

## **UNIVERSITY OF ROCHESTER**

### **CHARGE OF STEERING COMMITTEE ON TECHNOLOGY TRANSFER AND CORPORATE ALLIANCE**

#### **PRESIDENT SELIGMAN**

**January 10, 2006**

Based upon national benchmarks, the University of Rochester's technology transfer function is successful. Nevertheless, there are a host of policy questions, organizational issues and operating principles that frequently arise which could have a significant impact on resource allocation and revenue production. The University does not have a clear structure of authority to deal with how these issues are addressed.

Moreover, many of the stakeholders in the technology transfer process currently have a limited role in many of the key decisions that are made. This leads to a lack of understanding about the sophisticated nature of the technology transfer process and its value to the University.

#### **CHARGE:**

The Steering Committee on Technology Transfer and Corporate Alliance will provide oversight of all issues related to the University's Intellectual Property strategies and policies. The Committee will prioritize, review and address the key policies and issues that present themselves in the technology transfer, commercialization, corporate alliance processes at the University and make recommendations to the President.

Specifically, the Committee will recommend ways to (a) more effectively "steer" our intellectual property process into the future in a manner that is best aligned and integrated with all parts of the University, (b) ensure that critical business transactions in the technology transfer area are known and understood by key constituents within the University, (c) ensure that exceptions to University policy, or significant policymaking decisions that arise are considered by the appropriate group of University personnel, and (d) ensure that an adequate knowledge of, and support for, the technology transfer process is disseminated throughout the University.

The Steering Committee initially will meet biweekly to review and address the issues outlined in the white paper "Intellectual Property Strategies and Policies" attached to this Charge. The Committee will make its final report to the President by May 1, 2006 and will provide regular interim reports of its work.

The membership for the Steering Committee consists of:

Peter Robinson, Vice President and COO of UPMC, and Sue Stewart, Vice President and General Counsel – Co-Chairs

- (1) The Provost
- (2) The Vice Provost for Health Sciences
- (3) Dean of the College Faculty
- (4) Dean of the Medical School

- (5) Dean of the School of Engineering and Applied Sciences
- (6) SMD Senior Associate Dean for Basic Research
- (7) College Dean of Research and Graduate Studies
- (8) SMD Senior Associate Dean for Academic Affairs
- (9) Associate Vice President for Research Administration
- (10) Senior Vice President for Institutional Resources
- (11) Director – University Office of Technology Transfer
- (12) Director - Office of Technology Transfer – Medical Center
- (13) Director – Office of Corporate Alliance
- (14) Director – Laboratory for Laser Energetics
- (15) Deputy VP for Institutional Advancement

Gail Norris, senior counsel for technology transfer, will act as administrator for the Committee.

Representatives from Advancement, Communication and Finance will be invited when topics relevant to their responsibilities are discussed.

The paper that follows outlines the process involved in obtaining patents on our inventions, assessing their commercial potential, and transferring their benefits into commercial use. The strategy issues that arise in this process should not be addressed in a piecemeal fashion. This paper outlines the whole process and some issues that present themselves along the way, so that fully informed decisions can be made. The Committee may identify and consider other relevant issues as its work progresses.

## INTELLECTUAL PROPERTY STRATEGIES AND POLICIES

### I. WHERE ARE WE TODAY – THE STARTING POINT

The University of Rochester is at the top of the national rankings in technology transfer revenue and other key benchmarks. Although we are doing very well, the reality is that the majority of technology transfer operations at research universities, including many who are larger than us, do not generate sufficient revenue even to pay for themselves. In examining intellectual property strategies and policies, it is critical that potential revenues generated from technology transfer operations are realistically projected, and that measurements of success in our intellectual property management function are broader than revenue generation, and that we measure other types of impact important to the University.

Appendix I contains (i) statistics on research dollars invested, invention disclosures reported, patents filed, patents awarded, active licenses and options, royalty revenues and number of University-initiated start-up companies, (ii) some similar statistics for other research Universities, (iii) a copy of the University's Intellectual Property Policy, and (iv) an overview of the structure and staffing of the two Technology Transfer Offices at the University.

