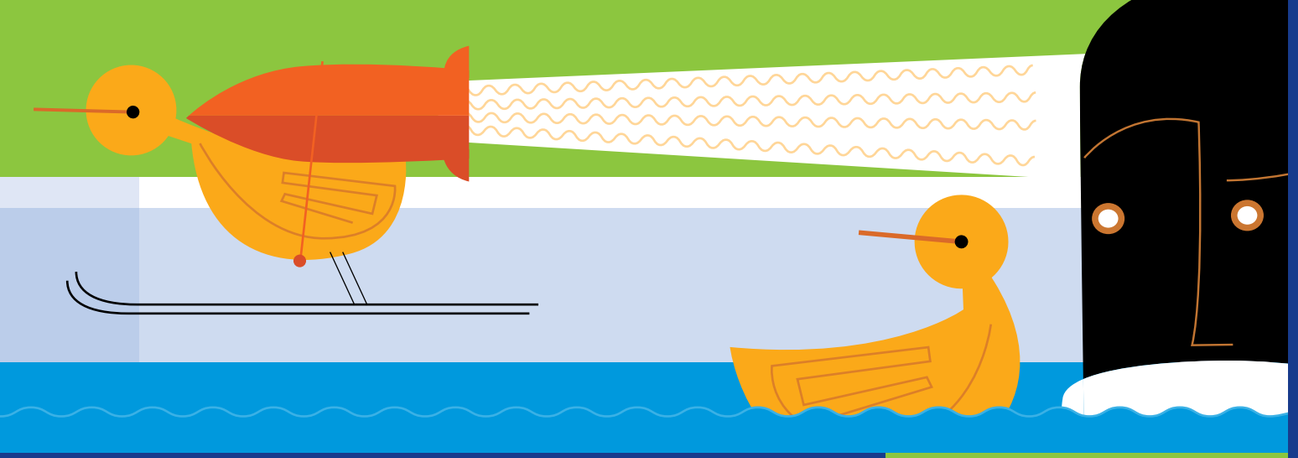
From Eureka to Enterprise

2003 Annual Report

UNIVERSITY OF TORONTO
Innovations
FOUNDATION



From Eureka to Enterprise

2003 Annual Report

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Chairman's Message

The University of Toronto Innovations Foundation (UTIF) is a not-for-profit organization dedicated to the commercialization of university-based research. Commercialization might be described as an activity whose purpose is to create or add economic value to technologies by consolidating, protecting and marketing them in a business-like manner to achieve a financial return.

The federal and provincial governments have expressed their expectation that results from publicly-funded research with commercial value or application should be effectively commercialized for the benefit of the public. Technology transfer operations, like UTIF, are a means to this end. UTIF uses its operating funds to protect the intellectual property of selected projects, to add value and to market these technologies in exchange for a share of future compensation, either in the form of equity from start-up companies or as royalties from licenses.

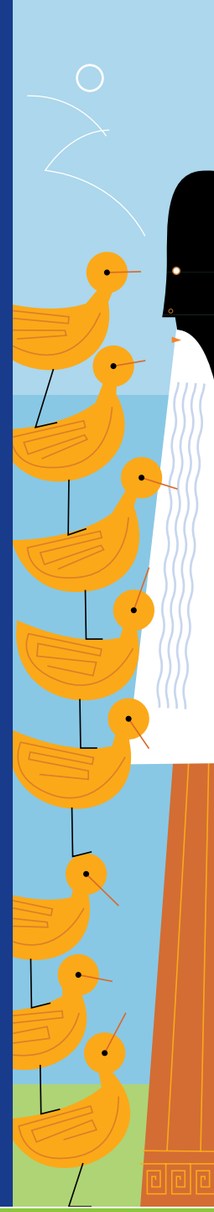
UTIF seeks to be involved in and support various government initiatives and policies that encourage innovation and commercialization. To this end, UTIF works with other universities, hospitals, governments, Centres of Excellence and business organizations to build an integrated network of people experienced in the commercialization of inventions and knowledge-based enterprises.

Overall, it is the objective of UTIF to be recognized among the leading commercialization programs of publicly-funded universities, on a global basis.

This coming year, UTIF's Board of Directors is focusing on a broad range of governance issues, improving internal control systems, and establishing a set of quantitative metrics to assess success in each area.

