Report

The Task Force on Enhancement of Industry Relations and Industry-Sponsored Research Funding

The University of North Carolina at Chapel Hill March 4, 2013

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Executive Summary

The University of North Carolina at Chapel Hill ("University," "UNC-Chapel Hill") has doubled its research funding over the past decade, and according to the most recent data, ranks 15th in externally funded research and development expenditures. Much of this growth can be attributed to the University's success with federal funding, especially with HHS, where it ranks 7th. UNC-Chapel Hill has not had the same success with industry-based funding. To grow and diversify our research portfolio, as well as to facilitate the translation of research into tangible benefits to society, the University must improve its position with respect to industry as a potential partner and sponsor of research. This report is submitted by the Task Force on Enhancement of Industry Relations and Industry-sponsored Research Funding to the Vice Chancellor for Research.

With the goal of improving university-industry partnerships at UNC-Chapel Hill, the task force has developed the following five recommendations:

- 1. Establish a model for preparing budgets that is consistent with the way industry conducts business. The task force suggests two alternatives: (a) establish a model that includes facility costs (facility use fee) attributable to the project as a line item within 'direct costs', with a 28% G&A charge (applied to modified total direct costs) added to total 'direct costs' or (b) permit a 'fixed price' agreement in which the sponsor is charged a fixed-project cost for mutually agreed upon deliverables (where the facility costs are embedded in the total project cost structure detailed above).
- 2. Create an Office of Industry Relations with the mission to enhance and coordinate UNC-Chapel Hill's industry relationships by actively engaging industry partners across the areas of philanthropy, sponsored research, commercialization and clinical trials.
- Implement the Office of Industry Relations with the appropriate organizational reporting, staffing and infrastructure to ensure the University's success with industry research and partnerships.
- 4. Create and publish simple and transparent Intellectual Property ownership and licensing options that appeal to industry partners.
- 5. Create metrics for measuring the success of the Office of Industry Relations.

Introduction and Charge:

The University of North Carolina at Chapel Hill ("University," "UNC-Chapel Hill") has doubled its research funding over the past decade, and according to the most recent data, ranks 15th in externally funded research and development expenditures. Much of this growth can be attributed to the University's success with federal funding, especially with HHS, where it ranks 7th. UNC-Chapel Hill has not had the same success with industry-based funding. To grow and diversify our research portfolio, as well as to facilitate the translation of research into tangible benefits to society, the University must improve its position with respect to industry as a potential sponsor of research and a potential partner.

What can be done? What changes can be made in the short and medium terms to make it possible for the University to reach its full potential with respect to industry as a potential sponsor of research? There are many challenges to address. Chief among these is the challenge of presenting a "common front" to industry. Related challenges are the need to coordinate and ensure communication among all of the different units within the University that might engage an industry partner. Indeed, there are numerous barriers to success in working with industry partners, and it is important to consider them all.

This task force consulted broadly inside and outside the University to identify and examine significant barriers to and opportunities for success in working with industry. As a result of its work, the task force recommends to the Vice Chancellor for Research changes in policy, procedure and infrastructure so that the University is positioned for success in partnering with industry. In its recommendations, the task force distinguishes between changes that can be made in the short term (immediately, or within a year) and those that might be possible in the medium or long term.

In recent years, the University has received approximately \$40 million per year from industry sponsors. The task force recommends that the University set the goal to double this amount within three years - a goal that will be achieved by increasing the number of proposals submitted and accepted by industry. The task force considered alternative approaches, identifying the strengths and weaknesses of each, and where more than one approach is feasible and potentially desirable, it has noted as such.

The goal of improving university-industry partnerships is not unique to UNC-Chapel Hill. In fact, it is central to recommendations made in the just-released National Academy of Sciences report, *Research Universities and the Future of America*, which calls for "the relationship between business and higher education...[to] evolve into more of a peer-to-peer nature, stressing collaboration in areas of joint interest rather than the traditional customer-supplier relationship in which business procures graduates and intellectual property from universities (p. 92)."

