



Memorandum

Office of the Vice-Principal
(Research and International Relations)
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TO: Senate

FROM: Dr. Rose Goldstein, Vice-Principal (Research and International Relations) and
Dr. Phil Barker, James McGill Professor, FRSQ Chercheur National, Interim
Director (Montreal Neurological Institute)

SUBJECT: Report on Quartier de l’Innovation

DATE: January 18, 2012

DOCUMENT #: D11-35

ACTION REQUIRED: INFORMATION APPROVAL/DECISION

ISSUE: The Office of the Vice-Principal (Research and International Relations) will present the recommendations for McGill’s engagement at the Quartier de l’Innovation (QI) – Report from Dr. Phil Barker, Chair of the McGill Internal Planning Committee

BACKGROUND & RATIONALE: McGill University has a unique opportunity to develop an ecosystem in partnership with the provincial government and École de technologie supérieure (ÉTS) that is conducive to innovation impacting economic development. The joint vision for the QI is based on universities serving as catalysts for the retention and attraction of high-quality personnel, as well as economic development. As such, the QI will create an ecosystem that is conducive to innovation, powered by knowledge institutions, and situated in the heart of a modern and dynamic city. Combining the strong performance of McGill’s research with ÉTS’s strength in commercialization and partnership development, these institutions will contribute to the development of an ecosystem supporting the whole innovation cycle.

MOTION OR RESOLUTION FOR APPROVAL: N/A

PRIOR CONSULTATION: McGill senior administration and academic community, QI Executive Committee, Research Advisory Committee.

NEXT STEPS: Preliminary Business Plan to be brought forward to the senior administration by the end of March 2012
Finalize agreements with ÉTS by end of April 2012.

APPENDICES: Appendix A: QI Final Report from McGill Internal QI Planning Committee

Recommendations for McGill Engagement at the Quartier de l'Innovation
Prepared for Dr. Rose Goldstein (VP-RIR) by the McGill QI Planning Group
Oct 30, 2011

Canadians enjoy an extraordinarily high standard of living but in comparison with international peers, Canada's productivity is lagging. Indeed, the recent history of Canadian business development and entrepreneurship is unenviable. Federal and provincial governments and corporations are increasingly looking to universities to function as engines of innovation that provide part of the solution to this problem. McGill University and École de technologie supérieure (ÉTS) are stepping up to meet this challenge by joining forces to create a unique urban environment, the Quartier de l'innovation (QI), which will have a major impact on the city and the province.

The QI will consist of a dynamic neighbourhood in which academic programs, entrepreneurs, established industries large and small, technologies, and the support services required to coordinate and sustain them, will be housed. Experiences in other cities and countries have taught us that the success of our innovation district will depend on the urban atmosphere that we foster. We believe that we have the opportunity to create a truly unique environment that is exciting, fun and attractive to live, work, and play in. Our aim is to create a new Quartier for the citizens of Montreal and Quebec that celebrates technological and social innovation, as well as diversity in the arts, in culture, and in ideas.

The QI will be housed in what is now under-utilized real estate in Montreal's southwest district. This area, located south of downtown Montreal, west of Old Montreal, and north of the Lachine Canal, was at one time the industrial heartland of the city. Over the last 50 years, however, this area has been underutilized and neglected. The goal of the QI is to create a new neighbourhood which respects the area's history and culture and that supports the desire of urbanites to live, work, and play in the same area.

McGill is enthusiastic and committed to developing the QI project with ÉTS. We have recently engaged in an internal planning process (Appendix 1) that has allowed us to define how McGill can leverage its strengths to ensure the project's success, and pursue our academic and community-based priorities. This process was guided by a planning committee that included a broad spectrum of the McGill academic community (see Appendix 2) and this document reflects the collective wisdom of this group. The first section of this report comments and provides recommendations on McGill priorities on the cultural, social and urban environment of the QI; the second reflects on McGill's goals and provides recommendations vis-à-vis innovation.

The Quartier:

For McGill, the QI is not simply a real-estate project. It is a unique opportunity for McGill to pursue goals that the university has articulated in its strategic planning documents¹ and our planning efforts are a direct response to the Principal's call to enhance the University's

¹ See 'Strengths and Aspirations: A white paper call to action regarding McGill University's future (2006)' and documents. 'Achieving Strategic Academic Priorities (ASAP 2012), the next 5-year strategic academic plan'.

contribution to the community. Our view is that the QI should promote innovation in all academic and professional realms at McGill and that portions of the QI will contain satellites of McGill University's downtown campus that, in partnership with ÉTS and other academic institutions, corporations, and public agencies, are enmeshed in a collaborative ecosystem that engages the community and significantly enhances the urban environment.