I thank each member of the Board for his/her diligence, commitment and vision, and the efforts made to advance the interests and activities of the University of Toronto Innovations Foundation.

Gary Goldberg,
Chairman



President's Message

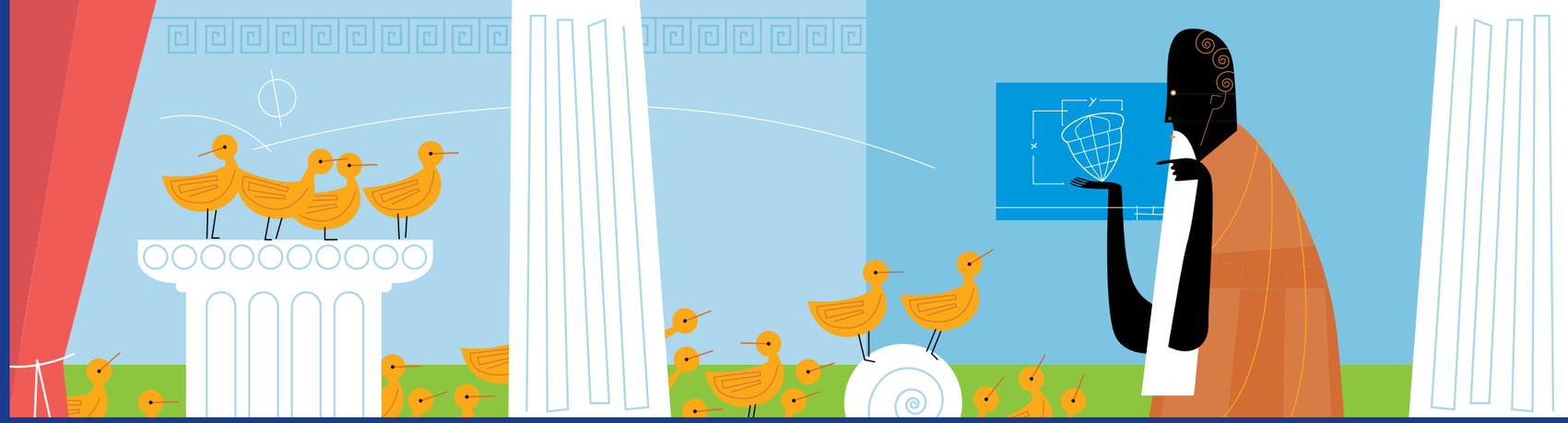
People often say to me, "You have a great job!" Certainly, working with great minds and great ideas at the University of Toronto, and in the business community, to bring inventions from "Eureka to Enterprise" is a wonderful privilege.

It is not without challenges. It is not easy to balance the needs of the academic, business and investment partners who are all required to effectively maximize the social and economic impact of each discovery. It takes a lot of very clever and dedicated people working together.

UTIF has been innovative in the way it has sought to establish trusted communities of stakeholders to work together, to envision the future benefits of new knowledge, and effectively implement a successful commercialization strategy. One example is the monthly meetings of 10 Ontario universities in the IPM-Ontario group. Each meeting the group reviews new inventions and helps each other to add value to discoveries that emanate from the member institutions.

UTIF has also continued its effort to establish sources for early stage venture capital, in partnership with other universities, hospitals, banks and venture partners. Available capital for the commercialization of early stage technologies now totals over $30 million in Community–Sponsored Small Business Investment Funds (CSBIFs). The 'U of T' CSBIFs have invested $15 million in 21 start-up companies, which have obtained co-investment or follow-on investments of $35 million, for a total of $50 million working to bring these technologies into their marketplaces. This seed capital is the most difficult level of financing to obtain for early stage companies, and UTIF will continue to endeavor to establish these funds for the benefit of all stakeholders.

Our organization has also established an innovative businesses incubator, the Exceler@tor, and is in the planning stage for another one in Mississauga. These facilities are a magnet for people who want to see new businesses succeed. Both incubators have received impressive sponsorships from industry-leading organizations and all levels of government. Twenty-one companies have been admitted to the Exceler@tor, and next-round financing of an aggregated $9 million has been obtained by these nascent businesses.