<u>Recommendation 1 - New Proposal Budgeting Model</u>:

During its deliberation, the task force learned that the practice of applying the federally-negotiated facilities and administrative (F&A) funds rate to proposed industry-sponsored research projects can, in many cases, diminish the competiveness and attractiveness of such projects to the industry sponsor because the rationale for those charges in supporting the proposed research is not clear to the sponsors.

Further, feedback received from external consultants suggests that industry sponsors are not deterred by the overall amount of project costs that embed F&A charges, but rather by the impression that they are paying F&A charges that do not necessarily support the proposed research. The concept of overhead charges is not foreign to industry sponsors, but most are accustomed to much lower G&A (general administrative) rates of approximately 25-28 percent. However, these rates do not typically cover all facility-related costs. Industry sponsors are not averse to seeing project-specific facilities costs represented as a part of direct costs. Therefore, one approach would be to apply this lower rate to industry-sponsored projects and charge facility costs as a direct cost. An alternative approach that industry sponsors are comfortable with involves 'fixed-price' agreements, in which the sponsor agrees to pay a certain amount for well-defined deliverables. Such agreements do not require the University to provide a detailed budget to the sponsor, although such a budget would need to be prepared for internal use of the University to ensure that the cost of the project is fully recovered. With either approach, the guiding principle must be to recover, at a minimum, the facilities and administrative costs to the same extent as the recovery of these costs for federally-funded research.

The task force recommends that any new model for preparing project budgets for industry-sponsored research must be consistent with three fundamental principles:

- 1) Competitiveness: It must be attractive to prospective industry sponsors/partners;
- 2) Simplicity: It must be simple to understand (by sponsor and UNC-Chapel Hill faculty and staff) and to administer, including simplifying UNC-Chapel Hill's ability to determine what portion of the costs go to support indirect costs;
- 3) Full Cost Recovery: It must recover the cost of research support at least to the same extent as for federally-funded projects.

Given the feedback that industry sponsors prefer more transparency and lower indirect cost rates in budgets presented to them, the task force recommends that the University establish a model for preparing budgets that is consistent with the way industry conducts business. Specifically, the task force recommends two options: (a) establish a model that includes facility costs (facility use fee) attributable to the project as a line item within 'direct costs', with a 28% G&A charge (applied to modified total direct costs) added to total 'direct costs' or; (b) permit a 'fixed price' agreement in which the sponsor is charged a fixed-project cost for mutually agreed upon deliverables (where the facility costs are embedded in the total project cost as detailed above). In each of these options facility costs are represented in budgets as direct costs; however, the University would treat these facility costs as indirect costs for internal accounting purposes.

The task force recognizes that it would be nearly impossible to determine the actual space (and thus facility costs) that would be used specifically for a given project during the life of a project. Therefore, the task force proposes that in order to determine the 'facility use charge' for an industry-sponsored project, the typical space allocation for an NIH R01 grant should be considered a benchmark for space use. An R01 grant typically secures approximately \$250,000 in direct costs per year. Schools and departments typically allocate approximately 625 gross square feet of space to a faculty member with an R01 grant. This would suggest that 250 square feet of space is used for research conducted with every \$100,000 in modified total direct costs (excludes equipment and subcontracts) per year.

The task force recommends two distinct facilities use rates: (i) Wet Lab space, and (ii) Dry Lab/Office space. The two rates reflect the different levels/types of infrastructure needed to support research in these two types of space. The proposed Wet Lab space-use rate is \$80/square foot, and the Dry Lab/Office space-use rate is \$60/square foot. The rate chosen for a project should be the one that represents where the majority of the activity is proposed to occur. This is because computing the overall space-use rate for mixed-use space based on two different rates is impracticalⁱⁱ.