In assessing "Where we are today", it is also important to keep in mind the wide number of stakeholders who are affected by a University's intellectual property management and transfer function. These include the University as an institution (its reputation and identity in the community), faculty, deans/department heads, finance personnel, the Office of Research and Project Administration ("ORPA"), the Offices of Technology Transfer ("OTT"), the Office of Corporate Alliance ("OCA"), the Office of Counsel, Public Relations, Advancement and the local community. Each has its own unique perspective on the value of this function to the University. The roles of the stakeholders in setting the mission and goals of an intellectual property management function, and in making some of the key policy decisions, should be considered and defined. This issue will be revisited throughout this paper.

### II. DEFINITION OF INTELLECTUAL PROPERTY MANAGEMENT FUNCTIONS AT THE UNIVERSITY – PRECISELY WHAT ARE WE TALKING ABOUT.

This paper focuses primarily on intellectual property in the form of patentable inventions which arise from University research, and the process of assessing the commercial potential of the invention, protecting it through patenting, and translating its benefits into society. There are two distinct "paths" that this process takes based on the funding source of the research.<sup>1</sup>

First, research is often funded by the government. The path government-funded research takes through the University is well trod, and, as a result fairly standardized. The award of the grant itself is based on a defined proposal and is subject to extensive

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<sup>1</sup> For the purposes of this paper, research funded through the University's own internal resources is not addressed since internal funding presents no novel intellectual property issues not already considered in this paper.

government regulations governing the use of the research dollars. The Bayh-Dole Act permits ownership of intellectual property to vest in the University, and restricts a University's ability to transfer title. Thus, government-funded intellectual property has no significant negotiation or policy issues up through the filing of a patent on an invention resulting from the research. Moreover, Bayh-Dole also stipulates some requirements for University licensing of these patents (royalties shared with inventors, diligence obligation to commercialization, etc.). Other than Bayh-Dole requirements<sup>2</sup>, the University typically has the unfettered ability to decide how best to commercialize its inventions and its clear ownership of the intellectual property gives it natural leverage in negotiating with industry.<sup>3</sup>

Similarly, the roles of the stakeholders are fairly well understood. The process of grant submission is well detailed, and faculty, deans, department heads, finance and ORPA have defined tasks and responsibilities. OTT and legal typically become involved when an invention disclosure results from the research, and the patenting process begins. The University as an institution, public relations, advancement and the local community may be involved in publicizing both the initial the award of federal funds and any transaction involving the commercialization of an invention arising from the research, but are not generally involved in decisions surrounding the commercialization effort.

The second path follows research that is funded by industry. Here there are few written rules or policies in this area, although the personnel involved in these arrangements have a clear idea of the principles we should follow. With no federal grant regulations or the Bayh Dole Act, there are no written guidelines other than University policy. Issues related to how a research contract is solicited and negotiated, how research funds are applied, how intellectual property is owned, etc. are left open for negotiation. Similarly, the roles of the stakeholders are more complex and not well defined. Consider, for example, a research contract sponsored by Bausch & Lomb or Kodak. To what extent should the roles of the various stakeholders be different than the roles they play in government-sponsored research?

The intellectual property issues that exist with all intellectual property owned by the University (whether from government-funded or industry-sponsored research) are outlined in Section IV. The additional issues unique to industry-sponsored research are outlined in Section V.