Highlights

- **New strategic plan approved**
- **$4.5 million in total revenues**
- **One business incubator operational and another planned**
- **$30 million in seed venture funds raised**
- **$15 million invested in 21 companies and an additional $35 million co-invested by others**

Already two of these companies have grown their businesses allowing them to successfully exit the Exceler@tor. CipherShare completed a trade sale and is now part of a large industry leader where it will be better able to bring its novel products to global markets. TransGaming Technologies grew explosively and moved to its own facilities.

Seeing the need for an even larger commercialization centre, leaders from academia, government and business have combined to launch the MaRS Centre in the heart of the medical research district. It aims to create a mechanism for establishing lucrative synergies between stakeholders in Canada's emerging technology community, by establishing and supporting networks and facilities for early-stage businesses. The University of Toronto has been a founding investor in MaRS. UTIF has committed to move its commercialization operations and the Exceler@tor into this facility in 2005. This will enable closer collaborations with the technology transfer community at the teaching hospitals.

With the University's endorsement, a new strategic plan has been developed and has established the ambitious goal for UTIF to become one of the foremost technology commercialization groups in the world. We have solidified an organizational reputation as a trusted partner to numerous stakeholder groups. As we all wait for our recent projects to bear fruit, UTIF continues to invest time and energy into new discoveries to facilitate the maximal social and economic impact of publicly-funded research.

Yes, I do have a great job; I work with exciting ideas and great people, and together, we can change the world.

George Adams, Ph.D.
President and C.E.O.

Innovations Foundation's Relationship to the University of Toronto

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Assistant VP, Technology Transfer

Graham Strachan
Special Advisor

Meredith Strong
Coordinator

Venture Capital Funds

The University of Toronto (U of T), through the Innovations Foundation, alone or in collaboration with several affiliated hospitals or other universities, has sponsored seven Community-Sponsored Small Business Investment Funds (CSBIFs). The CSBIFs total $30 million and have been critical to establishing enterprises and allowing them to develop prototype products to validate the business opportunity to later-stage investors.

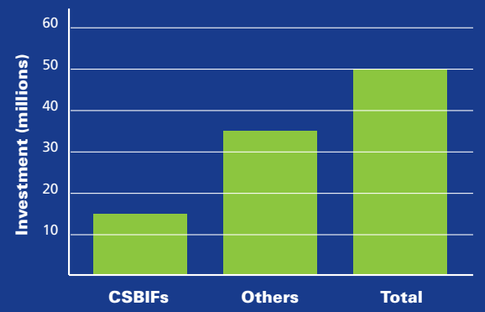
To date, the U of T-associated CSBIFs have invested over $15 million in 21 companies that have had co-investments totaling $35 million, for a grand total of $50 million invested in technology start-ups in the last four years. There is $15 million left to invest so an additional 21 companies could be started by existing CBSIFs and still there are plans for new funds underway.

The U of T experience is similar to the overall experience in Ontario where 13 CSBIFs have been formed and invested $30 million in 42 companies and attracted an additional investment of $155 million for a total investment of $185 million in start-up companies from universities and hospitals.

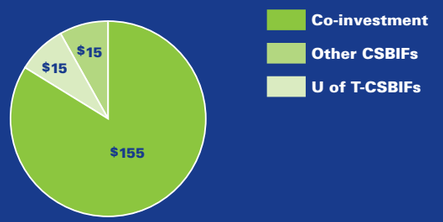
University of Toronto-affiliated CSBIFs

Sunnybrook Working Ventures Medical Breakthrough Fund
Innovations Foundation Internet Venture Fund (I)
Cotyledon Capital Fund
Discovery District Biotechnology Fund
Brighter Future CSBIF (I) Fund
Brighter Future CSBIF (II) Fund
Medical Ventures Fund

Investments by U of T-affiliated CSBIFs



Overall CSBIF Investments in Ontario (million)



Success Stories

The creation of biodiesel fuel through the conversion of agricultural seed oils has been a slow and expensive process. Because of this, biodiesel, while better for the environment, has not been able to effectively compete with petrodiesel fuel.

In 1999, Dr. David Boocock came to UTIF with a new process that not only improved the speed and efficiency of the conversion, but could also be used in conjunction with a pre-step to convert previously unusable fatty acids. This meant that cheaper feedstocks such as waste fats and recycled vegetable oils could be used. UTIF worked with Dr. Boocock to develop a company that would continue research and develop a commercially viable product. In September 2000, BIOX Corporation was formed.

