEDS), January 2003.
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