### III. ISSUES THAT WILL IMPACT TECHNOLOGY DEVELOPMENT, MANAGEMENT AND TRANSFER IN THE NEXT FIVE YEARS

The strategies and policies discussed in this paper should be considered in the context of future challenges in this area so that our solutions are flexible enough to survive. The four main challenges facing the continued development, management and transfer of

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<sup>2</sup> The text of the Bayh-Dole Act, and some of the more relevant regulations under the Act, are contained in [Appendix II](#)

<sup>3</sup> There are instances where the University collaborates with another University or a company in a government-funded research project. In those cases, issues of ownership of intellectual property and its disposition are more complicated. Still, the invention is primarily funded with government-dollars. As a result, the negotiations tend to be less contentious since none of the parties negotiating ownership issues have invested significant dollars of their own to generate the intellectual property.

university technology in the future are discussed below. Reading material related to these challenges is included in Appendix III

#### Sources of Funding for Research Will Shift

In the U.S., the sources of university research funding are projected to shift so that industry will be responsible for an ever increasing percentage of research dollars. Industry contributions to academic research in the nation have been growing gradually for decades. Between 1980 and 2003, industry contributions to academic research increased from \$236 million to about \$2.2 billion – a four-fold increase (after adjustment for inflation)<sup>4</sup>. Over the same time period, total research budgets of universities and colleges increased by less than three-fold.<sup>5</sup> Companies are concluding that their R&D spending dollars may be more efficiently spent by collaborating with research universities than by funding the infrastructure of research operations at their facilities.

In parallel, many predict that there will be a decrease in federal funding for scientific research.<sup>6</sup> Given our current deficit-spending economy, research universities will have to compete for increasingly finite dollars. Government (and taxpayer) support for basic research is likely to level off or decline as funds are diverted toward national security issues. States seem to be in no financial condition to pick up the slack.

#### The Patent System is Highly Stressed

The U.S. patent system was not designed to accommodate the huge increase in innovations that have been created over the past decade or so. The U.S. Patent and Trademark Office now receives more than 300,000 applications a year and issues 180,000 new patents. This volume has burdened the system and jeopardized the quality of examinations and the quality of claims in issued patents. Costs related to obtaining a patent are rising, decisions from patent examiners are taking longer, and there is an increasing amount of expensive litigation defending the validity of an issued patent.

In addition, there has been some confusing messages sent from the courts in the area of when and to what extent the use of issued patents for research purposes is permitted. A Federal appellate court in *Madey v. Duke* seemed to indicate that no infringement of a patent is permitted, even if done for non-commercial purposes. The U.S. Supreme Court seemed to lean the other way in its recent holding in *Merck v. Integra Life Sciences*. This has left research universities in a quandary about whether and when to seek licenses for patented research tools that may be used or useful in their laboratories.

Finally, there is an increasing concern that the excessive patenting of small pieces of technology is leading to excessive fragmentation of intellectual property, and an “anti-commons” effect. This theory espouses that our patent system is actually delaying technological advancement by requiring innovators to assemble licenses for each little piece of background or base technology before the next-step improvement can occur.

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<sup>4</sup> The Chronicle of Higher Education, November 25, 2005.

<sup>5</sup> Id.

<sup>6</sup> See, e.g., Remington, Michael, *The Bayh-Dole Act at Twenty-Five Years: Looking Back, Taking Stock, Acting for the Future*, Journal of the Association of University Technology Managers, Summer, 2005.

### Increase in Published Criticism of Universities' Use of Federal Research Funds.

Success invites scrutiny. The success of universities in translating inventions into commercial application has been met with an increased amount of criticism. A list of the most widely published criticisms includes:

- Universities are inflexible and unrealistic in their Intellectual Property policies, and, as a result, are too difficult to negotiate with;
- Universities are being overly aggressive in their patenting strategies by attempting to patent virtually every result that comes out of their labs;
- Universities are creating mini-monopolies by exclusively licensing many of their patents to one company who then “price gouges” its product;
- Universities have fallen off their responsibility to support open science and to allow for the advancement of scientific ideas for reasons other than commercial potential; and
- The incentive for researchers to become entrepreneurs has not only seduced them away from the basic academic research (per argument above) but also created conflicts of interest that may bias research results.

There is no implication that any of these criticisms are entirely valid or true. In fact, there are compelling rebuttals to these criticisms that are also contained in the reading material set forth in the Appendices. Still, the University should be sensitive to the criticisms, valid or not, that are out there so that we can be prepared to refute them as needed.