BIOX has run an operation with a one million litre capacity pilot plant since 2001 and has proven that the process is approximately 40% cheaper in capital cost and over 50% cheaper in operational cost, compared to other biodiesel processes. The BIOX process is the only technology capable of converting feedstocks, which contain high amounts of fatty acids, into biodiesel, cost effectively with 100% yields.

UTIF is currently working with BIOX to develop a funding strategy for the next stage of their development: the construction of a commercial scale facility capable of producing 60 million litres of biodiesel per year, scheduled for winter 2004. Agricultural and energy companies from around the world have shown strong interest in buying production plants. It is not hard to understand their enthusiasm given the cost advantages and environmental benefits BIOX biodiesel provides.

In the early 1990s, the field of biomaterials – which encompasses everything from tissue regeneration, to artificial organs, to medical devices – witnessed a rapid expansion, and "surface modification" became a popular research theme. The goal of the research was to make biomaterials more compatible with the human body so it would not reject them.

While some investigators were developing complex processes for enhancing the surfaces of existing devices, University of Toronto researcher, Dr. Paul Santerre, had another idea: why not simply add new properties to the mix during the production process, modifying them from the inside out?

Recently, Interface Biologics Inc. (IBI) was created and is working with UTIF and Materials & Manufacturing Ontario (MMO) to enhance the commercial value of the company's technologies: Surface Modifying Macromolecules (Endexo™ Technology), Bioactive Fluorinated Surface-Modifiers (Kinesyx™ Technology) and Drug Polymers (Epidel™ Technology).

IBI has secured a total of $2 million in financing from CSBIFs, and has received over $1.1 million from MMO in research funding towards the development of one of the company's core technologies, Endexo™. The first products to market will be better versions of existing medical devices – there are currently eight companies reviewing the three technology platforms for different applications. IBI is on target to identify its first medical devices product by the end of 2003 and is in the process of consolidating financing for the next three years with a consortium of venture capital groups.

Dr. Burhan Türksen has been refining a unique theory in the general area of "fuzzy-logic". It involves understanding the subtle relationships among complex sets of variables or data, which would allow business executives to fully utilize their company statistics through a better decision making model.

Fuzzy logic works best where base data is imprecise or missing – the exact conditions where common approaches taken by traditional theories do not work well. By allowing for shades of grey in number distribution and combining the numbers in a unique way, decision-makers are able to get a clearer picture of all the factors involved, and better tools to make informed decisions.

After several years of developing prototype software through collaborative research projects, Türksen formed Information Intelligence Corporation (IIC). In partnership with UTIF, IIC was able to secure initial funding from a UTIF CSBIF, a management team, and a corporate base at the Exceler@tor.

The company has now grown and has successfully completed pilot projects at a number of private and public organizations, including Dofasco Steel, Nortel and Sunnybrook & Women's College Health Sciences Centre.

As well, recent implementation of IIC solutions at TD Bank, on top of an existing SAS data analysis package, has improved predictability of return on marketing campaigns and improved cost effectiveness.

IIC will develop plug-in software tools that will work with most major third-party data analysis and CRM software to improve the predictability of the output. In addition, the company is looking at both licensing out its technologies to other vendors and developing specialist knowledge in certain areas.

Over the years, businesses have been looking for a secure way to manage and share their sensitive information, and to ensure that only intended recipients of the information had access to it.

CipherShare Systems Inc. developed secure file sharing and workgroup collaboration software that protects highly sensitive information, not only during its transmission, but also when it is stored on a company's server or computer desktop.

By moving into the Exceler@tor, CipherShare was provided with the infrastructure, support and professional services it required to develop and add value to its technology.

In March 2003, data-security specialist, Kasten Chase, purchased all the outstanding shares of CipherShare, marking the first successful graduation of a company out of the Exceler@tor. The acquisition fit into Kasten Chase's strategy for building a truly enterprise-wide security solution that protects data assets in transit and at rest with strong, end-to-end encryption.

