

# University of Toronto Toronto Ontario M5S 1A1

OFFICE OF THE VICE-PRESIDENT, BUSINESS AFFAIRS

TO: Business Board

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**DATE:** February 10, 2004 for February 27, 2006

AGENDA ITEM: 3

## ITEM IDENTIFICATION:

**University of Toronto Innovations Foundation Reorganization** 

# JURISDICTIONAL INFORMATION:

Pursuant to Section 5.4. (b) of its Terms of Reference, the Business Board approves the designation of incorporated units as ancillaries or termination of such designation.

# PREVIOUS ACTION TAKEN:

The University of Toronto Innovations Foundation's 2005 audited financial statements were reviewed and approved at the October 26, 2005 meeting of the Audit committee, and accepted by the business board on November 28, 2005.

Approval was given at the October 11, 2005 meeting for an increase in the line of credit provided to the Innovations Foundation by up to \$2-million from \$11-million to \$13-million to cover the shortfall anticipated during the restructuring period.

#### **HIGHLIGHTS:**

The Innovations Foundation (IF) is a not-for-profit corporation established by the University in 1980. Over the past 25 years, there have been a variety of business models, the most recent being approved in 2002. That plan called for the Foundation to become economically successful and provided a line of credit to carry the organization through the initial investment period. This plan has not been successful and the University now wishes to refocus on the mission of transferring knowledge without taking the risks associated with investing in start-up technologies.

In 2004, the Honourable John Manley was asked to head a team to review the operations of the Innovations Foundation and make recommendations for future operations. The recommendations included among other things a culture change within the University to one conducive to increased disclosure; closer relations between the Tech Transfer Group and the Innovations Foundation; and steady state financing.

Coincident with the initiation of the Manley review, the Executive Director left the organization and was replaced by an interim appointee.

The senior administration began a review of the operations of the Foundation and the Manley recommendations in early 2005. Dr. Ron Venter was appointed Interim Executive Director in July and charged with developing a strategy and plan for the operations.

The plan is to transfer the operations of the Innovations Foundation to the University within the portfolio of the Vice President, Research by April 30, 2006. Moving the operations (including the Innovations Foundation's 22 employees) back into the University is seen to permit closer relations with the faculties, more disclosure and a clearer focus on the mission of knowledge transfer.

A more thorough discussion of the plan is attached. The Innovation Foundation's Board approved the plan, and the following resolution:

In view of the fact that the University believes that its commercialization goals can be achieved more effectively it they are more closely integrated into the operations of the University, it is hereby moved that the Board of Directors of the Innovations Foundations recommend to the Business Board of the University that the operations and staff of the University of Toronto Innovations Foundation be transferred to the University into the portfolio of the Vice President Research and Associate Provost, effective May 1, 2006.

A search has been initiated for an AVP Research and Executive Director Innovations within the portfolio of the VP Research. This will combine two existing positions and bring the two operations (Tech Transfer and Innovations Foundation) together.

#### FINANCIAL AND/OR PLANNING IMPLICATIONS:

The assumption by the University of the Innovations Foundation's operations will cause an increase to the University's operating budget of approximately \$3.0 million.

Approval of the budget increase for the VP Research that results from this change will be brought forward as part of the annual budget for 2006-07.

Previously, the Innovations Foundation's operating budget has been funded by the line of credit extended by the University to the Innovations Foundation. The current outstanding balance of the line of credit is \$11.0 million (authorized amount is \$13 million). Future revenues from licenses and disposition of shares will be used to pay down the outstanding line of credit. It should be noted that these are internal changes only and that the financial statements of the University will not be affected, since the IF results have always been consolidated and the losses have therefore already been taken into account.

#### **RECOMMENDATION:**

It is recommended:

THAT, subject to arrangements being made for the operations of the Innovations Foundation to be brought into the general operations of the University, including securing the necessary operating budget support, initially and essentially in accordance with the Innovations Foundation's Board Resolution dated January 18, 2005,

- (a) THAT the University of Toronto Innovations Foundation cease, for purposes of University policy, to be designated as an incorporated ancillary operation of the University; and
- (b) THAT the appropriate Vice-President, as so designated by the President, be authorized to approve and execute any agreements required to arrange for the operations of the Innovations Foundation to be brought into the general operations of the University, including, without limitation, the transfer to the University of the staff, licenses and other rights, assets and liabilities of the Foundation.

# FUTURE DIRECTIONS FOR THE INNOVATIONS FOUNDATION

A plan for the future direction of the Innovations Foundation for consideration by the UTIF Board, the Administration and Governance of the University of Toronto.

# Re-positioning the University of Toronto Innovations Foundation to Innovations at the University of Toronto.

# Vision Statement: Innovations at the University of Toronto

For the University of Toronto to be recognized as the Canadian leader in the application of knowledge to society through the collaboration, transfer and commercialization of ideas and research initiatives fostered and created within the University.

A Planning Document prepared by: Ron Venter, Interim Director, University of Toronto Innovations Foundation [July 18<sup>th</sup>, 2005 – January 31<sup>st</sup>, 2006], and approved by the UTIF Board on January 18<sup>th</sup>, 2006.