### Increasing Tension between Security and Secrecy Needs of Our Funding Sources and Our Need for Academic Freedom.

Research universities are seeing an increasing number of federal grant restrictions on the dissemination of research results based on national security concerns. Similarly, in negotiations with industry funding sources, one sticky negotiating point is the University's use of confidential information and publication of research results. Restrictions on our use and publication of research results conflict with our academic mission and trigger complex and restrictive export control laws<sup>7</sup>. Research universities must acknowledge this tension and be very clear on when and how restrictions on the dissemination of research results will be allowed.

Similarly, researchers at research universities have a growing number of consulting arrangements which are generally outside the scope of University oversight. These business arrangements can take a variety of forms, but often have terms which require the faculty member to keep certain company information confidential. These consulting relationships lead to two main concerns: First, the researcher is unable to maintain a

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<sup>7</sup> Restrictions on dissemination of research results ruins the University's ability to use the Fundamental Research Exclusion under the export control laws, and thus necessitates a complex, involved evaluation of the applicability of a number of different laws (Export Administration Regulations (EAR) promulgated by the Commerce Dept., International Traffic in Arms regulations (ITAR) promulgated by the State Department and Office of Foreign Asset Control (OFAC) regulations promulgated by the Department of Treasury.

“Chinese wall” between information in his head that is subject to confidentiality and secrecy restrictions and information that is not. Second, commercial relationships and financial incentives can lead to subtle or overt bias in the interpretation of research data. Although we manage these through our conflict of interest process, we need to ensure that the two processes can work together.

#### IV. FRAMEWORK OF TECHNOLOGY MANAGEMENT AND TRANSFER PROCESS AND KEY QUESTIONS AND ISSUES

The fundamental aspects of the technology management and transfer process are outlined in this section. Each aspect is briefly described and the key related questions and issues are presented. As you review this section, keep in mind the staffing of the two Technology Transfer Offices outlined in Appendix I and consider whether the staffing (both in terms of number of personnel and their experience and background) is adequate to address the tasks outlined and issues raised.

##### A. Mission Alignment

An effective technology management and transfer process should enhance a university's ability to realize its missions and achieve its key objectives. As the key missions and strategic objectives of the University are developed and refined, the role that technology management and transfer should play in them should be defined as well. Technology management and transfer can and should play a role in (i) advancing key scientific research, (ii) recruiting, retaining and rewarding faculty, (iii) contributing to institutional prestige, (iv) commercializing discoveries, (v) spurring economic growth in our community, and (vi) generating additional revenue for the University. Some of these objectives may conflict from time to time, and stakeholders may differ in their views of how the technology transfer process should align with these objectives. The alignment of technology transfer's mission should be considered as and when the University's strategic objectives are more fully defined.

Questions for the Committee: Do we have a clear priority of missions for technology transfer at the University? How can Technology Transfer assist other parts of the University in meeting their missions and objectives? As missions pull in different directions, who will make the directional decisions? To what extent should technology transfer “service” the faculty-inventors by patenting inventions regardless of commercial value of the invention?

##### B. Structure of Technology Transfer Operations

Currently at the University, there are two separate technology transfer offices which are funded from separate sources, and subject to annual budgeting processes. Each office has a different structure and reports to different parts of the University. Each office has different challenges in managing expectations from their leadership and in establishing deliverables. Each office is staffed with personnel who must possess a very sophisticated and broad array of skills. Staff skills are needed to understand the science behind an invention, to apply for and prosecute patents, to understand the basic business process of commercial product development, to market our inventions, to negotiate and draft licenses, options and other intellectual property agreements, and to manage

relationships with our business partners. In addition, the Office of Corporate Alliance was created in 2005 to be the marketing arm of our commercialization efforts.

Questions for the Committee: What is the best way to fund/budget this function? To whom should this function report? What structure will maximize the level of internal support for its purpose? What structure will maximize the ability of the function to collaborate with stakeholders? How do we ensure that we structure the function to attract an appropriate level of skilled personnel? How do we measure and track the performance of this function?