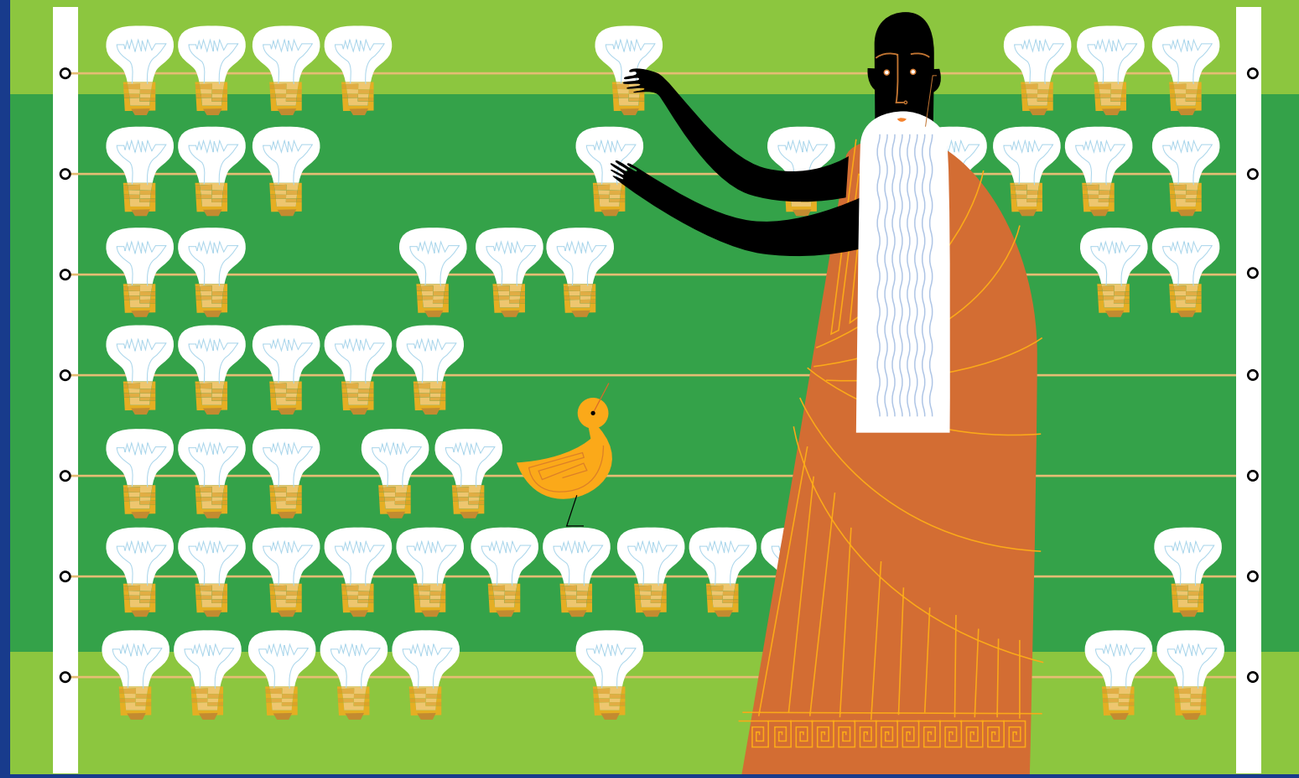
Currently, CipherShare's software is being integrated into the Kasten Chase Assurency suite of data-security products.

Financial Report

University of Toronto Innovations Foundation
Statement of Operations, Year Ended April 30, 2003

Revenue	2003	2002
Project & Service Fees	1,062,058	695,314
Royalties & License Fees	493,622	1,334,822
Sponsorship & Grants	828,695	470,831
Sale of Commercialization Rights & Capital Gains	1,941,774	106,274
Other	123,419	111,553
Total Revenue	4,449,567	2,718,794
Expenses		
Operating expenses – UTIF	2,234,628	1,563,806
– Exceler@tor	1,480,646	669,928
Patent costs incurred on behalf of Foundation	521,634	534,108
Total Expenses	4,236,908	2,767,842
Net Income Before the Following	274,070	(49,048)
Loss Before Distributions	(204,044)	(49,048)
Distributions	468,180	730,827
Surplus (Deficit)	(672,224)	(779,875)
Summary of Distributions		
Distribution to Inventors	107,692	336,690
Distribution to Institutions/Others	54,836	259,917
Distribution to University of Toronto	305,652	134,220
Subtotal	468,180	730,827
Additional Distribution to Inventors upon Sale of Commercialization Rights	750,000	
Total Distributions	$1,218,180	$730,827

The Innovations Foundation returned $1,218,000 to the University community.