This Planning Document has been assembled in two formats:

- 1. A Planning Document plus a set of detailing appendices, and
- 2. A stand-alone Planning Document.

# FUTURE DIRECTIONS FOR THE INNOVATIONS FOUNDATION

A plan for the future direction of the Innovations Foundation for consideration by the UTIF Board, the Administration and Governance of the University of Toronto.

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Illustration 1: The Flow of Activities within Innovations at the University of Toronto [Expanding the R & D of Research & Development to R, D & D (Delivery)]

Illustration 2: Organizational Flowchart of Innovations at the University of Toronto

Illustration 3: The MaRS Environment and the IUT Collaboration and Outreach

#### ACRONYMS USED WITHIN THE DOCUMENT

ACCT Alliance for the Commercialization of Canadian Technology

AUTM Association of University Technology Managers

BDO Business Development Officer

FTE, fte Full-time equivalents GTA Greater Toronto Area

htx.ca The Health Technology Exchange IP&C Intellectual Property and Contracts

ISC Innovation Synergy Centre

IUT Innovations at the University of Toronto

MaRS Medical and Related Sciences

Mount Sinai Mount Sinai Hospital

MRI Ministry of Research and Innovation

NRC National Research Council
NBMA New Business Media Alliance
OCE Ontario Centres of Excellence

OnSETT Ontario Society for Excellence in Technology Transfer OPIC Ontario Partnership for Innovation & Commercialization

OCIF Ontario Commercialization Investment Fund ORCP Ontario Research Commercialization Program

POP Proof-of-Principle Funding RIN Regional Innovation Network

SCAAT Seneca College of Applied Arts & Technology

SCITAL Sheridan College Institute of Technology and Advanced Learning

SIN Sectoral Innovation Network Sick Kids Hospital for Sick Children

SWRI Sunnybrook Women's Research Institute
TAP Technology and Administrative Personnel

TRI Toronto Rehabilitation Institute
TRRA Toronto Regional Research Alliance

TTT Technology Transfer Toronto
UHN University Health Network
UT University of Toronto

UTIF University of Toronto Innovations Foundation

YU York University

#### **PREFACE**

Innovation is one of the major driving forces for sustainable economic growth and social development and is the key to today's knowledge-based economy, becoming the main source of competitive advantage in all sectors of economic activity. It is closely associated with productivity growth, the creation of new firms and increased exports. Canada has been proactive in fostering innovation, increasing its investment in research infrastructure – more than \$13 billion since 1997 – and support for the creation and commercialization of innovation. Even so, as the October 2004 Speech from the Throne noted: *The next challenge is to turn more of Canadians' bright ideas into dynamic businesses, great jobs and growing export earnings*. Partnerships offer an opportunity to make this a reality.

The mission of a public teaching and research university is to create new knowledge and to educate the next generation of leaders. Traditionally these institutions have undertaken Research and Development [R&D] in support of the needs of society. As the centre of innovation has shifted into these universities it is evident that the traditional Research and Development [R&D] mandates are inadequate to effectively address the degree of outreach required. At the recent Canada-California Strategic Innovation Partnership Summit in Los Angeles, January  $12^{th}$ , 2006, Robert C. Dynes, President, University of California, introduced the concept of R&D extending into R, D&D; the latter D defining the absolute need, for the significant universities, to address the *Delivery* of ideas into society and the market-place.

This planning document for *Innovations at the University of Toronto [IUT]*, supported by the Manley recommendations, defines the vision of the IUT and allows for the continued strengthening of the innovation agenda at the University of Toronto to address the *Delivery*. Key to these achievements is the commitment to embrace change, the fact that new faculty and students are receptive to such change and the integration into the considerable infrastructure and expertise, with respect to both social outreach and commercialization, that exists within the University of Toronto. Together with the collaborative and complementary strengths within MaRS, OCE, Bio-Discovery and the many other burgeoning knowledge translation initiatives across province, the University of Toronto is well placed to compete and provide leadership on the world stage.

#### THE FUTURE DIRECTION OF THE INNOVATIONS FOUNDATION

#### A. BACKGROUND

The University of Toronto Innovations Foundation [UTIF] has operated for some 25 years. During this period different strategies have been debated, approved and implemented, all essentially focused on the commercialization of the results of university research.

