



Research and International Relations

**Innovation Steering Committee Submission to the Principal's Task
Force on the Academic Vision and Mission of the RVH Site**

February 2016

1. What is your vision?

The members of the [Innovation Steering Committee](#) (ISC) of McGill University share an encompassing, dynamic and purposeful vision for the spaces, facilities and governance of the reimagined Royal Victoria Hospital site. The ISC holds that the fundamental principle guiding the RVH redevelopment should be for the site to serve as catalyst for interdisciplinary collaboration and convergence for impact, enabling discovery and innovation on an unprecedented and profoundly impactful scale for the University, its partners and the broader community.

In order to realize this vision, the ISC proposes that:

- (a) The reinvention of the RVH site focus on evolving *thematic* occupancy (e.g. biomaterials, renewable energy, sustainability sciences), in addition to occupancy by candidate Faculties, Schools, Departments or Centers. Where possible, thematic occupancy should be networked with the latter entities. In all cases, occupancy should be awarded on a time-limited basis, subject to evaluation and conditional renewal based on program outcome expectations, merit, funding horizons, and/or other criteria to ensure a continuous dynamic evolution of the site.
- (b) Thematic occupancy be supported by physical proximity at all points in the innovation value chain including: grouped or shared laboratory and research spaces, facilities, equipment and instrumentation; shared spaces for invention development, open innovation and intellectual property support services; common commercialization assistance and incubator space.
- (c) An innovative (from McGill's perspective) model for the governance and operational organization of the RVH site be applied with the purpose of driving fluid collaboration between multidisciplinary teams including internal and external partners, enabling groups to convene, conduct research, innovate and evolve seamlessly. Achieving quantum changes in an organization's innovation outcomes begins with organizational innovation. Organizational routines and resource flows contributing to innovation outcomes not in line with the McGill's standards and aspirations for 'excellence' and 'impact' must be problematized and re-engineered/re-negotiated.
- (d) A portion of the reimagined RVH site be dedicated to the creation of a dynamic and expanding innovation centre, featuring the following services and offerings:
 - a. Modular collaboration, meeting and event space.
 - b. Invention development assistance personnel to support intellectual property protection, licensing and open innovation consortia.
 - c. Start-up incubator and "in-residence" facilities with stepwise rental fees.
 - d. Commercialization assistance programs and personnel (e.g. an expanded Dobson Centre for Entrepreneurship) to act as a focal point for innovation and entrepreneurship at McGill.
- (e) The "innovation centre" space be physically proximate to space allocated to laboratories and shared research facilities occupied by the thematically-organized academic and researcher occupants, in order to catalyze the "discovery to innovation to scalable commercialization" (or implementation, for social innovations) pathway.

2. Which units, groups or organizations would be good partners to create your ideal neighbourhood? Would their proximity within the RVH help advance your initiative? With which McGill groups have you spoken or worked to develop this vision? Are there any external partners that you envision as natural collaborators?

Well aligned internal partners include those units at McGill that presently support one link in the innovation value chain. Consolidating these units in one location has obvious advantages:

- Concentrating expertise in one physical location
- Providing seamless support along each step of the process to bring promising ideas and inventions to market
- Creating “critical mass” in innovation and entrepreneurship activities at McGill, serving to advance McGill’s external positioning, reputation and impact

The Innovation Steering Committee has consulted with Committee member Prof. Greg Vit of the Dobson Centre for Entrepreneurship on that entity’s submission to the Principal’s Task force on the Academic Mission and Vision for the RVH Site. Both groups would like to highlight the complementarity of these submissions, and particularly the strong alignment around the concept of an “innovation centre”.