It must be noted that these rates are fully burdened rates, inclusive of utilities, furnishings and all other research infrastructure. Any perception that the rates are higher than 'market rates' can be readily dispelled when considering the costs embedded in the facility use rates. The proposed rates were evaluated by the executive director of the University's real estate development office and were determined to be acceptable and comparable to fully burdened market rates. These rates represent cost recovery of facility costs, equivalent to or greater than the corresponding cost recovery for federally-funded projects.

The task force recommends this new model as the new standard for all research proposals to be submitted to industry sponsors--not simply an alternative to existing models. However, a school or department may recommend approval of a 'fixed price' agreement in which the sponsor is charged a fixed-project cost for mutually agreed upon deliverables. The total project cost, in such case, would embed the facility cost structure detailed above.

The task force recommends that this model be evaluated one year after initial implementation (and on an ongoing basis) to ensure that the model is producing the desired results, consistent with the model requirements listed previously and the success criteria set forth below. If necessary, the model should be refined to ensure competiveness, simplicity and full cost recovery.

See Appendix A for an example project budget using this newly-proposed model.

Recommendation 2 - Create an Office of Industry Relations:

UNC-Chapel Hill has a number of activities that would be enriched by strengthening its ties to industry.

Corporate Philanthropy. Gifts from corporations enhance research and educational opportunities.

Research. Industry-sponsored research augments federally-sponsored research and encourages the translation of knowledge into practical application.

Startups and Licensing. Corporations provide funding and support of University startups as well as license University Intellectual Property (IP) as part of their drug discovery and product development efforts.

Clinical Trials. Corporations rely on academic medical centers and the associated expertise to test and develop novel drugs, devices and diagnostics.

Industry is interested in partnering with universities for:

Joint Research. Many corporate entities are reducing internal research & development efforts and are looking to partner with universities to co-develop new technologies.

Access to Talent. Industry is looking for strong pipelines of talent and would like to strengthen relationships with universities to gain access to graduates/trainees for placement.

Input on Curriculum Development. Industry would like to provide input to University faculty that can impact curricula to ensure that students gain experience most relevant to industry needs.

Access to Faculty Expertise. Industry is looking for faculty who can provide expertise through scientific advisory boards and individual consultation.

Recognizing the benefits of partnerships with industry, UNC-Chapel Hill has resources focused on business development across the campus, but they are not well coordinated. The task force observed that industry business development and relationship management has evolved in a decentralized manner.

Currently, a number of campus efforts reach out to and engage with industry. These include:

- 1) The School of Medicine has a full-time individual engaging with the pharmaceutical industry to increase sponsored research, as well as another individual focused on growing clinical trials.
- 2) UNC Eshelman School of Pharmacy has established an Office of Entrepreneurial Development to enhance translation of research to the market/patient through facilitation of IP development, licensing and start-up activities, and forging partnerships with industry.

- 3) The Office of Technology Development, Carolina KickStart, and the Schools of Medicine and Pharmacy promote technologies and startups to corporations with the goal of securing a license or a partner.
- 4) Corporate and Foundation Relations seeks gifts and sponsored-research contracts from corporations.
- 5) The Offices of Sponsored Research and Clinical Trials work with faculty and industry partners to negotiate sponsored research agreements.
- 6) Several other schools and departments have individuals that work to foster relationships with industry.

Despite these resources being devoted toward industry funding and partnerships, the individuals and groups involved in these efforts do not always communicate or coordinate with one another, resulting in a decentralized and fragmented approach. Such an approach sometimes confuses external stakeholders and industry representatives in search of a potential partner. It also results in the under-representation of the full potential of the University as an industry partner.

