INTRODUCTION

We submit here the report of the Intellectual Property Policy (IPP) Review Committee. This report accompanies the draft policy revision submitted in March 2005, and includes a general assessment of the effectiveness of the current policy and of Indiana University’s present administration of IP, with a particular focus on the Indiana University Research Technology Corporation (IURTC) and its relation to the University. Included are our recommendations for administrative action or reassessment that we believe may contribute to an improvement in the institutional environment that would optimize implementation of the revised policy.

Our committee was constituted in April 2004 for the purpose of “review(ing) the appropriateness and effectiveness of the IPP . . . how effectively it has been implemented, and the stipulated revenue distributions.”¹ The revised IPP drafted by the committee makes significant changes to the 1997 policy with the intent of clarifying the policy in a number of areas, and altering the revenue distribution scheme to provide incentives for faculty and units and to dedicate a proportion of intellectual property (IP) revenues to ensure support for the Office of Technology Transfer. Throughout the process of formulating the revised policy, it was apparent to the committee that the successful implementation of the IPP depends on satisfactory resolution of a number of issues that currently affect the production and dissemination of Indiana University’s IP. These issues may hamper the achievement of the improved climate for IP that we sought in the revised policy, but could not be addressed effectively in the policy itself, either because they lie outside the scope or authority of the IPP, or because they are not amenable to formulation as policy. The committee agreed to submit these issues in the form of a report to the Vice President for Research, together with its recommendations for the revised IPP. The committee believes that the revised IPP must be considered together with the matters raised in this report if the best outcome for generation and dissemination of IP is to be attained.

Accordingly, this report outlines a number of issues that appeared most significant to the committee in four main areas, namely:

1) The governance, operation and mission of IURTC, and its relations with Faculty and with administration at the unit level;

2) University policies and administrative procedures, insofar as these conflict with the establishment of a culture that encourages the generation and dissemination of IP;

3) Mechanisms for the university and units to enhance the process of developing IP and its transfer to the business arena;

4) Ways in which the culture of the university could become more supportive to technology transfer.

The committee has proposed specific solutions in a number of areas where we felt competent to do so, while in others we have highlighted issues that merit further consideration by the university administration, the faculty, or the leadership of IURTC.

It should be noted that the work of the committee was greatly facilitated by a comprehensive analysis of issues related to the management of intellectual property, particularly on the IUPUI campus, undertaken by a task force appointed by the Dean of the School of Medicine. The work of the taskforce is reflected in many of the ideas embodied in the revised IPP and in this report. The scope of the task force report² includes many issues that our committee considered to be outside

¹ Charge to the Committee, Vice President McRobbie, April 2004.
its purview, but that are clearly of critical importance to establishment of a supportive context for the IPP. We recommend a careful university-wide consideration of the report.

1. IURTC MISSION, OPERATION AND GOVERNANCE

IURTC (formerly ARTI) has undergone significant changes in personnel over the last two years, and the committee heard from a number of different sources that faculty satisfaction with IURTC has considerably improved in response to these changes. Nevertheless, IURTC representatives consider that the level of service they are able to provide is not adequate for the needs of the university, and is severely constrained because the resources provided to it by the university are insufficient and compare unfavorably with the support provided to technology transfer offices at peer institutions. This view was endorsed by the committee, and the revised IPP deducts a fixed percentage of IP revenues to the support of technology transfer. Faculty support for dedication of a substantial fraction of IP revenue towards the support of IURTC will require, however, that the faculty view IURTC as serving their needs and being responsive to faculty concerns. The committee discussed a number of aspects of IURTC operations, mission and governance to identify ways to ensure that IURTC functions in alignment with the needs of the faculty and the university.

A. GOVERNANCE

IURTC functions as an independent not-for-profit corporation, governed by a Board of Directors, consisting of ex officio, appointed and elected members. There are currently 17 members. IURTC bylaws and the agreement with IU that established IURTC require that IU is represented on the Board of Directors by the University President, the Vice President for Research, and the Vice President and CFO, and that at least one IU faculty member is a member of the Board. Historically, the number of faculty representatives has always been higher than this, with three IU faculty currently serving on the board. IU faculty have been selected by ad hoc appointment by the President and Vice President for Research, with some informal involvement from University Faculty Council (UFC) leadership. The board currently meets three time a year, as required by IURTC bylaws.