To succeed in this business is no easy task; a single *home run* success can transform the perceived status of an organization. UTIF has had modest successes but no *home run*. In 2001/2 the UTIF embarked on a new plan to grow the commercialization activities. The plan was approved, expenditures were on track, but the projected rate of revenue generation was not being realized. It became increasingly evident that the approved model was flawed. The debt was increasing and approaching the maximum limit of \$11 million. In 2004, former President Robert Birgeneau, with the support of the UTIF Board invited the Honourable John Manley to review UTIF. The Manley Report contains a number of pivotal recommendations. The key items are identified below:

- 1. Changing the culture: Work on several fronts to build a culture that is more receptive to commercialization. Build a climate of trust and a culture of innovation. Officials responsible for commercialization must build close, ongoing ties to researchers and focus on their needs. These activities help create the climate of trust needed to nurture positive entrepreneurial attitudes. The process is accelerated where the leadership of the university shows clearly its commitment to commercialization, and ensures a strong alignment with the academic mission.
- 2. **Intellectual Property:** Changing existing policies to give investigators a greater share of the revenue created by their ideas, and to simplify ownership of the related intellectual property.
- 3. **Stable funding:** Restructuring its commercialization and technology transfer activities to follow a model for commercialization that is not driven mainly by the need to earn returns but rather to transfer knowledge.
- 4. **Streamlining:** One-Stop Shopping. Bringing together the existing separate functions of technology transfer and commercialization into a single unit, and better leveraging relationships with industry and potential investors.
- 5. MaRS: Engaging actively with the Medical and Related Sciences (MaRS) Discovery District.
- 6. Co-ordination with Hospitals, Bio-Discovery, ORCP, IRAP, others: Developing strong links to the university's affiliated hospital-based research institutes to build economies of scale

At the time of this review [November 2004] UTIF management was changed and an acting Executive Director was appointed which ended on June 30<sup>th</sup> 2005. The membership of the UTIF Board was also changed to allow for a larger representation from within the University during this transition phase to allow for the redefinition of the structure, the vision and the mandate of the UTIF. The Board approved the relocation of the UTIF offices from the 203 College Street location into the MaRS facility at 101 College Street. In late July 2005 Professor Ron Venter was appointed as interim Executive Director for a mutually agreeable term of six months to December 31<sup>st</sup>, 2005. UTIF was relocated to MaRS in October 2005.

The current plan outlines the new direction for the UTIF in support of the University's academic mission. In this context, it is to be noted that Business Board approved in October 2005 an increase in the line of credit in the amount of \$2 million to a maximum of \$13 million. This increase was conditional on a revised planning document being tabled and regular reporting of the progress to the Business Board as it relates to the re-positioning of UTIF to Innovations at the University of Toronto [IUT].

At this juncture it is useful to provide a point summary of the *financial*, *organizational* and *operating* situation within UTIF in 2005:

#### Financial:

- Business model approved in 2002 has not worked satisfactorily revenue growth is slower than planned, expenses on schedule with plan. Losses mounting.
- Business Board has approved an increase in the line of credit [October 2005] but is expecting a permanent solution.
- University wishes to limit impact of UTIF on operating budget.
- Manley Report defined need for steady state financing.

#### **Organizational:**

- Separation between UTIF & U of T has resulted in communication and reporting problems and has a negative impact on clear accountability and appropriate goals
- Good staff within UTIF are doing valuable work, in a climate of uncertainty
- Roles and responsibilities of UTIF Board an on-going issue
- Relationship of UTIF to VP Research portfolio is not clearly defined

#### **Operational:**

- UTIF does not cover full range of knowledge areas; with narrower focus on revenue generation
- UTIF does not provide full range of services
- Reliable data for bench-marking is limited
- Inventions policy is having a negative effect on innovations and commercialization, but change is not easily or quickly made. The pipeline is broken and requires interim adjustments that will ensure that all disclosures are either assigned and or assessed in defined time frames
- Government is focused on innovation and commercialization and is expecting to see the benefits of their investment
- Executive turnover continues need for new, continuing leadership is critical to maintain positive work environment in a challenging work area

It is very important however to recognize and understand that UTIF has achieved considerable success in the past. The current process is therefore one that must selectively build on these experiences. UTIF has pioneered considerable developments and has developed unique reengineering ability, working with the inventors, to enhance the value of U of T technologies for the potential market-place. Within Canada there is every indication that UTIF is already an established and very respected player. Internally, the University needs to ensure that the pipe-line from research to disclosure and potential commercialization and outreach is clear and consistent so that the IUT teams can devote their energies to the planned tasks.

#### **B. NEW DIRECTIONS**

A key recommendation of the Manley Report was the need for sustainable funding to support the planned activities of a revised Innovations Foundation. The academic mission of a leading research and teaching University is certainly to enhance its international stature in scholarship and research accomplishments to provide both recognized leadership and impact. Knowledge translation, outreach and the commercialization of new knowledge are all integral to these objectives and must increasingly be recognized as being an essential service, directly supported by the University, in the same way that offices and laboratories are provided with lighting and power receptacles.

The vision and mission of a revised UTIF must therefore contribute intimately to the academic mission of the University and provide a defined set of services that will promote and strengthen the resolve of all members of the University to recognize the need for and awareness of these delivery services within the mandate of the University. The benefits to faculty members, students and the University are considerable. The University of Toronto will benefit from enriched public relations, visible outreach by the University to commercialize research in partnership with industry and investors, greater appreciation by governments that are increasingly promoting such outreach and potential financial returns from license fees, royalties and or equity holdings within new and existing companies.