### C. Asset Identification, Evaluation, Valuation and Protection

University researchers are educated in the basics of intellectual property law so that the university does not lose control of inventions. Our Intellectual Property Policy clearly articulates how the invention will be owned and how any revenues resulting from the invention will be shared. Researchers submit invention disclosures as and when their research produces tangible results that can be considered an invention. OTT personnel cull through the invention disclosures and decide which ones to advance.<sup>8</sup> Of the 130+ invention disclosures submitted each year approximately 1/3 are pursued until a patent is granted (many more are the basis of provisional patent filings that are not pursued). Follow-up work is undertaken with the researchers to develop the best possible patent claims. Patent applications are filed and prosecuted. The drafting and prosecution of patent applications is done primarily by outside counsel and can take several years and cost from \$15,000 to \$100,000 or more depending on the nature of the invention. The average time for patents to issue is about 3 ½ to 4 years, and is likely to lengthen in the near future.<sup>9</sup> The vast majority of the budget of the Technology Transfer Offices is used for legal fees for patent prosecution and patent filing and maintenance costs.<sup>10</sup>

Once a patent issues, OTT re-evaluates the patent to see if the claims that were allowed still result in a valuable asset, or whether there have been changes in the technology involved during the long prosecution period that renders the patent less valuable. Marketing efforts begin when the invention disclosure is first submitted, marketing will continue over time. There is some process, albeit an informal and intuitive one, to prioritize the patents so that our limited marketing capacity is used most effectively. The published data indicates that the average time to translate an invention disclosure into licensing revenue is six to eight years.

Finally, we should have some strategy to identify and deal with third-party infringement and to enforce our patent rights in which we have invested time and money. We are hearing anecdotally that many companies are betting on the fact that universities don't

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<sup>8</sup> The Medical Center OTT has an advisory/oversight committee to help assess the patenting decisions, but it does not consistently meet, and when it does, it is not well attended by committee members.

<sup>9</sup> The Medical Center's OTT recently received correspondence from the USPTO indicating that a review of a recently filed patent application was expected to occur in 56 months (sometime in the year 2010).

<sup>10</sup> The expenses paid for patent prosecution and USPTO fees (net of reimbursements from licensees) for FY04 was approximately \$1.8 million. The other operating expenses for the two Technology Transfer offices (labor, office space, etc.) totaled approximately \$1.2 million.



have the appetite or budgets to sue to enforce their patents, and therefore, university patents are ignored when companies look at their freedom to operate in a technology.

Questions for the Committee: Who should be involved in the process of judging the commercial potential of invention disclosures? How should the decisions be made as to how much to budget for patenting costs? Who should be involved in the process of judging the value of inventions relative to each other so that resources can be appropriately prioritized? What, if any, resources should we dedicate to identify and deal with third-party infringement of our patents? Who should be involved in deciding what we do about infringers (e.g. initiating litigation)? Who should be involved in deciding what resources are used to ensure we are not infringing others' patents?

#### D. Marketing

There are a variety of ways to derive market value from inventions. These include direct licensing, creating joint ventures or other types of alliances and partnerships, and forming start-ups. The Technology Transfer Offices have developed a network of contacts with businesses and venture capital firms. Our website also lists our technologies that are available for licensing. Developing the optimal marketing plans for the myriad technologies created here, and aggressively pursuing them in the competitive marketplace is a daunting challenge. Very few, if any, universities have adequate resources to "do it all" in this area. Thus, the need to triage and prioritize technologies is critical.

Questions for the Committee: Who should be involved in determining the optimal path to market for a particular technology or invention? How do we ensure we are fulfilling Bayh-Dole's requirement, when applicable, that we give preference to small businesses? How do we ensure that we are bringing the invention to the businesses with the best chance of maximizing its commercial potential? How can we optimize the number of our patents that get to the marketplace and the value we receive for them? When, if ever, should we use IP management companies or patent enforcement companies?

