

# Quality

in Canada's Built Environment:

## Roadmaps to Equity, Social Value and Sustainability

Booklet of the 2022 annual reports from the 14 research sites associated with the Quality Research Partnership

## Initial Reports From the 14 Research Sites

2022

Edited by Jean-Pierre Chupin, PhD  
Scientific Director of the SSHRC Partnership on Quality

Social Sciences and Humanities Research Council of Canada  
(SSHRC) Partnership #895-2022-1003

Canada Research Chair in  
Architecture, Competitions and Mediations of Excellence



Conseil de recherches en  
sciences humaines du Canada

Social Sciences and Humanities  
Research Council of Canada

Canada



# ***INITIAL REPORTS FROM THE 14 RESEARCH SITES***

***2022***

***SSHRC Research Partnership  
(#895-2022-1003)***

Edited by Jean-Pierre Chupin, PhD, CRC-ACME, Université de Montréal

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**RESEARCH SITE: University of British Columbia**  
**PRELIMINARY RESEARCH PROGRAM FOR YEAR 1**  
*Date of submission: 2022 / 06 / 22*

**Researchers:**

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**Citizen groups:**

- still looking to identify appropriate groups

**Cities and procurement:**

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- CityStudio Vancouver
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**Professional Organizations:**

- Canadian Society of Landscape Architects
  - Grant Fahlgren ([grant.fahlgren@gmail.com](mailto:grant.fahlgren@gmail.com))

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**1- Title of situated project:**

## **Right to Land**

**2- Summary of issues and research questions:**

There is an inherent and disturbing history concerning the appropriation and dispossession of land occupied by Indigenous Peoples to develop parks and urban centres. Moreover, this pattern of dispossession continues as North American cities are increasingly implementing developments meant to enhance their climate resilience capacity while often displacing marginalized communities. Focusing on Vancouver as the primary research site, we will investigate and document if and how principles of decolonization and Indigenization inform city-wide planning and design decision-making processes at a project level. Additionally, we will compare and evaluate if decolonization initiatives can inform strategies to prevent green gentrification, address spatial justice, and support climate change adaptation.

Our central research question is thus bidirectional. Our research asks how can the design of future urban landscapes aid in reconciliation, improve spatial justice, and lead climate change adaptation? At the same time, we ask how the landscape has been historically used as a tool of dispossession, leading to greater inequality and worsening global warming.

**3- State of ethical approbation in your university:**

We do not need ethics approval at this stage (to do the case studies analysis). Once we have a better understanding as a team of our next steps, we will put together the ethics application. In order to get ethics approval, we will need more detailed information on the types of activities associated with the research, including information on potential surveys, semi-structured interviews, recorded site visits, and/or workshops. Based on recent experience, ethics approval will take about 3-4 months from the moment the application is submitted.

**4- Current state of exchanges with your partners:**

We have setup a meeting with all partners in the first week of July to go over the project and delve deeper into the goals and objectives of the partnership and how this can help shape/refine the research questions and case studies. During this meeting, we will also coordinate a regular meeting schedule with the full team—probably about 3-4 times a year.

**5- Summary of questions and current expectations by research site's partners:**

Based on early conversations with our project partners, we have identified a range of questions of interest (These will be updated and edited in the coming month):

*Identity*

- How can we use naming (of streets, parks, etc.) as part of the process of decolonization?
- What does a public park mean to a community? Place for respite, access to nature, educational opportunities, spaces for our more-than humans, etc.?
- How can planning and design processes be used to ensure that physical environments more equitably represent our population's diversity?

*Access*

- How do we integrate decolonization processes in the planning and design of public open spaces?
- How can we build relationships with diverse stakeholders with competing interests when designing the public realm?
- What are some of the equity considerations for Vancouver in climate change mitigation and adaptation?

*Design*

- How can we encourage accessibility and a feeling of inclusion in our parks and other public spaces?
- How can the physical design and material palette of parks better reflect the cities history and future?

