SOME POSSIBLE CONSIDERATIONS FOR DISCUSSION:

Does the proposed structure for BIOTECC provide value and impact for UTM, and in Mississauga?

How should the Convergence Centre be structured, and what would be a recommended blend of participants?

Who might be the champions, and who might be supporters of this initiative?

Notice of Motion:
That the Convergence Centre become part of the strategic plan for expansion of UTM.
PROPOSAL:
Creation of a Convergence Centre for sciences, health, management and policy at UTM

April 2003
PURPOSE:

• Develop capital infrastructure – “Science Building”

• Build a mechanism for bridging the Divisions, development of funding opportunities

• Develop programming of relevance to our students and the external community
ACHIEVING EXCELLENCE

INVESTING IN PEOPLE, KNOWLEDGE AND OPPORTUNITY

C A N A D A ’ S I N N O V A T I O N S T R A T E G Y

Investment in creation of ideas, and movement to products
BIOCouncil - Proposed Investments in Ontario
THE MISSISSAUGA NODE (in the Ontario Biotechnology Corridor)

The City of Mississauga has taken centre stage within Canada as a leading Biotechnology cluster, with over 400 companies and over 19,700 people employed within this Bio cluster, and is actively promoting expansion and investment by the federal and provincial governments.

UTM provides connectivity to the health network of the University of Toronto, and substantially broadens the scope to include business/management, specialized education/training, and targeted research that will complement the work derived from the health network.
The University of Toronto Biosciences and Biotechnology Cluster

From an international perspective, there will be 3 components in the University of Toronto Biosciences and Biotechnology Cluster. This association will offer the advantages of another famous “Research Triangle”, and will bring new energy to education and research programs that will focus on health sciences, applied biosciences, and policy development. Two critical pieces that are already in place include:

- The Toronto Academic Health Sciences Complex and CCBR
- The MARS Discovery District

The third crucial element in this triad is:

- The Biotechnology Convergence Centre (BIOTECC) at the University of Toronto at Mississauga (UTM), which represents the next and last major step in the development of the University of Toronto Cluster.
BIOTECC - THE UTM POSITIONING

GOALS THAT MEET GOVERNMENT OBJECTIVES:

• To develop an internationally significant economic cluster that will be a convergence centre in the biosciences based on momentum in the biotechnology and biopharma; drawing on the Health Network of U of T, and on partners in the Ontario Biotechnology Corridor

• Develop a physical infrastructure that will combine activities of science research and development, management and business, policy analysis and economics, entrepreneurial activities, university training, and training for industry

• Develop a resource infrastructure that caters to policy development that is responsive to government, and information dissemination for academia, industry, government and the public

• Create a physical infrastructure that bridges activities in the life sciences, physical and mathematical sciences, management, social sciences, humanities/communications, medicine, engineering
GOALS THAT MEET GOVERNMENT OBJECTIVES (Cont’d):

- Create an environment that will attract and retain the best minds (students, staff, faculty and industry), and provide a firm foundation for maintenance of industrial investment in Mississauga and the surrounding areas.

- Be responsive to needs of industry in terms of moving towards commercialization.

- Be responsive to needs of government and industry in terms of promoting commercialization of products based on science, and safeguarding the public in terms of new technologies.
BIOTECC

ACADEMIC
* NEW TECHNOLOGIES FOR DRUG DISCOVERY AND PROTEOMICS
* TRAINING
* BUSINESS MODELLING
* POLICY/MGMT

INSTITUTE
* APPLY NEW TECHNOLOGIES TO SELECTED TARGETS OF COMMERCIAL INTEREST
* TRAINING
* GOVERNMENT *ECONOMIC MODELLING
➢ Partners

Bridge with (our present contacts/partners at) Sheridan Science and Technology Park; City of Mississauga; Ontario: Ministry of Health, Environment, Enterprise Opportunity and Innovation, Natural Resources; Peel Region Conservation Authority; Canada Centre for Inland Waters; Canadian Food Inspection Agency; Health Canada; ABI, MDS, IBM, and members of the local pharma, bio-IT, and technology industries; Rx&D; PwC

➢ Focal Points/Themes

• Medical/Health (genomics, proteomics, neuropyschology, behavioral genetics)
• Water quality and safety, Centre for Pathogen Detection, including biosafety, bioterrorism
• Health and environmental monitoring, management and policy, “Healthy Cities” and WHO (“Stewardship Centre”)
EXAMPLES OF POTENTIAL LINKAGES/STRENGTHS:

CABB; CFI/OIT, Chemistry and Physics hires, Drug Discovery Pipeline, Microarray Centre, NMR Centre

BIOLOGICAL COMMUNICATIONS; CFI/OIT, Psychology hires, engineering, medicine

GEOGRAPHY; Branfireun CFI/OIT project, Credit River project

MANAGEMENT; Hatch Chair and new hires, Management of Technology

MATHEMATICS; Risk analysis, cryptography for e-health

LANGUAGE/COMMUNICATION

Programmatic themes:
  CCIT
  M. Biotechnology
  Pharmaceutical Sciences (including management)
  Bioinformatics proposal
EXAMPLES OF REAL OUTCOMES
Mississauga Technology Business Accelerator

The Mississauga Technology Business Accelerator (MTBA) will be a unique, not-for-profit organization established to help Mississauga based high technology and life-sciences companies accelerate their development, and greatly improve their chances for long-term success.

The MTBA will play a unique role in Southern Ontario in that it will focus on both the information technology and life science sectors, both of which are well represented in the Mississauga business and academic communities.

Further it will take advantage of existing operating synergies at the Sheridan Science and Technology Park, and the Exceler@tor, the University of Toronto’s information technology incubator, to become operational within 2-3 months. The facility will be managed by the UofT Innovations Foundation.
• In addition to its technology focus, the MTBA has been designed by a multi-stakeholder group (University, Government and industry) to ensure its long-term viability and with clearly achievable goals and objectives;

Companies in the MTBA will have some access to resources of the University of Toronto at Mississauga (“UTM”), The Rotman School of Business, the Mississauga Business Enterprise Centre (“MBEC”), the Mississauga Technology Association (“MTA”) as well as various supporting organizations (eg. PriceWaterhouseCooper, investment firms, legal firms);

The MTBA will complement other regional bio-tech incubators that are planned, such as MaRS
“The Mississauga Model” (Barb Murck, Anthony Wensley, +)

The City of Mississauga and the University of Toronto at Mississauga have already been engaged for a few years in the development of themes that relate to stewardship of “health” in its broadest context for all citizens. The results of this effort have been shared with the World Health Organization.

At a recent workshop sponsored by the City, it was recommended that the following 4 themes would provide the basis for defining this concept of “health”:

- Individual health and well-being
- Integration of the community
- A healthy ecosystem
- An effective social system
HEALTH AND CITIES STEWARDSHIP CENTRE
**Construction/Renovation (Some on-site, some off-site)**

- Bioinformatics/risk laboratories, research laboratories
- Seminar and workshop space
- Remote/distance education facilities
- Integration of space for life science, mathematics, management, medicine, engineering, culture-communications
- Space for entrepreneurial activities
- Office for Innovations Foundation, and for Advisory Boards; space for promotion of commercialization and so that students and faculty can develop science and business cases for partners as part of their “case studies”; office to steer intellectual property rights of partners, and collaborations
- IRAP headquarters in targeted areas of investment
- Offices for venture capital presence, and relationships with major investment firms and banks; to serve as sources of funding, and also a training platform for students in the finance sector