The following is a non-exhaustive list of other well-aligned internal partners:

- Marcel Desautels Institute for Integrated Management (Desautels Faculty of Management)
- Innovation Catalyst in Engineering (Faculty of Engineering)
- Invention Development and Entrepreneurship Assistance
- McGill University Business Engagement Centre
- Office of the Associate Vice-Principal (Innovation and Partnerships)
- Innovation in Practice (formerly the Quartier de l’Innovation project team)
- Medical therapeutics and clinical strategies

Externally, there are many potential partners who would bring value in the form of resources, market knowledge, and innovation development expertise to the innovation “supercollider” at the RVH site. The following are some examples of potential co-occupants:

- Venture funding sources: Venture capitalists, angel investor associations, and impact investors
- Institutional venture financing: [Business Development Bank of Canada](#), [Caisse de Depot](#), [Teralys Capital](#) (government sponsored innovation fund of funds)
- Foundations: [McConnell Foundation](#)
- Think tanks: [Conference Board of Canada’s Centre for Business Innovation](#)
- Footprint offices for local, national and international corporations and NGOs aligned with the thematically-focused McGill occupants. Some examples include:
 - [Verily](#) (formerly Google Life Sciences) for medical devices/bioengineering
 - [Hydro Quebec](#) (for sustainable sciences)
 - [Wallonie-Bruxelles International](#)
 - [Social Innovation Generation](#)

- Donor-sponsored entrepreneurs/mentors/thought-leaders “in-residence” (donors could be corporations, foundations, or individuals)
- Government agencies: [MITACS](#), [NRC-IRAP](#), [Ouranos](#)

3. What type of space would you need to foster this increased collaboration and interactions in service of academic excellence and scholarship with enduring impact? How would your initiative use the unique characteristics of the RVH location?

To the extent possible, the physical configuration of the reimagined RVH site should maximize interaction between its occupants, and promote proximity between complementary occupant groups. Transparent wall dividers and easily reconfigurable spaces are a best practice in innovation-centric organizations.

The Innovation Steering Committee vision for the RVH site requires the following types of space to meet the space needs related to the occupants and activities specified under question 1 part (d):

- Reconfigurable collaboration, meeting and event spaces with modern AV facilities.
- Modular incubation “hive” space (combination of open and closed group offices and collaboration space) suitable for start-up incubation.
- “Swing” office space for sponsored “in-residence” occupants (advisors, mentors, experts, thought leaders, visiting venture capitalists, and corporate partners).
- Administrative offices for invention development assistance personnel and commercialization assistance personnel.

The ISC proposes that for the uses specified above, floor-space of approximately **930 m²** be allocated, with flexibility built in to the broader floor-plan design to allow for an eventual expansion to **2,800m²**. These estimates were set using the following external benchmarks as a guide:

Institution	Footprint (square meters)	Occupancy/space usage
MaRS Discovery District	4,645	The MaRS complex has approximately 4,645m ² of laboratory/incubator space. Elsewhere in the complex approximately 930m ² is taken up by administrative offices, and the MaRS buildings have expansive meeting and event spaces, as well as space occupied by corporate partners
Harvard University iLab	2,787	Administrative offices, 14 “ventures-in-residence”, 100 “experts-in-residence”
Ryerson Digital Media Zone (DMZ)	1,525	Administrative offices, incubator space, meeting space, event space
University of Waterloo Innovation Centre	1,208	Includes 3,800 square for their “Office of Research and Innovation Services” and a 9,100 accelerator

MIT Beehive Cooperative (offshoot of Martin Trust Centre for Entrepreneurship)	465	Incubator space housing 40 companies
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4. How would your vision add value to the University as a whole and advance its academic mission?

Novel model for propelling interdisciplinary scholarship: The new vision for enabling seamless interdisciplinary collaboration and convergence *for impact* proposed by the Innovation Steering Committee for the physical structure and governance of the reimagined RVH site answers many of the challenges faced by interdisciplinary groups operating in McGill’s current organizational context. This new model will amplify McGill’s scholarly outputs in thematic areas, bringing together disciplines where the University already enjoys unmatched research excellence. In turn, this will spawn new academic programs, draw together external academic and research partners, and catalyze a virtual cycle of discovery and scholarship. As well, the model allows the University to adapt with much greater flexibility and speed to emerging thematic priority areas.