During its deliberation, the task force learned that a significant key to growing and maintaining strong partnerships with industry is to provide a single interface that serves as a liaison among the research team(s), the UNC-Chapel Hill administrative offices, school- or department-based resources devoted to industry relations, and the industry stakeholders. The task force consulted with industry representatives as well as peer universities that have been successful in fostering partnerships with industry, and both groups emphasized the importance of having a central interface to coordinate with industry partners. In general, industry stakeholders prefer the continuity of working through a single individual or team. The task force observed that some of the most successful models of industry/university collaboration are built on a model whereby the industry partner has a strong relationship with an individual or an office and can interface with that person or office on project or partnership-related issues.

Another key to maintaining strong relationships with industry partners is to deliver results, reports, and other deliverables on time and as per the expectations set by the University and by industry partners. Industry representatives consulted by the task force suggested that one of the most significant concerns of working with universities is failure of a research team to produce expected deliverables in a timely fashion. The task force noted that many federally-funded research faculty are not accustomed to producing deliverables in the way and with the hard deadlines that industry partners expect. A central university liaison for industry would assist research teams by serving as an internal 'project facilitator' to ensure that the deliverables and reports are provided to the industry partner on time and as per the expectations set by both sides.

The task force has examined our internal industry relations efforts and surveyed industry relations efforts at peer institutions. Our findings indicate the following:

1. UNC-Chapel Hill's industry relations efforts, although present, have not been resourced to the level required for substantive impact.

- 2. Efforts toward industry relations have evolved across campus, and consequently they are fragmented, uncoordinated and without an overarching strategy.
- While other peer institutions' models may be relevant, we need to speak to our strengths in life science, physical/computational sciences and social sciences, and recognize that we do not have an engineering school.

Thus, the task force recommends the following:

Create an Office of Industry Relations with the mission to enhance and coordinate UNC-Chapel Hill's industry relationships by actively engaging industry partners across the areas of philanthropy, sponsored research, commercialization and clinical trials.

The Office of Industry Relations (OIR) should:

- 1. Position itself as the primary, but not exclusive, interface for industry seeking to engage with UNC-Chapel Hill.
- 2. Focus externally to engage industry partners across the many aspects of industry-relevant activities (gifts, research, commercialization, clinical trials) by:
 - a. Identifying key industry personnel;
 - b. Making frequent contacts with prospective industry partners;
 - c. Understanding all current UNC-Chapel Hill relationships with existing and potential industry partners;
 - d. Promoting, facilitating, developing and presenting partnership proposals to select industry prospects (in conjunction with UNC-Chapel Hill leadership and faculty);
 - e. Hosting potential and existing partners on campus;
 - f. Structuring industry-relevant events on campus; and
 - g. Maintaining and growing relationships with existing and future industry partners
- 3. Focus inwardly to:
 - a. Identify faculty or groups that are current or future magnets for industry relationships;
 - b. Facilitate projects by:
 - i. Identifying the internal units the industry partner should be interfacing with;
 - ii. 'Shepherding' the progress of contract/agreement negotiations;
 - c. Monitor the progress of industry projects and be attentive to deadlines and expectations of industry partners, and take the necessary actions if the ability of the University to deliver is at risk.
- 4. Work with and coordinate efforts already present across campus.
- 5. Educate the faculty, departments and offices about working with industry (timeliness, reporting, intellectual property and confidentiality).
- 6. Create and manage the marketing efforts, website and informatics tools to effectively engage with industry.

Model

The model for the OIR should be similar to other external-facing University offices (e.g. OTD, Corporate and Foundation Relations). OIR officers should have responsibility for specific industry segments and engage industry partners across the key areas (gifts, research, commercialization, clinical trials). The OIR officer would not directly engage in any contract negotiation, compliance or intellectual property management functions. These functions would continue to be served by the Offices of Sponsored Research (OSR), Clinical Trials (OCT), Technology Development (OTD), and other relevant functions. However, the proposed OIR office would work closely with these other offices to ensure that contracts and tasks related to a partnership are developed and implemented efficiently, appropriately and with the urgency that industry stakeholders expect.