## 6- Preliminary list of case studies:

### **A- Local case studies relevant to your situated project (to be developed during year 1)**

1. Northeast False Creek, Vancouver (JCFO)
2. New Brighton Park, Vancouver (Connect Landscape Architecture), 2017
3. Iona Wastewater Treatment Plant, Vancouver (Space2Place)
4. Hastings Park, Vancouver (PFS)
5. Devonian Harbour Park, 1973
6. Point Grey Campus, University of British Columbia, 1925
7. Stanley Park, Vancouver, 1888

### **B- Potential case studies to be developed during year 1**

1. - Te Ara Manawa, Auckland (Nelson Byrd Woltz)
2. - Te Wānanga, Auckland (Isthmus)
3. - Hydropark Quebradora, Mexico City (Taller Capital)
4. -
5. -

## 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

### **A- Doctoral students:**

- SALA does not have a PhD program so it will be unlikely we will have Doctoral students engaged in the research.

### **B- Master's students:**

- We are planning on hiring 3 Master Students to work on the case study project. Each student will work with a different supervisor (Kees, Sara or Fionn) on different case study projects that have slightly different emphasis.

- TBD
- TBD
- TBD

### **C- Undergraduate:**

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**RESEARCH SITE: Dalhousie University**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
Date of submission: 2022 / 06 / 22

**Researchers:**

- Susan Fitzgerald ([susan.fitzgerald@dal.ca](mailto:susan.fitzgerald@dal.ca))
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- Martha Radice ([martha.radice@dal.ca](mailto:martha.radice@dal.ca))
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**Citizen groups:**

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**Cities and procurement:**

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- Eric Lucic ([lucice@halifax.ca](mailto:lucice@halifax.ca))
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**Professional Organizations:**

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**1- Title of situated project:**

## **Mapping Quality and Belonging through Experiences of Space**

**2- Summary of issues and research questions:**

Built environments have the profound capacity to contribute to the social value and sustainability of communities. Many years after engaging with architecture the effects—both positive and negative—are felt. Our team will investigate a series of built case studies across Nova Scotia and ask **how they foster quality and belonging through the design process and everyday experiences of the people that use the spaces.** To do this we will study two building types that are vital to a sense of inclusion within the community—the school and the library (Klinenberg 2018).

**3- State of ethical approbation in your university:**

Application was submitted June 20, 2022 to the REB. We have not heard back from them but will keep you posted.

**4- Current state of exchanges with your partners:**

We have sent them emails but have not met.

**5- Summary of questions and current expectations by research site's partners:****Current Conversation**

Schools are at the center of our communities. They are also one of the first buildings outside of the home with which we all engage. However, most research into schools has focused on what is taught and how it is communicated rather than on the physical environments where learning and teaching occur (Walden 2015). Children and teachers spend a considerable amount of time in these institutions and governments continually spend vast budgets on the construction and upkeep of schools. So, it is important to uncover what contributes to the quality of these spaces in the community. The quality of architecture might appear to be readily identifiable, but examination of this subject reveals few sources especially as to how they cultivate a sense of belonging. Rönn outlines evaluation criteria to consider what constitutes good architecture and the list includes “aesthetic, functional, technical and social qualities as well as environmental and economic considerations” (Rönn 2017, 76). Others have assessed a work of architecture in terms of the participatory design process or health and safety (Kubey 2020). Evaluation strategies typically focus on a building being fit for purpose but recent experience working with groups on the design of new schools and other informal studies with students suggest that there is a disconnect between the architecture, the design process and creating a sense of well-being or belonging (Stringer, Dunne, and Boussabaine 2012; Birkett 2011; Osanloo, Reed, and Schwartz 2016). In addition, school projects receive very few architectural awards in Canada - particularly at the national level.

**Expectations**

Our team will initially review the manual used to design schools in the province of Nova Scotia, the DC350 Design Requirements Manual 2020. This document is used by design consultants (engineers, architects, landscape architects) for all provincial projects. It has a specific section for school architecture. We will also review the wording from recent RFPs and whether they focus on a design process or product to promote belonging within school architecture. In addition, we will also undertake the study of a series of case studies for awarded school projects in Nova Scotia.