It is also appropriate to enquire as to the situation were no UTIF or equivalent to exist at the University of Toronto. All inventors could request that the university sign over the intellectual property rights to the inventors, a situation currently provided for within the inventions policy. Faculty members, researchers & students [all inventors] would be directed to external sources of assistance i.e. lawyers, accountants [exists at present]. All could find their own investors and could start their own companies. Many inventors will choose this route, a larger number will not.

A renewed UTIF<sup>2</sup> needs to work with the academic community to channel and cultivate new or emerging research results into the external marketplace so that the endeavours of the academic community have increasing impact on society and the external community. The University is a creation of our society, it is an assembly of our finest creative talents; this output needs to be nurtured, intelligently protected, suitably quantified and bridged to the external community for the betterment of our society. The UTIF can and must provide this enhanced awareness within the halls of academe, to identify and encourage important disclosures leading to the protection of intellectual property, to informed innovation and the translation of knowledge into society. This is the responsibility of a leading research and teaching University and requires structure that is fully supported by the academic community.

## **Vision Statement:** *Innovations at the University of Toronto*

For the University of Toronto to be recognized as the Canadian leader in the application of knowledge to society through the collaboration, transfer and commercialization of ideas and research initiatives fostered and created within the University.

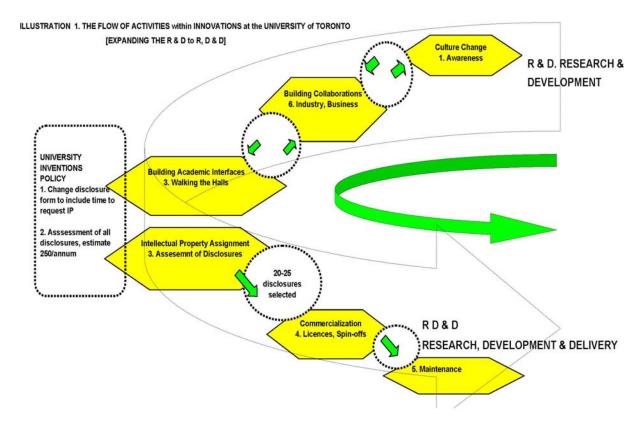
Mission Statement: Innovations at the University of Toronto

<sup>&</sup>lt;sup>1</sup> Sustainable funding: Support for UTIF to be provided from the base budget of the University and to be independent of generated revenues.

<sup>&</sup>lt;sup>2</sup> Renewed UTIF. It is important that a renewed UTIF be suitably renamed to better reflect its planned activities. For now it will simply be identified as Innovations at the University of Toronto, IUT. Some perceive a negative connotation with current UTIF, others find the word Foundation to be problematic.

Provide effective and clearly defined services to the academic community for the communication, packaging and translation of its ideas and research into collaborations, products, services, ventures or processes to benefit society.

Following directly from this mission statement it is important to briefly identify the range of anticipated services. These have been classified into six distinct areas of activity, are obviously inter-related, but it is critical to have this categorization to provide for a flexible balance among the aspirations that exist, the resource allocation and the maximization of the benefits that can be derived in support of the academic community. Within the whole, supply and demand will prevail within each activity and competing activities; the percentage resources currently recommended for each activity are therefore more representative of a stable situation based on the number of disclosures that can be reasonably be expected to occur within the University of Toronto each year. The number of disclosures has been so identified as it represents the key metric within the pipeline which defines the magnitude and global cost of all of the services to be provided. Greater awareness will increase the number of disclosures which in turn will increase the resources required for assessment and the resultant promotion and commercialization of these disclosures. The current model is based on an estimated 250 disclosures per year. Some 10% of these being selected as active projects in which the University and the researcher would effectively collaborate and seek to fully develop the idea through licensing, royalties, equity positions within spin-off companies or simply sharing the knowledge with society.



1. Improve awareness of the value of intellectual property, its ownership and changing the culture. The value of all forms of University outreach needs to constantly be marketed and promoted at all levels within the University. A consistent message is required so that faculty and students will fully appreciate the need to publish the results of

their research endeavours whilst simultaneously recognizing the need to first protect the intellectual property. Today intellectual property is the driver of new national wealth and the University can contribute significantly to the development of this capability in partnership with business, industry and government. Such initiatives require consistent, durable effort. The approach is to work with all faculties; each having different needs, commercial and or non-commercial strategies and certainly different levels of expertise and information. The cultivation of internal university contacts is critical. Seminars and symposia for faculty, to clarify the benefits of working with IUT, Web site, *e-share* information on innovation awards, technical services, newsletters, articles to promote innovation and reinforce IUT value will be part of the mandate, tailored for the particular academic unit. For success, all such activities require the enthusiastic support and recognition by the administration, deans and chairs.

- 2. Walking the corridors & laboratories: cultivating University contacts. With the support of academic units, key laboratories will be defined as well as the lead innovators and new faculty who will be major contributors to building the pipeline for disclosures and related impact materials. Business Development Officers within the IUT [and potentially from within academic units] will be assigned to these laboratories to promote and encourage and to learn and understand what precisely is germinating in these laboratories with future development possibilities post disclosure to the University.
- 3. Assessment of disclosures. A commitment to ensure that each disclosure is assessed in a timely manner post disclosure to the University and that the intellectual property gets assigned is a critical step in building a climate of trust and a culture of innovation. At present there are deficiencies in the process that need to be rectified in the interests of all contributors.