The committee agreed that the relationship between the board and the IU faculty needs to be strengthened if the confidence of the faculty in the responsiveness of IURTC to faculty interests is to be ensured in the long term. This could be achieved by an increased and assured level of faculty representation on the board, and by providing an explicit linkage to faculty governance.

- The committee proposes that the number of faculty representatives on the IURTC board should increase to a minimum of four, any future additions to the board preserving a faculty representation of 20-25 percent. We propose that two faculty representatives should be appointed by the IU President, in consultation with the IURTC President, and that the other two representatives be appointed by the Intellectual Property Policy Council (IPPC) constituted by the revised IPP. The latter two members, in particular, would play a liaison role, both providing a conduit for faculty and unit viewpoints to be expressed to the board (although their decision making as board members would be primarily guided by their fiduciary responsibilities to IURTC), and reporting regularly to the IPPC to ensure that it is kept apprised of the activities of IURTC. Some interactions with faculty councils would be appropriate in the selection of nominees. Those responsible for appointing faculty members to the IURTC board should work to ensure that board members are active as producers of IP, or otherwise have sufficient familiarity with the process to be effective, and that there is fair representation of the major IP producing units across the university.

- The committee recommends that, given the growth in the activities of IURTC that is anticipated in the revised IPP, the frequency of required board meetings should be increased to four times a year.

- The committee recommends that these changes be effected by amending the IURTC bylaws accordingly.

B. MISSION OF IURTC

The mission of IURTC, as defined in the original documents that created it, is very broadly defined to include service to the university, to Indiana and the U.S. The IURTC Board approved a revised mission statement in 2004 that more
narrowly defines its mission as “building Indiana’s future with strategic commercialization of research and technology through Indiana University and business/industry collaboration.”

IURTC has three major functional areas at present:

a) the Technology Transfer Office;
b) IU Trademarks and Licensing;
c) corporate development: incubator, start-ups, general economic development.

The non-incubator related elements of the activities under c) are problematic because there is no clear boundary defining whom IURTC is to serve and how. Resources that are diverted to the service of localities and individuals outside of IU proper detract from activities that are more closely aligned with IURTC’s core missions, such as responding to faculty on regional campuses, and impair the quality of work overall. Moreover, while IURTC is uniquely equipped and its leadership uniquely experienced in the planning and operation of incubators, it has at times been called upon to operate incubators planned by others, not in accord with IURTC’s judgments as to viability, or with only tenuous connection to IU.

We recognize that the broader functions in economic development that IURTC currently provides to the state and local communities are important to IU. The university is increasingly expected to demonstrate service to the state; to be proactive in identifying or creating economic development opportunities that can benefit both IU, its graduates and the state; to be responsive to a broad range of more or less legitimate requests for assistance in order to attract and maintain a broad base of support and a healthy profile in the eyes of the public, political leaders, alumni and donors. However, these are more appropriately tasks for IU itself, not IURTC.

In addition, IURTC currently serves a management function for the Kelley Executive Partners. This has no connection to the IURTC mission. While the resources diverted from IURTC are not large, they do include a portion of the executive leadership’s time, and the impact is significant. When viewed in this light, this arrangement is a high cost solution that the committee believes should be terminated.

The committee agreed that the mission of IURTC is currently too broadly defined. IURTC is called upon to serve a number of economic development functions for the state and local communities that in some cases are not related to what we consider to be its primary role: service to the research faculty of Indiana University through implementation of the IPP. We urge the university to work to divest IURTC of functions that are not in some way related to this core mission.

Specifically, we recommend that as part of a comprehensive overhaul of its approach to the administration and financing of economic development activities, the university establish an Office of Economic Relations analogous to that maintained by Purdue. That office has three FTE (one primary administrative officer and two support staff) and reports to the president. Such an office at IU, reporting to the President or an appropriate Vice-President, should have designated interconnection points with each campus, with major IP producing units, and with IURTC. The costs may be offset to a degree by increased efficiency for IURTC and a more effective development of the university’s public profile with regard to economic development, but the primary costs will need to be borne by the university as an investment.