Business Incubation

This year was the first full year of operations for the Exceler@tor, UTIF's information technology and telecommunications business incubator. With 21 companies admitted, and $9 million raised in early stage angel and venture financing, the Exceler@tor is off to a great start in its role to assist companies to advance their business plans.

continued

Business Incubation continued

The Exceler@tor's incubator companies are focused on high potential disruptive or platform technologies. An early indicator of the caliber of the companies is their customer list which includes companies such as Kasten Chase, TD Bank, Smith & Nephew, CanWest, CCNMatthews, McDonald's, Canadian Tire, Microcell, Primary Counsel, DePuy, as well as foreign governments such as US Congress, Singapore and Belize.

The Exceler@tor is truly a cooperative project with a list of prestigious sponsors that include the National Research Council Canada, Hewlett-Packard, Macromedia, Microsoft Great Plains, Albright Ventures, the Ontario Ministry of Enterprise, Opportunity and Innovation, Goodman and Carr, G2M Strategic Public Relations and Communications, Fuller Landau and the City of Toronto.

The federal granting agencies; NSERC, CIHR, and SSHRC, through the IPM-Ontario group now support the activities of the Exceler@tor, and have access to it for support and a physical location where their start-ups can incubate.

The most important development for the Exceler@tor has been its widespread partnerships with industry, government and other universities.

The newest incubation project is the Mississauga Technology Business Accelerator. It is a joint effort of the City of Mississauga, the University of Toronto-Mississauga and a number of local stakeholders. This ambitious new technology accelerator for biotechnology, advanced manufacturing and information technology industries should be open by the end of 2003.

The Exceler@tor's Philosophy

Mission

The Exceler@tor is a centre for innovation, which enables entrepreneurs to accelerate high potential disruptive and platform technology businesses globally, by providing a unique, collaborative environment with access to the great minds of the University of Toronto and the wider resources of the Toronto technology community.

Vision

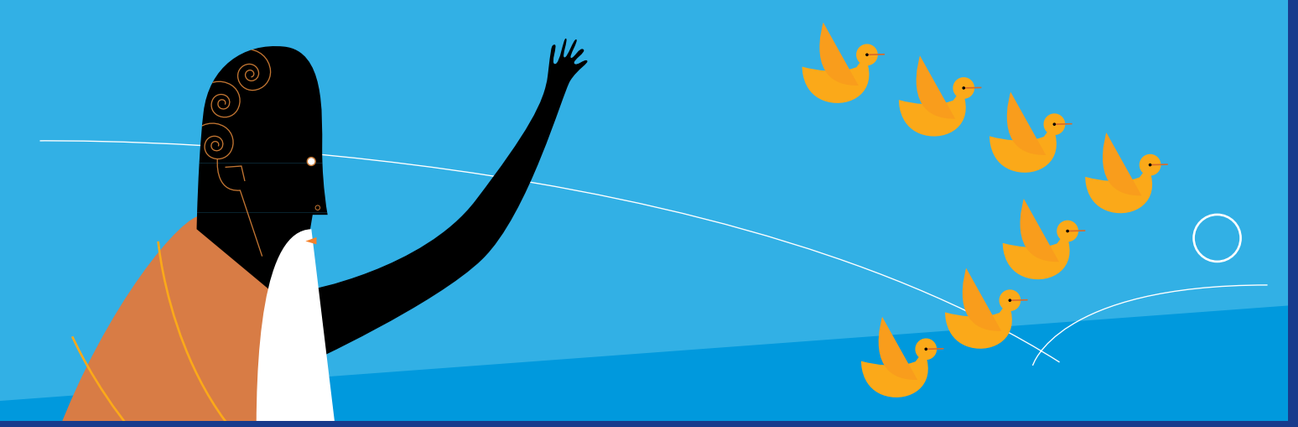
The Exceler@tor's vision is to be the foundation of a successful information technology and telecommunications hub in Toronto, recognized as a top 10 international institution, fostering a culture of entrepreneurial opportunity.

The Exceler@tor will...

- Act as a hub for Southern Ontario to facilitate university/industry interactions
- Provide a physical and virtual catalyst for teams to form and networks to build
- Become the focal point for the development of a high technology cluster/discovery district/science park
- Create a learning environment where expertise can be developed, researched and disseminated in the area of technology commercialization

The Exceler@tor's impact on wealth creation...