The rate of disclosures filed at the University presents the critical path in the support activities that can be provided. It is estimated that some 200 disclosures are recorded each year within the University of Toronto. With increased awareness and promotion of the need and value to record all disclosures this number will increase and should be monitored as but one important metric in future planning. Of this 200, it is estimated that some 10% could be disclosures that have immediate potential benefit to society if appropriately developed with external partners and the prospect of potential financial rewards to the inventor and the University. While the rate of acceptance of the disclosures for development in partnership with IUT is around 10%, it follows that 90% of the filed disclosures will be rejected for one reason or another. This can but must not be perceived as a negative experience for the inventor. Rather it must be seen as part of the process and no one can be expected to invest time and effort in an invention that by our collective best judgment is unlikely to be successful or required within the market-place. Feedback, with support from the leadership of all academic units is essential to ensure that the experience is a positive one for the inventor with the motivation for a repeat disclosure. It is no different than having a good journal paper rejected.

4. **Re-engineering inventions for commercial activity.** Few, if any, of the disclosures filed can be identified as ripe for investors within the external community. Most are immature or require careful re-engineering to begin to align key features of the invention within the pull of the marketplace. This is applicable to both licensing and spin-off opportunities. The transition from a laboratory concept, partially proven, to something in which the external community recognizes the market value is a difficult phase that can be very costly to undertake. Furthermore, it is at this very stage in the process where the real value can be added by the Business Development Officer [BDO] through interactions with MaRS

OCE, industry and investors, and the collaboration of the inventor(s). The ability, experience and contact network of the BDO come to life and provide the inventor(s) with much needed support and experience.

It is critical within this activity to fully recognize the value of the research contribution that is being either licensed and or spun-off. Some of these commercial opportunities are more likely to be realized within a spin-off and it is essential in the full spectrum of activities to promote a limited number of spin-off possibilities, possibly 4-5 of which only two may lead to a successful conversion with royalties and equity. Working intimately with MaRS, OCE, the venture capital community and Bio-Discovery are the central vehicles for the assembly of spin-off teams that will provide a broader knowledge base for implementation.

- 5. Maintenance of all deals. As each deal [license, royalty, etc.] is made, it will require a commitment to maintain the file. Maintenance is necessary to ensure that adequate records are maintained, fees and milestones are met and that licenses signed are honoured and respected. For an institution to falter on this aspect simply undermines their ability to do future business.
- **6. Industry, government & professional interactions.** The mandate of IUT is to work on those projects where deals can be made because the project has appeal to potential investors and or companies seeking to license the technology. While success rates in the transfer of knowledge increase when the product is good and timely, it also requires excellent collaboration with the industry and an informed knowledge of the receptor capacity both nationally and internationally.

All six activities relate in one form or another to building confidence internally and the promotion of opportunities that are available to investors, industry, and the community to benefit them and enhance the stature of the University. Successes need to be promoted that will serve to consolidate confidence and greater opportunity with Government, Industry and the local, national and international community. While all activities are important, the proposed guideline is to devote some 30% of the resources to items 1 & 2, 35% to item 3, 25% to item 4, and 5% to each of items 5 and 6 respectively.

The initiatives as identified within the six activities represent a new beginning which is intentionally well-defined so that the objectives and the resources to be allocated to each function are clear, can be monitored and accomplishments bench-marked. It must not however serve to curtail our creative thinking and should allow for the establishment of new initiatives based on the successes achieved. For example, there exists tremendous scope within Ontario and Canada for research and development of various forms of innovation models, partnership planning, tax structures for the investment in innovation, international business partnership building to match the resource pools of participating nations. All such activities are best nurtured within an academic environment that should be actively connected into Innovations at the University of Toronto and as such provide the matching academic scholarship and leadership in an area of tremendous importance to the nation. It is very important to forge and cement the appropriate links to new and existing entities within the University of Toronto, most notably the initiatives within the Rotman School of Management and the Faculty of Law since these units are already addressing the broader policy issues of productivity etc. The entities need to identify the vehicles whereby our collective efforts can reinforce each others success; the proposed Academic Operating Committee (see Illustration 2) should be seen as an opportunity in this context.

#### C. ORGANIZATIONAL STRUCTURE

Consolidation of the activities of the IUT with the former technology transfer and legal services activities that reported through the Assistant V-P within the Office of the Vice-President Research was recommended within the Manley Report. It will provide for one-stop services for the academic community. This consolidation is supported and recommended by the UTIF Board. In addition, it is proposed to merge the positions of the Assistant V-P and the Executive Director into a single appointment that will clarify the reporting structure through to the V-P Research at the University of Toronto. The search for the new Executive Director of IUT and the Assistant V-P Research is now active and proceeding under the auspices of Professor John Challis, V-P Research.