As such, the development plan for the QI will reflect a process in which McGill University is an active partner, along with ÉTS, public agencies, private players and community groups. Working together, this group will design an urban area where innovation is fostered in all realms of creative endeavours, from science and technology, to art, to public health and community organizations; the QI must be an area where social entrepreneurs and business entrepreneurs can thrive.

Thus, the QI will be far more than a set of buildings. It will be a showcase for innovation in urban renewal, design, architecture and construction, for sustainable urban development, and in corporate and community relations.

Recommendations for the Development of the QI Neighborhood:

1. The QI should feature state-of-the-art planning and design in terms of sustainable urban development, neighborhood configuration, building technology, energy use, greenery, healthy living, and barrier-free design. We recommend that McGill take advantage of the unique opportunity presented by the QI to involve students and professors from across McGill to participate in a major urban development that is innovative in social, cultural and environmental terms.
2. The QI will be a living neighbourhood and must engage a broad swath of the Montreal community. We recommend that a major feature of this engagement be an open community village, with common space for performing arts, exhibitions and cultural events. The community village should be seamlessly linked to the environs and allow for physical and recreational activities and for educational initiatives linked to the QI agenda (e.g. summer camps for youth or seniors, teacher training opportunities, social or technical innovation workshops). Special attention should be devoted to offering diverse and inclusive services such as those for mobility-limited individuals or setting up activity programs for specific groups in the community (e.g., encouraging innovation and entrepreneurship among aboriginals, youth, or the various cultural communities in Montreal).
3. A component of the open community village should be a refurbished Montreal Planetarium, which can serve as a cyber-linked meeting place for seminars and events consistent with QI ethos. This center will facilitate a business-university interface designed to enhance bilateral opportunities (continuing studies, professional development for corporate clients, internships, field experiences for McGill students and professors etc.).

4. We recognize that housing will be a significant element in the QI and recommend that the QI neighbourhood include housing modules for McGill students, faculty, staff and visitors. Working with developers, McGill should strive to work with developers to create residential units that offer flexibility in terms of leasing periods (e.g., short-term rentals) and in terms of physical set-up (e.g., family housing with accessory suites for students; housing for the mobility-impaired).
5. We recommend that the University use the QI to enhance the visibility of McGill. In that respect, the QI should include the Bonaventure corridor, the main entrance to Montréal from the south. With the lowering of the Bonaventure Highway, new space will be created where a prominent QI pavilion could be erected. McGill should also become visible on Peel Street, the thoroughfare that will link QI with the downtown campus.
6. McGill can use the QI as a laboratory for research on the process of innovation. This process should focus on social innovation as well as on technological innovation and we recommend that McGill experiment with the use of cyber-connectivity and virtual spaces in building innovative networks, both with partners in the QI and with the global community of innovators. We also recommend that the QI forms the core of an experimental setting in which McGill faculty and students perform action-research on urban, social and cultural, and educational issues.

Innovation at the QI

McGill is poised to play a crucial role in the innovation agenda of Montreal, Quebec and Canada. McGill is unparalleled as a leading research institution and as the pressure to translate our basic research into societal benefit has mounted, we have carefully considered how we can increase our impact, both locally and at a distance. We have been very fortunate to partner with ÉTS early in this process and have learned much from studying their successful programs.

We believe that the core mission of the QI is to enhance Quebec's ability to be fully engaged as a successful participant in the international innovation race. Thus, QI will be part of a long-term provincial strategy designed to enhance Quebec's productivity and prosperity. For this to occur, we have to look at QI Montreal's innovation players in a new way, and engage a new generation of innovators. We envision the QI as an opportunity to enhance our collaborations with local, national and international corporate partners, and to create new opportunities for local innovators and entrepreneurs.

Success of the QI as a sustainable entity requires that we develop a culture of successful innovation and entrepreneurship, both technological and social. The QI will promote innovation across several strata but in our view, the core mission of QI is to provide opportunities to our students. With McGill at the QI, students will be provided with tools required to participate fully

in Quebec's innovation economy. These will run the gamut from finance and management skills, entrepreneurial mentorship, language training, and focused networking opportunities. In this regard, the QI will leverage McGill's ability to attract top students from Quebec and around the world, and enhance our ability to retain the talent that we attract. Rahm Emanuel, the new mayor of Chicago, recently declared that, "the jobs of tomorrow will go to those cities that produce the workforce of tomorrow". We believe that Montreal is uniquely placed to build upon existing human resources to create an environment at the QI that captures the new generation's innovative spirit and that allows it to flourish.