The Kelley School of Business may be an example of an underused asset in this regard. Entrepreneurship outreach for the school could accommodate some of the corporate development functions now in IURTC, while establishing useful links for IU and the school. The Office of Economic Relations could facilitate coordination of such contacts. There may be other units within the University whose potential contributions to IP have not been noted and developed.

Management of Kelley Executive Partners should be removed from IURTC.

C. IURTC OPERATIONS

Comparison of the staffing levels in the Office of Technology Transfer (OTT) at IURTC with the OTTs at peer institutions shows that the OTT is comparatively understaffed compared to other OTTs. Projections of desirable staffing levels based on the commonly used benchmark of 3-4 FTE per $100M of total research funding suggest that the OTT is funded at 50-75% of ideal levels (ideally 12-16; now 8 FTE), the lowest staffing level in the Big Ten. The dedicated revenue stream is intended to remedy this situation. IURTC representatives indicated that all additional hiring in the OTT need not necessarily be into professional technology transfer officer positions, but rather that effective use could be made of additional support staff. The committee considered the desirability of hiring technology transfer officers matched to

3 IURTC Mission Statement, http://iurtc.iu.edu/about_index.html
particular scientific areas with high actual or potential production of IP. The committee feels that areas of concentrated research funding should be considered as potential assignments for functional TTO appointments, although the degree to which this can be realized depends on expansion in the number of appointments and the identification of such funding focuses. Given the relatively small staff size of IURTC currently and the dispersed nature of much IP-related research activity, any movement from general to functional bases for TTO appointments will be gradual and partial.

There have been clear improvements in the responsiveness of IURTC to the needs of the university for information about disclosures and other IP related activity. Further progress is necessary both in the way that information is conveyed from IURTC to the university and units, and in the receptiveness of the units to information related to their IP activities. Robust quarterly reports to the university and units should be maintained, while recognizing that there are certain types of data that IURTC must maintain as confidential. At the unit level there should be a careful review of data sharing practices to ensure that these meet the needs of the unit and the university. Units need to actively seek and analyze data from IURTC and other sources to support their activities related to IP.

2. INTERFACE BETWEEN IP AND OTHER UNIVERSITY POLICIES

The committee gave some consideration to the ways that other university policies and administrative practices can influence the ability or enthusiasm of faculty to engage in IP related activities. Relevant policies and practices include those governing conflict of interest (COI) and conflict of commitment (COC). Lack of information on current COI/COC policies and inconsistencies in the way they are implemented by units – in some cases based on uncodified traditions and practices that faculty have no way of knowing – can seriously undermine the willingness of faculty to pursue IP opportunities. Standard operating procedures developed by human subjects institutional review boards (IRBs) may add additional requirements to research protocols that are related to licensed IP in order to guard against actual or perceived conflicts of interest. These protections are critical, but there is a risk that without clear explanation of them and an understanding by faculty of their necessity, these requirements may be seen only as adding bureaucratic hurdles sufficient to act as a disincentive to pursue IP opportunities. In addition, no clear policies seem to exist to guide faculty and administrators in clarifying expectations concerning leaves that may be granted in order to pursue start-up activities. Confusion in these areas is itself a disincentive.

- For difficult COI/COC issues guidelines based on case examples should be available online for each campus or unit, and should indicate how issues related to IP can be accommodated within policy requirements.
- We recommend that the Vice President for Research alert faculty governance to the need for university and campus policies on leave without pay that clarify how faculty involvement in start-up activities may be accommodated. Current practices often vary from the stipulations in the Academic Handbook, which are, in any event, specified only as administrative practice.