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The second part of the puzzle was to consider the advantages and disadvantages of having a revised UTIF continue as an external entity of the University or to re-position the UTIF within the University as unit reporting to the V-P Research. As noted previously there does exist organizational issues with the existing structure that would be simplified with the re-positioning of the UTIF, re-defined as Innovations at the University of Toronto, entirely within the portfolio of the V-P Research as a self contained unit. The clear accountability for results of the IUT will reside with the V-P Research; the need for separate financial statements and audits is eliminated. All staff can be more conveniently appointed within the University of Toronto Human Resources policy guidelines.

Vice President, Research

TBA: Executive Director, Innovations Foundation & Assistant Vice-President Research

Business Operations Committee

Office & Director, Direc

Physical

Sciences

Knowledge

Translation

Contracts &

Policy

Illustration 2: Organizational Flowchart

Origin of resources: Innovations Foundation Origin of Resources: Intellectual Property & Contracts

Information

Technology

The proposed organizational structure is provided in Illustration 2. Innovations at the University of Toronto would become an administrative unit, comprising five definite areas of responsibility, namely Life Sciences, Physical Sciences, Information Technology & Communication plus a fourth area identified as Knowledge Translation<sup>3</sup> and finally the legal services within Contracts and Policy. These technical groups will be supported by a administrative support team. In

Sciences

addition, two operating committees, namely an Academic Operating Committee referred to in

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**Business** 

Manager

New Structure and Activities

<sup>&</sup>lt;sup>3</sup> Knowledge Translation. In the present context the intent is to address those significant areas of endeavour within the University where the transfer of knowledge could occur with no anticipated revenue; examples might included source software, significant contributions in education systems, urban planning issues etc.

section B, and a Business Operating Committee would be established and chaired by the Executive Director of the IUT and the V-P Assistant Research. These are proposed in lieu of UTIF's current full-governance board of directors as required by the company's by-laws.

While the organizational flowchart identifies Life Sciences, Physical Sciences, Information Technology and Knowledge Translation are the areas of specialization, the structure must allow for the possible consolidation of these areas as opportunities are fully explored with for example Bio-Discovery and or the National Centre for Bio-medical Innovation that was recently announced by the Federal Government. Furthermore, the organizational structure of IUT must allow hotelling type of accommodation in support of the numerous activities; while the MaRS location is the hub of the activities, the outreach must be integrated into Research Services as well as into the University Halls and Laboratories. Business Development Officers will essentially hotel at these sites with defined contact times at sites to enhance interaction.

The Academic Operating Committee will include academic representation from Vice-Deans and Chairs as well as academics with a keen entrepreneurial commitment who will recommend and advise on all activities that will foster a greater commercial awareness and outreach on all campuses. In contrast, the Business Operating Committee will comprise the very best external business, investor expertise plus representation from MaRS and OCE to provide input and consultative direction on each of the *active projects*<sup>4</sup>. Members of the Business Operating Committee would also be available for input outside regularly scheduled meetings<sup>5</sup>.

The UTIF Board is no longer required with the repositioning of the IUT/UTIF into the University, however a new Interim Executive Committee appointed by the President, and chaired by the President, is recommended. The membership of this Advisory Committee would comprise individuals from within and external to the university [government, business, community], to provide a high level strategy forum on issues pertaining to university participation and leadership in outreach, commercialization and expanding the economic base of the Province.

#### D. COLLABORATION & OUTREACH

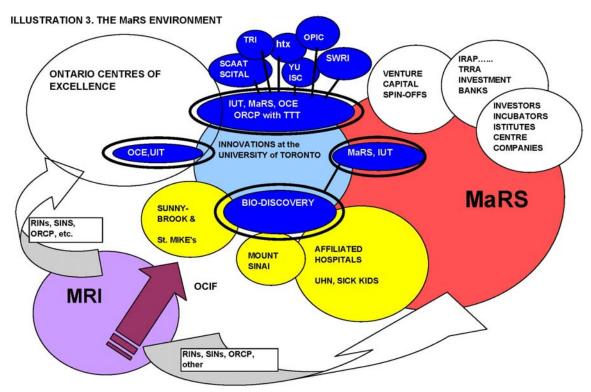
It is essential, as noted within the Manley Report, for the restructured UTIF to actively promote and play a dominant leadership role within the spectrum of the defined activities of the proposed Innovations at the University of Toronto. Many players have entered the commercialization and technology transfer stage in the past twelve months. Regional and Sectoral Innovative Networks [RINs & SINs] have been established, MaRS has opened its facilities, Bio-Discovery has been initiated as a collaborative endeavour among the affiliated Hospitals, CAMH, U of T and UTIF and others. The Toronto Regional Research Alliance [TRRA] too has emerged. Each entity has a mandate yet to be tested and which often appears to conflict with other competitors. None of us, in the interests of the University, Ontario and Canada can afford to be competitors; it is absolutely essential that our collective efforts are to be *complementary* and not *competitive* if we are to make headway in the international market-place.

Dated January 25th, 2006..