**Discussions on Method and Free Lab**

Initial meetings have been held with our community group Zuppa Theatre, represented by co-director Alex Maclean, to discuss methodology. The team is developing ideas about narrative interacting with computational augmentation. A specific testing period was proposed for Summer 2023, with the Dalhousie School of Architecture Free Lab. This will also allow a period of direct collaboration between the group members of our cluster, to help refine the project methodology and aims.



## References

- Klinenberg, Eric. 2018. *Palaces for the People: How Social Infrastructure can help Fight Inequality, Polarization, and the Decline of Civic Life*. New York: Crown.
- Kubey, Karen. 2020. "Design for Impact: Measuring Architecture's Social Value in the United States." *Architectural Design* 90 (4): 14-21.
- Osanloo, Azadeh F., Cindy Reed, and Jonathan P. Schwartz. 2016. *Creating and Negotiating Collaborative Spaces for Socially Just Anti Bullying Interventions for K-12 Schools*. Charlotte, NC: Charlotte, NC: Information Age Publishing, Incorporated.
- Rönn, Magnus. 2017. "Quality in Architecture – learning form history, practice and competitions." The 4th Symposium of Architectural Research in Finland – The 4th International Conference on Architectural Competitions.
- Stringer, Allan, Jack Dunne, and Halim Boussabaine. 2012. "Schools Design Quality: A User Perspective." *Architectural Engineering and Design Management* 8 (4): 257-272.
- Walden, Rotraut. 2015. *Schools for the future: design proposals from architectural psychology*. Wiesbaden: Springer.

## 6- Preliminary list of case studies:

### **A- Existing case studies relevant to your situated project**

1. DC350 Design Requirements Manual 2020
2. Marine Drive Academy – awarded 2020 Lieutenant Governor's Awards for Excellence in Architecture
3. Citadel High School – awarded 2009 Lieutenant Governor's Awards for Excellence in Architecture
4. Bible Hill Consolidated Elementary School - awarded 2018 Lieutenant Governor's Awards for Excellence in Architecture
5. RFP studies (from the period 2020 – 2022)
6. Charles P. Allen High School – 2018 Maritime Architectural Design Excellence Awards
7. Wagematcookewey School - 2017 Lieutenant Governor's Awards for Excellence in Architecture

### **B- Potential case studies to be developed during year 1**

1. -
2. -
3. -
4. -

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

*A- Doctoral students:*

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-

*B- Master's students:*

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- Rita Wang ([rita.wang@dal.ca](mailto:rita.wang@dal.ca))

*C- Undergraduate:*

- Hiring shortly

**RESEARCH SITE: McGill University**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
*Date of submission: 2022 / 06 / 30*

**Researchers:**

- Bobby Benedicto
- Anna Kramer
- Will Straw
- Alanna Thain
- Ipek Tureli

**Citizen groups:**

- Montreal 24/24
- Architecture Sans Frontières - Québec

**Cities and procurement:**

- Ville de Montréal

**Professional Organizations:**

- Ordre des architectes du Québec (OAQ)

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**1- Title of situated project:**

## **Nighttime Design for/with Marginalized Communities**

**2- Summary of issues and research questions:**

This project is part of the Theme Cluster **#1** « Spatial justice and heightened quality of life »

- Question: Montreal has long been recognized as a « night-life capital » How can city spaces be designed to create safe and attractive spaces for marginalized group
- Context: Montréal
- Space type: Urban design, public and communal spaces
- Key themes: Social justice and the city. It is by now well accepted that civic and other architectures work with a model which sees the daytime as natural, while considering the night-time aspects of urban contexts largely in terms of their aesthetic or spectacular elements. As political protests and cultural activities of all kinds move steadily into the night, and as questions of sleep equity and shelter become central to ideas of social justice in cities, a rethinking of urban design in which night is central becomes all the more urgent.