#### E. Negotiating and Deal-Making

The deal-making team needs to be skilled in the art of patent licensing, venture capital financing and forming a new business entity. Within each of these general areas, there are an unlimited number of sophisticated negotiating issues that arise. Currently, OTT personnel conduct almost all of the negotiation and the decisions made as issues arise are done so on an ad hoc basis. Moreover, deal-making often facilitates the creation of conflicts of interest as deals progress. Care must be taken to ensure that the conflicts can be managed and that employees having a stake in the deal have reasonable expectations and understand the University's role.

Questions for the Committee: Who should be part of a negotiating team? Should it depend on whether the technology will be licensed or transferred to a start-up? Should there be guidelines for the terms we will or will not accept? What are the various lines of authority governing how negotiating decisions are made? For instance, how and when do we decide whether to take equity in a start-up? If we have equity, when, if ever, should we accept/require a board seat? How do we vote our equity interest in a start-up? How do we decide when to divest our interest?

## F. Documentation and Reporting

Once a deal is consummated, the agreement is put into a database and appropriate reminders for tracking due diligence requirements and collecting royalty payments are calendared.

Additional reminders are needed to stay on top of patent maintenance fees, converting provisional patents to full applications and filing international applications. Moreover, under Bayh-Dole, universities have an obligation to notify the funding agency within two months after creating an invention with federal funds (e.g. two months from the submission of an invention disclosure) and to notify the funding agency within one year thereafter<sup>11</sup> whether it has elected to take title to the invention by filing a patent application. Thereafter, there are periodic reporting obligations regarding the use of the patent and the collection of revenues from it.

Finally, royalties need to be collected and distributed to University inventors pursuant to our policy

All of these documentation and reporting requirements are critical to preserve our assets. They create significant administrative work however. Currently, OTT operations are understaffed in this area.

## G. Monitoring and Management

In a perfect world, we should also monitor (1) institutional and individual conflict of interest that may have been created through the commercialization process, (2) the due diligence obligations of our licensees to ensure they are working to bring our invention to market in a commercially reasonable period of time, and (3) the computation of royalty payments by our licensees to ensure we are receiving our fair share of the value of the invention in the marketplace. Scant resources are left over for this monitoring function.

## V. INDUSTRY-SPONSORED RESEARCH AND OTHER WORK

The minutes of Penn State University's Research Council meeting of February 6, 1928 documented a discussion of the following two questions: to what extent should the College enter into contracts with commercial concerns and under what conditions? What should be the institutional policy in reference to patents and patent rights?<sup>12</sup> These questions are equally relevant today, although the answers have become increasingly complex.

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<sup>11</sup> The notification obligation is one year if publication of the invention occurs, which is nearly always the case with university inventions. If no publication is made, the time period is extended to two years.

<sup>12</sup> Reported in *Industry-University Research in our Times*, The National Academies, June 26, 2003.

Successful collaborations between industry and academe are an excellent way to encourage efficient economic returns to research programs by translating basic research into commercial application. Many new Federal research programs are requiring collaboration between industry and academe to promote economic return on the research.<sup>13</sup> In addition, there is increasing pressure in some University departments to attract industry funds to cover basic operating costs. But the collaboration between these two different “creatures” with different cultures is predicated on the ability to come to agreement regarding the terms and conditions upon which the research will be conducted and commercialized. Reaching such an agreement depends not only finding common ground with the company, but also on ensuring that there is internal agreement at the University about the extent to which our academic missions should be flexed in the process of collaborating with industry.

Some of the key issues in negotiating agreement with industry are discussed below. Additional information on these issues can be found in Appendix IV.

### Freedom to Publish

Balancing the need for security or secrecy with the freedom to publish is one of the areas that produce conflict. From the university’s perspective, the right to publish fundamental research is an integral part of its culture; it is the mechanism to gain reputation and prestige. In addition, any restriction on the publication of research negates the fundamental research exclusion under the U.S. export control laws and triggers all the security obligations associated with EAR, ITAR and OFAC regulations (See footnote 7). These obligations are contrary to the free and open exchange of information in a university.