This direct attention to 'shepherding' projects by the OIR would guarantee that the University can function as an effective and efficient partner to industry. For example, a pharmaceutical company could have a number of interactions with UNC-Chapel Hill: licensed technology, sponsored research and/or clinical trials. An industrial relations officer would manage the overall relationship with the company, but the level of the officer's engagement would vary according to the role the officer played in establishing the project, as well as the expertise of the officer. At a minimum, the officer will make connections between the corporate partner and internal units, then monitor the progress of all those interactions. The officer's role may be greater if, for example, the officer was instrumental in identifying and establishing the research grant. The officer may also engage more if the relationship is at risk or becomes strained (late deliverables or stalled negotiations). The goal is to coordinate and enhance those interactions established by others, engage in new relationships, and monitor and maintain the overall relationship with the corporate partner.

The key contacts of the OIR may include:

Office of Sponsored Research. Industry-sponsored research brought in through OIR will be negotiated and managed by OSR but monitored by the OIR staff. OIR will assist OSR and the faculty by facilitating negotiations and providing frequent updates to the industry partner.

Office of Clinical Trials. OIR will work with faculty interested in conducting clinical trials to develop new clinical trial partnerships with interested external parties, and also work with OCT to ensure that enrollment milestones are met in a manner expected by the sponsor and/or CRO.

Office of Technology Development. OIR may help market intellectual property, as well as assist in the management of relationships where an industry partner has licensed IP and also continues to sponsor research. For example, OIR may assist in relationship management with UNC-Chapel Hill's own startup companies.

Carolina KickStart. OIR can assist in relationship management of companies or initiatives in which Carolina Kickstart has invested.

Office of Corporate and Foundation Relations (CFR). OIR will work closely with CFR on current and prospective industry partners now managed by CFR to maximize value of those relationships especially in the areas of sponsored research, clinical trials and technology transfer.

Recommendation 3 – Implementation of the Office of Industry Relations:

3.1 – Organizational Structure

The task force feels that there are many possibilities for the organizational structure of the proposed OIR. Some of the possibilities include placing OIR under the Office of the Vice Chancellor for Research, the Office of the Vice Chancellor for Development or the Office of the Chancellor. Rather than suggest where this proposed office should reside, the task force has decided to articulate the fundamental principles under which this decision is made.

The task force proposed Office of Industry Relations should be organizationally located such that:

- 1) It is as close to the Chancellor as possible, so that industry partners perceive the University's commitment as coming from the Chancellor;
- 2) It is organizationally structured to serve the entire campus community;
- 3) It is highly visible to both internal and external stakeholders; and
- 4) It has sufficient stature to work with University administrative offices to solve problems or other 'thorny' issues.

3.2 - Staffing

While the task force recognizes that there are business development resources that already exist within schools and departments, the task force is recommending that the new OIR be staffed with new resources/positions. This recommendation is based on the rationale that additional positions are warranted and that the new OIR positions would strategically complement (and not duplicate) positions already on campus.

The task force recommends that OIR be staffed with one (1) full-time director, as well as eight (8) industry relations officers, four of which would be senior-level positions and four junior-level. The director will be responsible for managing the Office and for engaging senior University administration to identify strategic opportunities and industry partners. The ideal director candidate should have experience working in (or deep understanding of) both industry and academia, and should have a track record of forming partnerships between entities in those sectors.