### **3- State of ethical approbation in your university:**

As McGill is part of a general agreement between universities in Quebec, there is a fast track process for ethical reciprocity. We have sent our documents on July 30 following guidance from UdeM/Prof. Chupin. This request for approval is for a component that will build on the experience and reflections of the co-researchers and partners (representatives) but will not develop research that integrates individuals.

Year 3: Part of the McGill project on “Nighttime Design for/with Marginalized Communities” is led by Professor Bobby Benedicto in collaboration with the other 4 co-investigators and is on the LGBTQ community, where there is no representative citizen organization we can interface with and one-on-one interaction (e.g., interviews with individuals) will be necessary, and an amendment will be submitted for that part of the project on year 3 by when we will have clarified research design for that.

### **4- Current state of exchanges with your partners:**

Three of our five faculty members have expressed interest in participating to the August conventions: Will Straw, Alanna Thain and Anna Kramer.

We already have a partner interested in participating to the August convention: Montreal MTL 24/24.

We have recently (July 27, 2022) met with Architecture sans Frontieres Quebec because it came to our attention that they have turned their focus to the homelessness in Montreal. They agreed to collaborate with us and are willing to participate to the convention in late August. Both the partner organizations (MTL 24/24 and ASF-Q) need more information on the terms and expectations form their participation; i.e what will happen.

Also, faculty colleagues in our cluster are asking:

- 1) if they are expected to participate the full three days (which seems a lot),
- 2) if they will have opportunities to meet exclusively with our community partners within the convention period (it wasn't clear to us from the tentative schedule shared within the set of slides).

### **5- Summary of questions and current expectations by research site's partners:**

#### **Key milestones over the next 5 years:**

Year One: Interdisciplinary Methodologies for the Urban Night. This will include initial archival work, such as researching how design and architecture magazines in Quebec have addressed, or not addressed, the 24/h cycle. We will also hold a series of workshops exploring alternative methodologies for collaborative mapping and data visualization relevant to our situated project.

Years Two-Four: In the next three years of the grant, the McGill cluster will develop a working methodology for addressing the question of quality design for the urban night. Each year will focus on a particular use of urban space by minoritarian subjects. We will move outwards from Montreal's city centre to account for the impact of rapid changes in the availability of affordable

housing that has increasingly pushed communities into new spaces (such as homeless encampments in Hochelaga-Maisonneuve or near the planned “Royalmount” development, underground club scenes and LGBTQ+ community in the former garment district of Chabena). In year two, we will consider “Public Sleep”; in year three, the “Animated Night” of LGBTQ+ nightlife and club culture and in year four, “Night Movements” of activism and protest. We have identified three distinct marginalized groups (underhoused (homeless), LGBTQ, protestors) but also recognize the intersectionality between these groups. For example, sleeping in public spaces can be considered a form of protest, and protestors can have identities as LGBTQ+ individuals or may be protesting for the rights of their community, or LGBTQ+ individuals may be disproportionately homeless. We do not place these broad groups into siloes.

In these explorations, we intend to work with citizen associations who are already working with these minoritarian subjects. One of our two partners MTL 24/24 is exploring equity at night. The second partner, Architecture without Borders already has a project working on homelessness. We plan to invite and develop working relationships with such citizen associations.

Year Five: consolidation of research results and development of a suite of deliverables for both academic and community members, with an eye to questions of democratic governance and accountable public policy.

## 6- Preliminary list of case studies:

Here is a preliminary list we identified from the catalogue.

- Luminotherapy [https://www.ccc.umontreal.ca/fiche\\_concours.php?lang=en&cld=386](https://www.ccc.umontreal.ca/fiche_concours.php?lang=en&cld=386)
- More Than Waiting For The Bus  
[https://www.ccc.umontreal.ca/fiche\\_concours.php?lang=en&cld=430](https://www.ccc.umontreal.ca/fiche_concours.php?lang=en&cld=430)
- Gamme de mobilier ludique pour l'esplanade Clark
- McGill College, l'avenue réinventée, Montréal, Quebec, 2019
- Place des Montréalaises, Montréal, Quebec 2017
- Atwater : Cabot Square (2011 design by Affleck de la Riva) and more recent competition to transform the interior of the Peter-McGill Centre (2020)
- Emily Gamelin Square and unhoused / hotel