Recommendations for the Innovation Agenda at QI:

1. We recommend that the QI become the focal point for a series of training programs that are centred on innovation and entrepreneurship. Programs available to undergraduates could initially take the form of a minor in innovation/entrepreneurship (e.g. modeled on the Minor in Technological Entrepreneurship already in McGill's Faculty of Engineering). Novel interdisciplinary minors that bring together several McGill Faculties should also be considered (e.g. Management, Law & Science and Engineering for non-biomedical technologies; Management, Law & Medicine for health technologies; Law & Arts for social innovation). Internships with local, regional, and international corporations will be a crucial element of these programs. These minors would be offered to undergraduates but the parallel development of modules that could be offered to graduate students and postdoctoral fellows would add significant value. Ultimately, MBA or engineering management programs could form part of the QI curriculum. We recognize that there are elements of these programs at McGill (across several faculties) and at ÉTS and we recommend that the QI be used as an opportunity to review the various offerings. The goal of this review will be to identify synergies and ensure the development of outstanding programs that can be consolidated and relocated at the QI.
 - a. On a similar vein, we recommend that the QI be used as a forum for a suite of entrepreneurial outreach activities. These could include a summer entrepreneurial 'boot camp' for students, faculty and the public, quarterly networking opportunities (e.g. 5-7, elevator talk contests), and a weekly or monthly seminar series that features accomplished innovators and entrepreneurs. The existing Summer Undergraduate Research in Engineering (SURE) program now hosted at the McGill Faculty of Engineering could be expanded to include opportunities at the QI.
2. In general, the Quebec media has been not engaged in the innovation agenda but it is a key player required to inspire a culture of innovation in Montreal and Quebec. We recommend that the QI serve as an outlet that provides opportunities for media to better understand the importance of the innovation agenda to Quebec. We recommend that McGill consult with media outlets on this issue to define concrete efforts that would ensure that they become fully engaged. As initial steps, QI can provide regular access to speakers, local and international, offer to host weekly or monthly broadcasts, provide

facilities to support media efforts, and provide a platform for showcasing Montreal-based entrepreneurial efforts and innovative breakthroughs.

3. We believe that there is a pool of capital, both donor and angel investor-based, that can be employed to develop projects that emerge from our respective institutions, either as individual investments or from a pooled fund. We recommend that a portion of McGill's development activities be devoted to explore this possibility. As a first step, we recommend that McGill contact outside organizations with an interest in this area (e.g. Anges Quebec, National Angel Capital Organization (Canada), valorization and venture capital firms (listed below)), consult them as to feasibility, best practices, tax and equity ownership implications, and report within a timeframe that allows this aspect to be incorporated in the QI business plan.
4. McGill is a tremendous source of innovation but its success in commercializing its inventions has been variable. The commercialization activities of McGill are presently housed in the Office of Sponsored Research (OSR). In order to engage McGill fully in the commercialization activities at the QI, we recommend a two-step evolution. In the first step, the commercialization activities of McGill would leave the OSR and form a new office housed at the QI that reports directly to the Vice-Principal for Research and International Relations. As the QI expands and additional partners are engaged, a reconstituted commercialization office would, in a second step, consolidate commercialization activities of McGill with non-McGill member academic institutions. This integrated approach would be appealing to industry and, we believe, is likely to receive support from the provincial government.
5. Success of the QI will depend on building an eco-system of stakeholders that supports the innovation agenda. We recommend that external organizations that are directly involved in this activity be sought as partners and targeted to locate all or a subset of their facilities in the QI. Targeted entities fall into several categories:
 - a. Governmental organizations including the Ministry of Economic Development, Innovation and Export Trade (MDEIE), Immigration Quebec, Investissement Quebec, Industry Canada, Ville de Montreal, Montreal International, and Health Canada.
 - b. NGOs and arms-length organizations involved in product and platform innovation (e.g. CQDM, In-vivo Montreal), social innovation (e.g. Medecins Sans Frontières), and global trade (e.g. IATA).
 - c. Valorization and venture capital firms, such as MSBI, Business Development Bank of Canada, CDP Capital, Fondation, Fonds de solidarité des travailleurs du Québec (FTQ), GeneChem, iNovia Capital, Pappas Ventures, ProQuest Investments, Montreal Startup, Brudder Ventures, Société générale de financement du Québec (SGF), and Vantage Point Venture Partners.
 - d. Legal and accounting firms with a strong presence in the innovation space (Ernst and Young, Gowlings, McCarthy Tetrault).