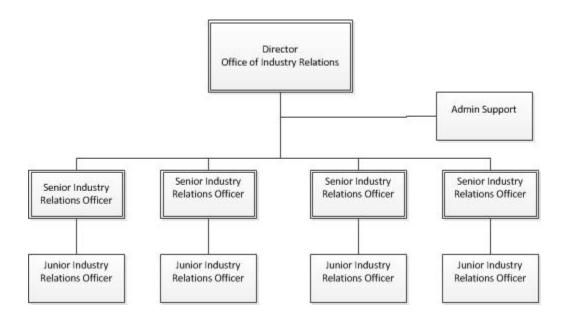
The OIR industry relations officers would be responsible for business development, focusing on strengthening existing partnerships and forming new ones. These positions would work with faculty to identify existing partnerships and to understand faculty interests and capacity to work with industry. The industry relations officers would also function as internal project 'managers', working with other University offices to ensure that all agreements and other institutional requirements are completed in a

timely fashion, and to ensure that any industry projects are conducted efficiently and as per expectations set by the industry partner and the University. Ideal candidates for the industry relations officer positions should have a technical background and should have worked in an industrial environment in the past and/or should have deep ties and contacts with industry.

While any of the business development officers would be available to work on any potential partnership or relationship, it is recommended that one (1) of these officers be focused on pharmaceutical research, one (1) on diagnostic and device research, one (1) on information technology research, and one (1) on physical science research. It should also be noted that the TraCS Institute recently hired a business development officer to focus on growing clinical trials. The task force recommends that this individual function as part of the larger business development team; the TraCS Institute has signaled its support for this approach.

The Office of Industry Relations will also need one (1) administrative staff member to assist with other general administrative tasks.

The organizational structure proposed is as follows:



The task force recognizes that the resources required to create the OIR as proposed are significant and that the OIR would likely take some time to 'spin-up' to its proposed size and scope of function. Given these considerations, the task force recommends that the OIR be phased in over a three-year period to enable it to develop its function tactically and strategically, and to modulate the financial burden of funding the Office. See Appendix B for a proposed resource request and implementation plan.

3.3 - Implement a Financial Incentive Model for Business Development

The task force acknowledged that the model by which the University fosters industry research partnerships is very different than the way the University interacts with governmental sponsors of research. With government-sponsored research, there is less of a need for investigators to establish relationships with sponsors in order to be successful in securing research funding. However, strong relationships are critical to be successful with industry sponsors. While many investigators are successful in establishing relationships with industry, the task force feels that the path to growing and increasing industry partnerships and industry-sponsored research is to rely on the business development professionals within the proposed Office of Industry Relations.

Success of OIR and, ultimately, the University with regard to industry partnerships will depend heavily on the performance of the business development professionals. Therefore, it is critical that the University hire the best professionals possible to serve these functions.

In order to recruit and retain top quality industry relations officers with significant business development experience, the University must compete effectively with market forces. This will require establishing a market-driven incentive/bonus model.

The task force recommends that the University establish and implement a financial incentive model based on achievement of annual performance goals, consistent with market practices.

3.4 – Coordination of Campus Activity

To prevent confusion that could result from a 'fragmented' business development landscape, the task force recommends that the proposed OIR assume a broader coordinating role for all business development activities on campus. This proposed coordination should include the OIR working synergistically with unit-based business development officers to accomplish business development goals. These include briefs on any existing or proposed partnerships and relationships, meeting regularly, and committing to a common platform (recommendation 3.7) for recording data on industry relationships.

It is also recommended that unit-based business development officers report to the proposed OIR via a dotted-line reporting relationship. Ultimately to be successful, the proposed OIR, the unit-based business development officers, the Offices of Sponsored Research, Corporate and Foundation Relations, Clinical Trials and Technology Development should function as a matrix organization that integrates seamlessly with its constituent parts.

3.5 – Create an Industry Relations Advisory Committee

Although the formation of the OIR would be a significant step toward enhancing, coordinating, and streamlining campus efforts in working with industry, the task force believes that OIR will need counsel and oversight on an ongoing basis. The task force recommends that an evaluation and advisory committee be formed and meet on a quarterly basis to provide advice and feedback to the director of

OIR and his/her line management. It is also recommended that the advisory committee include some representation from industry (e.g. former executives) to ensure that the advice and feedback is enriched with a deep knowledge of the needs of existing and prospective industry partners as well as the challenges and opportunities in working with industry.