## 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

We are in the process of enlisting research assistants for the project. We are unfortunately unable to provide names to participate to the convention in late August

**RESEARCH SITE: Toronto Metropolitan University**  
**PRELIMINARY RESEARCH PROGRAM FOR YEAR 1**  
*Date of submission: 2022 / 06 / 22*

**Researchers:**

- Dr. Samantha Biglieri ([samantha.biglieri@ryerson.ca](mailto:samantha.biglieri@ryerson.ca))
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- Dr. Fatih Sekercioglu ([fsekercioglu@ryerson.ca](mailto:fsekercioglu@ryerson.ca))

**Citizen groups:**

- Open Architecture Collaborative Canada
  - Afsaneh Tafazzoli, Director of Strategic Partnership ([Afsaneh@openarchtoronto.org](mailto:Afsaneh@openarchtoronto.org))
  - Marveh Farhoodi, Program Director ([marveh@openarchtoronto.org](mailto:marveh@openarchtoronto.org))

**Cities and procurement:**

- Waterfront Toronto
- TBA

**Professional Organizations:**

- OAA Awards
  - Kristi Doyle, Executive Director ([KristiD@oaa.on.ca](mailto:KristiD@oaa.on.ca))
- City of Toronto Urban Design Awards
  - Kristina Reinders, Program Manager, Civic Design ([KristnaReinders@toronto.ca](mailto:KristnaReinders@toronto.ca))

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**1- Title of situated project:**

## **Re-evaluating Inclusivity and Well-Being on Toronto's Evolving Waterfront**

**2- Summary of issues and research questions:**

The Toronto Waterfront has long been, and continues to be, a contested territory. As the Lake Ontario shoreline has evolved from an industrial waterfront to a dynamic, vibrant mixed-use urban asset, it has been the subject of intense debate concerning the nature of future development, reflecting ongoing tensions between public space and private development, built form and open space, urbanization and restorative naturalization. The unique opportunities offered by the waterfront are underscored by the fact that development proposals must be approved by a Design Review Panel to encourage design excellence, a requirement unique in the City of Toronto. An important debate is centered around the accessibility of the waterfront to all Torontonians, which relies on the creation of a robust system of public spaces, multi-modal mobility networks and other systems that can be disrupted by excessive privatization of the waterfront (the recent proposal for the redevelopment of Ontario Place is a case in point).

Accessibility must be considered from a variety of perspectives; the elimination of physical barriers is a key consideration, but equally important are barriers based on social, economic and other non-physical forms of exclusion that can limit access to the waterfront and the amenities it offers. The research will include analysis of award-winning design projects to better understand how design excellence is understood in the context of conceived- perceived-lived experience of architecture and public space (Lefebvre, 1974/1992). Our partner organizations -- Open Architecture Collaborative Canada and Waterfront Toronto -- bring to the project this broad perspective on design excellence in the built environment, addressing issues of environmental and social sustainability, equity, the social value of public space, and the role of design in relation to the physical, social and environmental health and equitable well-being of the community.

#### Research Questions

How do people with different mobility, sensory and cognitive abilities experience award-winning buildings and public spaces along the Toronto Waterfront? How successfully have award-winning projects on Toronto's waterfront addressed their stated intentions (conception-perception-lived experience analysis)?

How can the definition of design excellence be expanded to further include issues of accessibility, equity, well-being and inclusion?

### **3- State of ethical approbation in your university:**

After initially indicating that we should be able to secure expedited Ethics Board approval based on the UdeM approval, the Research Ethics Board at TMU has reversed direction and is requiring that we complete the full REB application. This is due to the fact that all UdeM documentation is in French only and therefore they are asking for full documentation in our application. However they have stated that given the prior approval for UdeM and Concordia, their review should be expedited even though we are required to submit a full application. The preparation of the full application will be more time consuming than anticipated so we are working with representatives of the TMU REB to complete and submit the full application at the earliest opportunity.