- e. Local, provincial, national and international networking initiatives supporting entrepreneurship such as StartupCamp Montreal, BarCamp, etc.
6. It is essential that corporate partners be located within the QI. For this to be viable for industry, we recommend that the QI offer services and inducements unavailable elsewhere. The three key assets that McGill can leverage to attract corporate participation are:
- a. Training programs: McGill is known for excellence in management and business administration and for high quality information sciences and continuing education programs that are in high demand by medium to large-sized corporations (e.g. finance and accounting, intellectual property, language training etc.).
 - b. Research and researchers: McGill is renowned for its high quality research but less well regarded for creating systems that allow easy collaboration with industry. The QI provides an opportunity to facilitate these relationships – if necessary, early QI occupants could be considered as loss leaders that are provided with preferential overhead rates on McGill research contracts, reduced licensing rates/restrictions, and ready access to McGill-based consultancies.
 - c. Students: The quality of McGill students is outstanding and we believe that corporate partners are anxious to have access to this pool of highly trained individuals. We recommend that QI-based businesses be given unique access to this pool of individuals through job fairs, on-site interview infrastructure, and access to a new innovation internship program.
 - d. In our view, long-term viability of QI will require buy-in by large ‘anchor’ clients who will validate the QI model by establishing a presence in the QI. Examples of companies already in Montreal that are deemed especially appropriate for this role include Hydro Quebec, Bombardier, Google, SNC Lavalin, Pratt and Whitney, and CAE. Exploratory discussions on the possibility of locating a portion of their operations within the QI should be initiated as soon as possible.
 - e. With the commitment of 1-2 anchor corporations in place, the QI will be well positioned to house a number of established local and non-local SMEs that can contribute to, and benefit from, the unique innovation environment that will be established in the QI. Industrial domains identified by the committee as especially appropriate for the QI neighbourhood include advanced materials, nanotechnology, software, micro-fabrication, bioengineering, medical diagnostics, biomedical imaging and devices, eHealth, broadband telecommunications, sustainable engineering, and aviation.
 - f. The QI will provide a unique concentration of training, finance, intellectual property expertise, capital, and business strength from a variety of sectors. As such, the QI will provide an ideal opportunity for exchanging information and creating opportunities and we anticipate that it will function as an important service centre and launching pad for new businesses. Furthermore, provided that

the QI can effectively leverage assets offered by McGill and ÉTS, we anticipate that multinational discovery- and innovation-based businesses will be attracted to have a presence in the QI environs (e.g. Pfizer, Monsanto, General Motors).

- g. It is important to note that we recommend that building spaces within the QI that are managed by McGill (i.e. Ingo II) do NOT function as an incubator that houses new ventures. The surplus of commercial and research space in Montreal, the rapid turnover of start-ups (either by success/purchase or by business failure), and the poor track record of the incubator model argue against relying on new businesses as a core element within these entities. Thus, the QI should facilitate and house start-ups but not within McGill-managed structures.
7. Finally, we propose that McGill work with ETS, the city and local partners to develop an integrated kindergarten to university urban education plan with the view to enhance overall economic, social and cultural factors for sustainable prosperity. ÉTS has carried out several initiatives with CEGEPs that resulted in the creation of a University-CEGEP collaborative model and we recommend that McGill consult with the Commission Scolaire de Montreal and ÉTS to develop an integrated education plan focused on innovation that is based in the QI and that reaches local students and opens their minds to possibilities as innovators and entrepreneurs. Over the short term, this would allow development of a QI CEGEP and/or college technology transfer centres (CCTT) with an innovation focus; over the long-term, would lead to a K-university curriculum based around the innovation agenda that is physically located in the QI neighborhood. We believe that there will be considerable enthusiasm for an innovation-based integrated education plan at both municipal and provincial levels.