3. ENHANCEMENT OF IP DEVELOPMENT AND TRANSFER TO THE COMMERCIAL SECTOR

There is a widespread view that the university’s research has generated a substantial portfolio of IP of commercial potential that has not been protected or successfully brought to market. This failure to exploit commercial outlets for IP probably lies at both the level of formal disclosure of the IP by faculty, and also in the process of taking disclosed IP from concept to the marketplace. The committee discussed two particular areas in which the climate for the successful transfer of IP to the commercial sector could be enhanced.

The willingness of faculty to consider disclosure as well as publication as outlets for their research depends on a number of factors that relate to the culture of the institution. Some of these factors are alluded to elsewhere in this report. We considered potential mechanisms that might foster a climate that is supportive of faculty-business interactions and might heighten faculty awareness of potential opportunities derived from their own research activities. One attractive model is that of local support groups –interactive venues that would allow faculty interested in IP development and sharing a general research area opportunities to share information about IP processes and insights into how research opportunities may have IP potential. No single approach or model seems applicable to all potential cases, but broadening interest in IP and increasing faculty confidence in successfully engaging in technology transfer is the basis for long-term growth in IP, and fostering faculty interactions wherever it seems fruitful will accelerate the process.
The university should be proactive in seeking to reinforce clusters of IP interest within the faculty by encouraging deans, chairs, and directors to sponsor local support groups.

Gaps in funding opportunities along the path from initial conception of an innovation through commercial availability frequently result in the loss of potentially valuable IP. There are two critical points where such gaps are usually encountered: 1) the initial research may identify IP that needs further funding to further develop the idea to make it attractive for licensing. This phase is not covered by funding from NIH and other agencies since it is too applied for normal research grant mechanisms, but is too early in the process to qualify for SBIR/STTR funding. Licensing is a key step in the delivery of IP to the market, and additional work is often required to convince potential licensees of the value of IP. 2) In the case of IP that is licensed to startups, additional funding is often required in the organizational and development phase of these companies.

The university currently lacks funding and mechanisms to support either of these key transitional steps.

An internal funding source could be developed through dedication of a portion of the university’s limited share of IP revenue, particularly if that funding were designated on a “matching” basis with funds designated by units, perhaps with IURTC contributions in some cases. Efforts should be made to attract philanthropic and corporate support.

As resources for gap funding become available, a single protocol should be developed to govern allocations. This mechanism should assure that proposal reviewers are capable of assessing both the technical and business aspects of the proposal. It would be appropriate for relevant units to be involved in the technical aspects of proposal review and oversight, and for IURTC or others with similar expertise to assist with review and oversight of the business aspects. The protocol should recognize that the involvement of IURTC and unit personnel in the processes of proposal review and project oversight will likely be different for the two types of gap funding identified above.

4. THE ACADEMIC CULTURE OF THE UNIVERSITY AND INTELLECTUAL PROPERTY

Faculty have been at times suspicious of the very notion of intellectual “property” and the whole process of technology transfer. The committee felt strongly that the mechanisms outlined in the IPP for the delivery of the university’s IP to the commercial sector were, in fact, ways to further enhance the university’s missions of research and creative activity by ensuring the widest possible dissemination of the fruits of the university’s work. Without protection of rights to IP the financial resources available from the business world cannot be harnessed to support the development of IP to give it broad utility and widespread availability. The constraints imposed by the legal steps in obtaining protection of copyright or patent rights should be viewed by the academic community as a means to an important end – of making knowledge available and useful to society.

The committee supported the idea that IU (particularly the Office of the Vice President for Research) and IURTC should emphasize the consonance of pursuing commercial outlets for IP with the core missions of the university, especially in publicity directed towards the faculty and staff of the university.

Campuses and units should be encouraged to develop written implementation policies or standard operating procedures that conform to university policy and that align IP work with unit priorities. These documents should be written in such a way as not to discourage faculty from pursuing IP opportunities, and could indicate ways in which such activities can legitimately be accommodated within the relevant policy.

Efforts should be made to publicize and celebrate faculty and administrators whose commitment to IP creation and technology transfer results in successful impact that serves the University mission to state and community.

Transparency in where IP revenue dollars go and how they are used would help bolster faculty support for IP related activities. Faculty need to see that the revenues help support the core missions of the university and its units in direct ways.