<sup>&</sup>lt;sup>4</sup> All projects established within the IUT organization need to be clearly categorized. The four established categories are *Active*, *Pending*, *Maintenance* and *Terminated*. Projects move through the each category, with the active list preferably not exceeding 50 projects at any one time. All active projects are to be listed on the website and well marketed both within IUT and the external community. To achieve *active project* status means that the University considers the project to be sufficiently appealing to have directed resources to the successful marketing of the project. S

<sup>&</sup>lt;sup>5</sup> The Business Operating Committee is structured to provide informative input to the IUT staff. It must not attempt to micro-manage projects.

Illustration 3 represents the many innovation players emerging within the MaRS environment. The four elliptical outlines highlight the partnerships with Bio-Discovery, MaRS [Medical & Related Sciences], the OCE [Ontario Centres of Excellence] and the ORCP initiative entitled Technology Transfer Toronto that are critical to building the success within IUT. Additional collaboration details with other partners have been defined.



Superimposed on this commercialization play-pen, the Ontario Government is proceeding with the establishment of the new Ministry of Research and Innovation [MRI] and advanced the Ontario Research Commercialization Program [ORCP]. Regional ORCP submissions were encouraged that, in the submission stages formally excluded the OCE and MaRS, since these Ontario Government based partners would be subsequently included, post the announcement of the awards.

In this context, UTIF pioneered the ORCP application entitled Technology Transfer Toronto [TTT] with some ten partner institutions across the GTA to establish a *Proof-of-Principle Fund* in support of the Physical Sciences, Information Technology, Devices & Instrumentation. In partnership with Bio-Discovery, a second Toronto-based *Proof-of-Principle Fund* in support of Life Sciences was prepared by Bio-Discovery. Both applications were submitted to the Ontario Government through the University of Toronto.

The results of the ORCP are expected in February 2006 and there is an excellent chance of receiving funding. Planning will require, as noted previously, active involvement with MaRS and the OCE as well as Bio-Discovery and all partners across the GTA.

On the national stage the ACCT was established and held its first national meeting in November in Ottawa. OnSETT is beginning to be recognized and supported by Ontario Universities. There were also considerable rumblings and beneficial discussions within AUTM as to the real value of

metrics currently being used and promoted within AUTM to evaluate the *true* success of technology transfer offices within North America.

The primary reason for collaboration with preferred partners is to define useful and cooperative working boundaries that will enable new resources and expertise to be brought to bear on selected projects. The approach requires formal clarity since collaboration for collaboration's sake is not what is required. Each of these relationships will also permit the growth of the critical mass and allow for expanded expertise; for example, appointments made within Bio-Discovery should not duplicate the expertise that currently exists within UTIF; defined collaboration is underway.

#### E. HUMAN RESOURCES:

With the repositioning of the UTIF into the portfolio of the V-P Research it is proposed to proceed as follows to allow the transition to be completed by May 1<sup>st</sup>, 2006 to coincide with the start of the new fiscal year 2006/07.

- 1. By February 1<sup>st</sup>, 2006 the FTE complement would be reduced to 19.2. [11.8 BDO FTE and 7.4 TAP FTE]. Dr Cyril Gibbons will be serving as the Interim Executive Director until such time as the new Executive Director and Assistant V-P is appointed, presumably by April 1<sup>st</sup>, 2006.
- 2. *BDO Positions*. Position descriptions for each of the 14 BDOs will be established. It is proposed to establish three levels of BDO, namely an Assistant BDO, the BDO position and the Senior BDO position. Another option, being discussed with Human Resources is a single classification that includes various levels, possibly as many as five, of BDO activity within the position description.
  - Technical and Administrative Personnel Position: Position descriptions for each of the 8 technical and administrative positions need to be established as well, but all of these positions are certainly fully compatible with existing positions in the University and the equivalent descriptions will be used. All position descriptions should be completed by the end of January 2006 so that offers of employment can be made to all 22 individuals to join the University of Toronto.
- 3. At this time it is very important to maintain as many of the UTIF team members as possible through this transition for stability of service, provision of knowledgeable expertise and maintenance of all faculty relationships. Some staff may choose to leave and the new the conditions may not be satisfactory.
- 4. It would be advantageous to try to secure continuing appointments for all staff who accept the offer for a position at the University of Toronto.
- 5. On establishing the salary budget for 2006/07 it is proposed that the estimate of \$200,000 increasing to \$220,000 per BDO FTE per annum is used. This estimate will cover the support costs of the technical and administrative staff and the operating costs. It will not include the recoverable patent costs, the office leasing [rental] costs for suite 320 at the MaRS Centre or the salaries of the seven personnel that are currently derived from the budget of the V-P Research.