Appendix 1: McGill Internal Planning Process

1. In May 2011, Drs. Rose Goldstein (VP-RIR) and Remi Quirion () directed Dr. Phil Barker (PB) to lead an initial round of internal planning for the McGill aspect of the QI project.
2. To create an internal planning process that would identify and articulate McGill's goals and aspirations for the Quartier d'Innovation project, PB assembled and chaired an executive group (consisting Helene Perrault, Caroline Baril, Genevieve Cote, Jim Nicell, and Richard Briere) that was tasked with i) clarifying terms of reference, ii) identifying membership of the larger McGill QI planning committee, and iii) defining process and timing. This executive group met three times in May-June 2012 – results of their deliberations are attached as appendix 2.
3. Two major planning meetings of the entire McGill QI planning committee to place, each for about 5 hours. This group was subdivided into 2 subcommittees (Quartier chaired by Raphael Fischler, Innovation chaired by PB) that were charged with providing recommendations on the Quartier and on Innovation aspects. In the first meeting (June 13, 2011), the entire committee discussed terms of reference (1 hour), met in subcommittee (3 hours), and then shares ideas/views that emerged (1 hour). RF and PB and circulated these. The second meeting (August 31, 2011) was structured similarly, with RF and PB collating final conclusions.
4. Using these recommendations as a template, PB wrote the first draft of the recommendations and circulated these to the entire QI planning committee for comment (Sept 21, 2011).
5. Draft document 2 was circulated to the QI planning executive group for final comments and approval (Oct 10, 2011); the QI planning executive group held a face-to-face to make final adjustments (Oct 24, 2011); the final QI planning document was approved by the QI planning executive group and submitted to Dr. Rose Goldstein on Oct 28, 2011.

Appendix 2
QI Internal Planning Executive

Name	Faculty or Department	Title	Phone No.	Notes
Chair				
Phil Barker	Medicine	Interim Director, MNI	398-3064	
Members				
Caroline Baril	Office of the Principal and Vice-Chancellor	Senior Associate, Government and Institutional Relations	398-2020	
Richard Brière	Strategic Partnerships Office	Senior Advisor, Health Management Initiatives	398-2296	
Rose Goldstein	Vice-Principal - Research and International Relations	Vice-Principal (Research and International Relations)	398-7224	
Natasha Laliberté	MNI	Research Administrator	398-5569	
Jim Nicell	Office of the Associate V.-P. University Services	Associate Vice-Principal	398-2926	
Hélène Perrault	Education	Dean	398-7037	

QI Innovation Sub-Committee

Name	Faculty or Dept.	Title	Phone No.	Notes
Co-Chairs				
Peter Grutter	Science	Associate Dean, Research and Graduate Education	398-8110	
Phil Barker*	Medicine	Interim Director, MNI	398-3064	
Members				
Lea Cameron	Provost's Office	Senior Director	398-1438	
Rob Kearney	Biomedical Engineering	Director, Technical Services	398-6737	
Masad Damha	Chemistry	Assoc. VP, Research & Int'l Relations	398-7521	
Bruce Lennox	Chemistry	Chair	398-6940	
Catherine Guastavino	Education	Associate Professor	398-1709	
Dilson Rassier	Education	Professor	398-4184 Ext. 0558	
Andy Large	Education	Professor	398-3360	
Elizabeth Wood	Education	Assoc. Dean, Academic	398-8154	
Christophe Pierre	Engineering	Dean	398-7251	
Showan Nazhat	Engineering	Assoc. Dean / Assoc. Director	398-6991	
Richard Gold	Law		398-6636	
Steve Maguire	Management			
Fabrice Marandola	Music	Professor	398-4535 Ext. 09627	
Michèle Beaulieu	OSR	Associate Director, Commercialization	398-6874	
Erica Besso	Science	Research Innovations Officer	398-3897	

**Member of QI Internal Planning Executive Committee*

QI Quartier Sub-Committee

Name	Faculty or Department	Title	Phone No.	Notes
Co-Chairs				
Raphael Fischler	School of Urban Planning	Director	398-4076	
Hélène Perreault*	Education	Dean	398-7037	
Members				
Drew Love	Athletics and Recreation	Director	398-7002	
Jill Barker	Athletics and Recreation	Assistant Manager, Recreation and Fitness	398-7011	
Judith Potter	Continuing Education	Dean	398-6156	
Enrique Garcia	Education	Professor	398-4184 Ext. 0541	
Shaheen Shariff	Education	Professor	398-5396	
Raad Jassim	Engineering	Adjunct Professor		
Michael Porritt	Residences	Executive Director, Residence Administration	398-6363	
Wendy Thomson	School of Social Work	Director	398-7068	
Linda Jacobs Starkey	Students	Associate Dean of Students	398-4990	

**Member of QI Internal Planning Executive Committee*