From industry perspective, contracts commonly have provisions that identify and protect proprietary information. Contract language must protect against leaking this confidential information to competitors. In addition, companies can more easily work with the restrictions imposed by ITAR, EAR and OFAC because they do not typically publish the results of their research.

Questions for the Committee: What publication restrictions are permitted in contracts with industry? What type of information should a university agree to hold confidential? Who should review and approve contracts that have these types of terms?

### Ownership of Intellectual Property

Research is becoming more and more multidisciplinary and inter-related. As a result, it is getting more and more difficult to put a box around research projects and to keep the information coming from a project discrete. This becomes an even more complicated issue when projects funded by the government and industry overlap. In

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<sup>13</sup> In addition to the Small Business Innovation Research ( SBIR) and Small Business Technology Transfer (STTR) grant programs which encourage collaboration between universities and small business, the NIH recently announced a new type of award to finance research focused on turning laboratory research into medical treatments called the Clinical and Translational Science Awards.

many of these cases, it is virtually impossible for a university to grant broad or exclusive intellectual property rights to a company.

Companies, on the other hand, want to own what they feel they have “paid for” or “bought”. Companies expect universities to simply avoid any situation that might interfere with the ability to grant exclusive rights, or even outright ownership, of research results to the company who funded it. Even a clause which reserves to the university the right to continue to use research results for non-commercial purposes make companies nervous, and can cause complications in the future.

Questions for the Committee: What should the University’s policy be on intellectual property developed at the university but paid for by industry? What rights will we give the company at the outset of the project (e.g. right of first refusal, option to license)? If we need to segregate research results from other intellectual property at the University, how do we do so? What mechanisms are needed? Who should review these provisions?

### Tax Issues

The University must pay tax on its unrelated business income, it must abide by its bond covenants regarding the use of its facilities for private activity, and it is not permitted to use its assets for private inurement. IRS revenue procedure 97-14 provides a safe-harbor for the type of research financed by industry that will not be considered “private use”. In addition, IRS regulations define certain industry payments that will be considered unrelated business income or private inurement. These regulations all overlap to create a “continuum of clarity” on whether a particular contract creates tax issues. Industry-sponsored research contracts which give the university ownership of all intellectual property that results and the free right to publish, and defers negotiation of the terms of any license until the invention is created fall at one extreme, where the research does not trigger any tax issue. Industry-sponsored contracts for the performance of testing services by a University that are routine and do not create intellectual property (characterized as “work for hire” contracts) fall at the other end of the extreme where UBIT and bond covenant issues arise. Between these two extremes, however, there is a large gray area and very little authority or written analysis that provide guidance in this area.

Questions for the Committee: How should we monitor industry-sponsored contracts to ensure no tax issues are presented? How willing are we to work within the “gray area” in order to collaborate with an industrial partner? Who should be making these interpretations?

### Other Issues

There are a number of other issues that can cause “sticking points” in university-industry contracts. These include (1) whether and to what extent the company should pay “indirect costs”<sup>14</sup>, (2) whether and to what extent should the university agree to indemnify the company and potentially put endowment assets at risk, (3) to what extent should company scientists be permitted to participate in university

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<sup>14</sup> This concept is not used in the for-profit world and companies may resist paying any indirect costs unless and until they understand that these costs from a for-profit perspective.

research, (4) to what extent should consulting agreements between university researchers and the company be permitted when industry-sponsored research contracts exist, and what are the unique conflict-of-interest issues presented.

## Conclusion

This paper outlines some of the key issues that arise in the intellectual property management and transfer function at the University. Unless the University is clear on how it will approach the key issues, business discussions with industry have the potential to be contentious, and result in public relations and advancement repercussions. The policy questions need to be addressed by a group that includes all stakeholders and the questions must be addressed in a neutral setting, outside of the context and pressures of a particular deal.