#### **F. BUDGET FOR 2006/07:**

The IUT budget for fiscal year 2006/07 will be prepared by the Office of the Vice-President Research and incorporated into the University Budget. The magnitude of the new funding required to sustain Innovations at the University of Toronto will be approximately \$3million per

annum plus the existing funding within the Office of the Vice-President Research that will in future be consolidated into the IUT activities, consistent with the Manley recommendations. The macro elements included within the IUT budget address the following items;

#### 1. The BDO activities originating from within the existing UTIF.

There are 12.3 BDOs identified within the initial plan and the cost for each BDO is estimated at \$200,000 per year. This approach provides a convenient index to assess the overall cost based on the BDO activities. For 2006/07 the BDO count will be held at 11.8 growing to 12.3 in 2007/08 with the addition of the Knowledge Translation Director. The cost per BDO includes the BDO salaries and benefits, the salaries and benefits of 8.9 FTE technical and administrative staff plus the operating costs of IUT.

# 2. Office Leasing Costs.

There is tremendous value to being located in the MaRS environment and conveys a clear commitment and message that the University in a major player in this activity. This cost is identified outside of the regular costs.

# 3. Activities of the Contracts and Policy.

This component is currently budgeted within V-P Research portfolio. It includes members of the legal services team as well as the salary of the Executive Director and AV-P.. In time these costs could possibly also be included into the overall cost of the BDO as noted above. For the present, during this transition these funds are identified independently as they are essentially available within the Office of the V-P Research.

#### 4. Recoverable Patent Costs.

Patents costs need to be identified as a budget item. The intent is to recover these funds, currently estimated at \$400,00 per annum. Current projections would indicate a possible 70% recovery of these funds as individual projects develop their particular revenue streams. It is proposed to place a 30% surcharge on these as they are recovered so as to attempt to recover all patent costs.

Details will be fully incorporated into the University Budget. Budgets in subsequent years will depend primarily on the BDO count that is required to deliver on the mandate. In 2006/07 the cost is estimated at \$200,000 per BDO.

All existing revenue streams are to be recorded annually and channeled into the operating budget of the University of Toronto to pay the accumulated debt established within the approved line-ofcredit. The total projected revenues per annum can fluctuate quite substantially as can the revenues net of the distributions to stake-holders. The order of magnitude of the total revenues received for fiscal years 2001/02, 02/03, 03/04 and 04/05], is provided<sup>6</sup> for information. The comparative figure for the current, but incomplete 2006/07 year is \$600,000. The total projected for the entire 2006/07 year is \$903,000 of which the net revenue after distribution is estimated to be \$558,540<sup>7</sup>. The current accumulated debt as of April 30<sup>th</sup>, 2006 will not exceed \$13 million which is within the approved line-of-credit

The University of Toronto also receives additional annual revenues from those inventions, outside of UTIF, where the intellectual property was acquired by the inventor in exchange for a share in the revenues derived from commercialization activity.

03/04: \$1.2 million; 04/05: \$1.6million

<sup>7</sup> This value includes an estimated \$56,000 royalty distribution to the University of Toronto.

Dated January 25th, 2006...

<sup>&</sup>lt;sup>6</sup> Total revenues received by UTIF: 01/02: \$2.7 million: 02/03: \$3.8million:

#### G. RECOMMENDED ACTIONS

The recommended actions are numerous, but will be categorized as action items within each of the financial, organizational and operating headings as recorded below.

#### Financial:

- Merge the revised University of Toronto Innovations Foundation activities into the V-P Research portfolio.
  - o Define the personnel requirements within the Innovations at University of Toronto.
  - o Offer new positions as required to UTIF staff within the IUT.
- Continue to run the UTIF corporation shell as required, with no official employees
  - Clarify operational procedures with respect to cash flow with patent costs, licensing, equity positions, royalties.
  - o Complete due diligence and recommendations for UTIF corporate entity. The categorization of all projects into one of Active, Pending, Maintenance or Terminated will allow for a cleaner sub-division. All new agreements with Active projects should be completed within the new IUT structure.
  - o Dedicate revenues to loan repayment.
- Plan the budget support required for 2006-07.

#### **Organizational:**

- Recruit the Executive Director/ Assistant V-P Research [ED/AV-P]. External consultants have been appointed; V-P Research overseeing the search process.
- Consolidate UTIF as IUT within the operations of VP Research, under an ED /AV-P reporting to the VP Research.
- Recruit new Business Operating Committee with defined mandate.
- Recruit new Academic Operating Committee with defined mandate.

#### **Operational:**

- Introduce a revised University of Toronto Disclosure Form that will allow, within the existing Inventions Policy, the inventors to seek a timely assignment of the ownership rights to the invention or permit the University to request an assessment of disclosure by UTIF.
- Research Advisory Board to consider recommended changes to the Inventions Policy that will allow for user friendly documentation and the timely assignment and assessment of all disclosures submitted.
- Restructure the processing of all disclosures such that the turnaround time is reduced to a minimum. To be addressed within the University of Toronto.
- Agreement on set of services to be offered within Innovations at the University of Toronto.
- Agreement on target objectives for disclosures, licensing, patent costs, spin-offs.
- Document processes for management of operations.
- Communication. Communicate services available to U of T faculty, students and staff.
- Create a communication strategy, University portal and other, that effectively informs faculty on an on-going basis what IUT is and what it provides.