- Enhance the survival rate and accelerate the growth of incubated companies
- Provide additional linkage opportunities between University and technology companies
- Position Toronto as a centre for innovation in information technology (and bio-technology informatics), attracting people, investment and economic activity



Partnerships: IPM-Ontario Program

One of UTIF's key partnerships is with other universities in Ontario through the IPM (Intellectual Property Management)-Ontario program. UTIF acts as the secretariat for all the universities that work collaboratively to train technology transfer professionals through an internship program, manage a proof-of-concept fund to advance technologies to a point where they attract commercial partners, and study best practices for technology transfer offices.

Funding is now provided by all three federal granting councils, National Science and Engineering Research Council (NSERC), Canadian Institutes of Health Research (CIHR), and the Social Sciences Humanities Research Council of Canada (SSHRC).

The IPM seed fund has invested over $600,000 in 35 proof-of-concept projects and these funds have leveraged an additional $1,000,000 in research funding and follow-on investments by commercial partners of $7,750,000.

The IPM-Ontario program has been extremely well received by participating institutions. Six new technology transfer staff have been trained, and faculty has been educated through seminars and group meetings. Although there were many challenges such as varying degrees of experience, different intellectual property policies and geographical separation, the renewal of the program since its founding in 1995, and its expansion from six universities to ten, attest to the value it brings to the member institutions.

University of Windsor · York University · Trent University · McMaster University · Carleton University · Wilfrid Laurier University · Ryerson University · Brock University (Careers begin here!) · Laurentian University / Université Laurentienne

Partnerships: Innovations Challenge

The Innovations Challenge, our business plan competition, was successfully run twice this past year, with a focus on biotechnology in Innovations Challenge III and information technology in Innovations Challenge IV.

The expansion into biotechnology was facilitated nationally by sponsorship from Burrill & Co. (a leading U.S. life science venture capitalist), Nestle Nutrition, Foragen Technology Management Inc., NRC Industrial Research Assistance Program (NRC-IRAP), and the Canadian Institutes for Health Research. Innovations Challenge IV was sponsored by Jefferson Partners, Brightspark, Triax Covington, as well as Hewlett-Packard and NRC-IRAP.

The winner of the third competition was Hybrisens Ltd., a company based on a unique biotechnology developed at York University. Second place went to Kingston-based Cardiomics. Honorable mentions went to Thunder Bay's Genesis Genomics and Toronto's Developmental Nutrition Inc. The awards ceremony was held at U of T's Hart House, where a keynote address was given by Dr. Alan Bernstein, President of CIHR, and provided a great finish to our first successful national competition.

The fourth competition was won by Sonic Mobility out of Calgary. SECT, a company in the Exceler@tor, finished second, and tied for third place were StorageLight Technologies and 3DNA. Rounding out the top six were two other Exceler@tee companies, USTWeb and Florence Systems. The winners were announced at Canada's national information technology industry financing event, Financing Forum, where several hundred venture capitalists and interested parties were looking for up and coming companies.

With over 100 judges (from the venture capital and business communities), 60 companies and 100 people attending the workshop, the Innovations Challenges have proven to be one of our most successful outreach programs. Winners from previous years have received in excess of $4 million in venture investments. If past success is anything to go by, the Innovations Challenge will continue to be an effective way to stimulate entrepreneurs to formulate their business plans and pitch them.

Cardiomics · genesis genomics · USTWEB · sonicmobility · StorageLight · Sunnybrook & Women's · Backbone · brightspark · cito · Ernst & Young · G2M · hp invent · CATA Toronto · Miller Thomson LLP · Nestlé · OCRI · Gowlings · Parteq innovations · 3DNA · Silicon Valley North · Pence · TVG Toronto Venture Group · TechSpace · IRSC CIHR · Jefferson · NRC·IRAP · Brock University (Careers begin here!) · Carleton University · Laurentian Université Laurentienne · Trent University · University of Guelph · University of Windsor · Wilfrid Laurier University · York University · Ryerson University · McMaster University · OntarioGenomics Institute · CABI · Burrill & Company · foragen · Strategic Health Innovations · Ontario Agri-Food Technologies · UST · MTA · BIOTECanada · TRIAX · The Hospital for Sick Children

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