3.6 - Expand/Enhance partnerships.unc.edu Web Portal

In addition to the need for the OIR, the task force feels that the University needs to maintain a strong 'virtual' entry point into the University for prospective industry partners. The School of Medicine and the TraCS Institute recently designed and launched the partnerships.unc.edu web portal, primarily designed to support industry partnerships in the biosciences. While the launch of this portal represents a significant milestone, the task force recommends that this portal be expanded to support industry partnerships for the entire campus.

A summary of the budget requested for this recommendation can be found in Appendix C.

3.7 - Implement Information System for Tracking Partner Relationships

The task force has recognized the need for greater coordination among business development staff on campus (See recommendation 3.4). Key to coordinating activity is providing a platform on which to document existing and new relationships with industry partners and their contacts. Data that represent these partnerships and interactions with industry contacts reside in disparate, decentralized locations, and may not even be documented at all. To successfully partner with industry, the task force believes that all such data related to a partnership and interactions with industry contacts be housed in a central Client Relationship Management (CRM) platform.

A CRM platform should be integrated with existing University systems such as RAMSeS (OSR), Blue (OTD), ALICE (OCT), and possibly the Blackbaud system (University Development) so that existing data related to an industry partner can be viewed from one place. Further, the task force recommends that all business development professionals on campus use this platform to record their activity and interactions related to an industry prospect or partner so that other professionals and administrative staff on campus can have access to this information as appropriate.

There are many CRM platforms available either commercially or as open-source solutions. The task force recommends that a small working group be formed that includes major campus stakeholders to evaluate potential options, including CRM systems already used on campus, and select a platform to implement. The task force is also recommending a modest investment to implement and maintain this platform.

A summary of the budget requested for this recommendation can be found in Appendix C.

Recommendation 4 - Publish Transparent and Simple Intellectual Property (IP) Ownership Options:

The task force learned from both industry representatives and universities that communicating simple and transparent terms for ownership of IP arising from industry-sponsored research projects helps to foster research relationships with industry partners. Often during preliminary discussions with prospective partners there are discussions about IP rights and ownership which can create barriers to forming and launching a partnership. In some cases the concerns or differences can be so significant that they prevent the formation of a partnership entirely. In most cases an agreement on IP terms can be reached eventually, but this process often results in lengthy negotiations leading to increased frustrations and lost time. Any true partnership requires effort and compromise by both parties, and, as such, it is not always possible to reach agreement on IP terms in all situations.

The task force recommends that the University create and publish simple and transparent IP ownership/licensing options for industry partners. The first and most obvious option that should be offered is an automatic, non-exclusive, royalty-free license to any IP created by the University that resulted from a partnership as long as that partner pays full IP protection costs.

Another option is one in which the industry partner can prepay a 'premium' (likely as a percentage) on the total value of a sponsored research agreement for exclusive, worldwide rights to IP created by the University under the partnership as long as the partner pays the full costs of IP protection. Such an option would likely need to include other provisions and restrictions, but it could serve to settle concerns at the time of agreement negotiation about IP that has not yet be created. (It should be noted that any 'premium' paid to the University under this model should be considered royalty income subject to the University's royalty distribution policy.)

The specifics of the options should be developed among the leadership of the OIR and the OTD, with assistance from the Office of the University Counsel, and should take into consideration the various kinds of protectable IP that may arise out of industry-sponsored projects, including patentable IP, copyrightable computer coding or algorithms, structured and unstructured data, final reports and scholarly works.

The published options would not serve as the only arrangements acceptable by the University. Given the diverse nature of the University's research enterprise, it is not possible to create a series of options that address all potential research relationships. OIR would be free to negotiate other IP terms in consultation with the OTD that are consistent, in principle, with the published options.