Enhancing the student experience and preparing McGill graduates for the careers of the future: The Innovation Steering Committee’s vision for the RVH would create opportunities for students to gain exposure to thematic problem-driven research designed for impact, participate in interdisciplinary academic programs, interact and collaborate more intensively with industry partners, and play an active role in the innovation and commercialization process supported by experts and “in-residence” advisors and mentors at every step.

Innovation funding and connectivity: Capitalizing on the reimagined RVH as an opportunity to underscore McGill’s commitment to an ambitious innovation agenda will link the University more closely with an external community of support in the form of prominent alumni in the international innovation economy, industry partners, private donors, government, and peer institutions. Ryerson’s Digital Media Zone, for example, has attracted an array of important supporters (Intuit¹, Government of Canada², University of Birmingham³, First Stone Venture Partners, Upper Canada Equity Fund⁴, MasterCard⁵, Rogers⁶, etc.) whose relationships with Ryerson may be expanded over time.

Enhanced external positioning and reputational benefits for McGill: McGill is ceding competitive positioning on innovation and entrepreneurship to Ryerson, UBC, and others who have committed to an aggressive innovation agenda, which in turn generates resources and external recognition which multiplies their success and places McGill at a greater and greater disadvantage. This will eventually impact brand value and reputation unless the University launches on a course to consolidate and elevate its innovation and entrepreneurship initiatives.

¹ [Intuit FinanceHub Helps with Startup Bookkeeping at Ryerson DMZ](#)

² [Ryerson Futures Now an Approved Business Incubator for Startup Visa Program](#)

³ [The DMZ at Ryerson University Launch the Next Big Idea Contest with Birmingham](#)

⁴ [Ryerson University Partnership to Promote Technological Innovation, Entrepreneurship](#)

⁵ [MasterCard, Ryerson University Launch Women in Entrepreneurship Program](#)

⁶ [Ryerson and Rogers launch the Next Big Idea in Sport Competition](#)

Enrolling Canada’s future leaders, both students and scholars: In the present age, *where* young people look forward to studying and, later, working when they graduate from university is much less important than *what problems* they are interested in solving. The reimagined RVH represents an opportunity to adapt broadly in order to continue to attract the kinds of students who will lead as innovators in the coming decades. Similarly, while McGill’s academic renewal program continues to bring dynamic new scholars into McGill’s professoriate, these same scholars, when met with institutional resistance and insufficient support for their innovative projects, may respond to more attractive conditions at other universities who are anxious to recruit from McGill.

Sponsored research and industry partnerships: Leading corporations have been under increasing pressure to integrate knowledge from a variety of fields in order to continue to develop products and services that will serve the evolving needs of society. Foundations too are investing for impact and seeking to partner with institutions to resolve social problems through social innovation. Increasingly, funders also expect universities to align with, if not play a leading role in, this convergence. The proposed reimagining of the RVH will be the ideal platform for meeting this need.

5. How would your vision benefit the communities we serve off campus, locally, nationally or internationally?

Economic impact: Coupling thematic rather than discipline-specific research groupings with the supporting structures and personnel for invention development and commercialization creates an end-to-end innovation continuum from the laboratory to the global markets. The Quebec economy benefits from the introduction of spin-off companies and highly qualified personnel at a greater rate into the local market, and the broader society profits from effective research translation.

Grand challenges: By creating an environment and governance structure designed entirely to promote interdisciplinary collaboration internally and with external partners, the University will have the opportunity to bring its research strengths more effectively to bear on society’s “grand challenges”, bringing benefits for Quebec, Canada and the world.

Point of convergence for the international innovation community: The Innovation Steering Committee envisions the reimagined RVH site as a locus for innovation-driven scholarship, invention, and entrepreneurship, supported by a vibrant community of internal partners and external partners drawn from all over the world to observe and take part in the unique interdisciplinary projects, programs, thought leadership, and entrepreneurial endeavours constantly launching and evolving at the RVH.

To be completed by the appropriate dean(s) or vice-principal(s) responsible for the unit or units involved:

I am comfortable with the Task Force exploring this initiative as a possible candidate for space in the Royal Victoria Hospital site:

Signature

Submissions are due February 12, 2016, and should be emailed to rvh_vision@mcgill.ca.