Recommendation 5 – Create Metrics for Measuring the Success of OIR:

<u>Success Criteria:</u> While there are many factors that contribute to the success of the University in working with industry partners, the task force defines certain criteria/metrics that could be used to determine success of the University's effort in developing industry-sponsored research:

- 1) Industry Funding Levels Increase (Goal: 100% increase within three years)
- 2) Length of time to execute deal/contract decreases
- 3) Number of Industry-Funded Projects Increases
- 4) Number of Proposals Submitted to Industry Increases
- 5) Number of Proposals Accepted by Industry Increases

The task force recommends that the University maintain and evaluate these metrics from industry-sponsored activity so that progress can be evaluated.

¹ The task force examined the actual costs to support University research facilities as documented in the 2010 F&A rate proposal. Building costs on campus vary widely, depending on factors such as the building age, type (wet lab, dry lab, office, etc), energy consumption, etc.

ii An example of this newly proposed model is represented in Appendix A.

Industry Funding Task Force: Appendix A Sample Budget Templates

SUMMARY:	Sample Project (Office/Dry Lab @ \$60/Sq Ft)			Explanation/Notes	
P.I.:	John Doe				
CATEGORY	YEAR 1	YEAR 2	TOTAL		
PERSONNEL	179,082.00	92,588.00	271,670.00		
FRINGE BENEFITS	50,142.96	25,924.64	76,067.60		
SUPPLIES	780.00	460.00	1,240.00		
TRAVEL	10,725.00	0.00	10,725.00		
FACILTY USE	28,887.60	14,276.72	43,164.31	< (Subtotal Direct Costs/\$100,000) x 250 x \$60	
SUBTOTAL	269,617.56	133,249.36	402,866.91		
MODIFIED TOTAL DIRE	ECTS 269,617.56	133,249.36	402,866.91		
INST G&A	75,492.92	37,309.82	112,802.74	< Modifed Total Direct Costs x 28%	
TOTAL	345,110.47	170,559.18	515,669.65		

SUMMARY:	Sample Project (Wet Lab	@ \$80/Sq Ft)		Explanation/Notes
P.I.:	John Doe			
CATEGORY	YEAR 1	YEAR 2	TOTAL	
PERSONNEL	179,082.00	92,588.00	271,670.00	
FRINGE BENEFITS	50,142.96	25,924.64	76,067.60	
SUPPLIES	780.00	460.00	1,240.00	
TRAVEL	10,725.00	0.00	10,725.00	
FACILTY USE	38,516.79	19,035.62	57,552.42	< (Subtotal Direct Costs/\$100,000) x 250 x \$80
SUBTOTAL	279,246.75	138,008.26	417,255.02	
MODIFIED TOTAL DIF	RECTS 279,246.75	138,008.26	417,255.02	
INST G&A	78,189.09	38,642.31	116,831.40	< Modified Total Direct Costs x 28%
TOTAL	357,435.84	176,650.58	534,086.42	

Appendix B - Budget Request for Office of Industry Relations Personnel

Years 1 a	and 2				
	<u>Position</u>	Quantity	Proposed Salary	Fringe Benefits	<u>Total</u>
	Director, Office of Industry Relations	1	\$175,000	\$52,500	\$227,500
	Business Development Officers (Senior)	4	\$130,000	\$156,000	\$676,000
	Administrative Assistant	1	\$50,000	\$15,000	\$65,000
	Travel & Operations Budget	-	-	-	\$50,000
	Total Per Year (Years 1 and 2)				\$1,018,500
Year 3					
	Business Development Officers (Junior)	4	\$90,000	\$108,000	\$468,000
	Additional Travel Budget	-	-	-	\$25,000
	Total Per Year (Years 3+)				\$1,511,500

Appendix C - Budget Request for Office of Industry Relations IT Infrastructure

<u>Item</u>	Cost
Contract Web Designer (6 months)	\$52,000
CRM System Purchase Contract Project Manager for CRM Implementation (6 months)	\$5,000 \$52,000
Total Request	\$109,000