### **4- Current state of exchanges with your partners:**

Open Architecture Collaborative Canada – we have had an initial meeting with representatives of OACC and have reconfirmed their commitment to the project. In early stages of the work OACC will serve primarily in an advisory capacity and will participate in the development of questions and methods emerging from preliminary case study analysis prepared by the scholars and student research assistants. Once the project moves to the stage where members of the public will be involved in workshops and other public events, OACC will take on a more active role as facilitators.

Waterfront Toronto – we have yet to confirm their participation in, and the nature of their contribution to, the project. At the time of application WT had signed on as partners with the University of Toronto team, with the understanding that if the application was successful, they would expand their involvement to other teams; they have been approached to confirm but have yet to respond.

Ontario Association of Architects – understanding that the OAA's involvement covers five situated teams from the Ontario schools of architecture, we have approached the Executive Director, Kristi Doyle, with a request to have access to a staff member directly involved with the OAA Awards program, and await a response.

City of Toronto (Urban Design) – we have approached the City of Toronto's Program Manager, Civic Projects, Kristina Reinders, with regard to the City's Urban Design Awards program, which has recognized a number of projects in our study area. Ms. Reinders has expressed interest in participating in the project but we have yet to discuss her involvement in detail. She has been alerted to the August meeting in Montréal.

#### **5- Summary of questions and current expectations by research site's partners:**

As noted in item 4, we have had initial meetings with our OACC partners and at this time questions are primarily related to their role and participation in the August meetings. We will schedule additional meetings with them prior to the August sessions.

There is a meeting scheduled with the OAA representative, the TMU site leader, and other Ontario researchers next week on a similar topic, i.e. the OAA's role and participation in the August meeting.

We will continue to approach the City of Toronto Urban Design Awards organizers and Waterfront Toronto to discuss their roles and expectations.

#### **6- Preliminary list of case studies:**

##### ***A- Existing case studies relevant to your situated project***

1. – Trillium Park/William G. Davis Trail
2. – Tommy Thompson Park Entrance Pavilion (DTAH)
3. – Tommy Thompson Park Pavilions (MSA)
4. – Humber Bicycle and Pedestrian Bridge
5. – The Bentway
6. – Queens Quay Terminal
7. – Limberlost Place (The Arbour)
8. – Cherry Street Stormwater Facility
9. – River City
10. – Harbour Terrace
11. – Borneo Sporenburg (Amsterdam) [http://www.kerstinhoeger.com/NTNU/STUDIO-IBA-BASEL/1\\_CASE-STUDIES\\_Draft.pdf](http://www.kerstinhoeger.com/NTNU/STUDIO-IBA-BASEL/1_CASE-STUDIES_Draft.pdf)
12. – Chicago Waterfront/Millennium Park <https://www.landscapeperformance.org/case-study-briefs/millennium-park>



***B- Potential case studies to be developed during year 1***

Buildings and Urban Spaces

1. – East Point Park Bird Sanctuary Pavilions
2. – George Brown College Waterfront Campus
3. – George Brown College Daphne Cockwell Centre for Health Sciences
4. – Canada's Sugar Beach
5. – Port Lands Flood Protection & Enabling Infrastructure Project – Bridge Design and Engineering
6. – Queens Quay Revitalization
7. – West Don Lands Public Realm
8. – Sherbourne Common
9. – Simcoe, Reese and Spadina WaveDecks

Policy/Guidelines/Awards Programs

- 10.– City of Toronto Accessibility Design Guidelines
- 11.– Ontario Public Space Accessibility Standards
- 12.– Waterfront Toronto Design Review Panel

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

*A- Doctoral students:*

- TBA

*B- Master's students:*

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- TBA

*C- Undergraduate:*

- TBA

**RESEARCH SITE: University of Toronto**  
 PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
 2022 / 06 / 20

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**Cities and procurement:**

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**Award organizations:**

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**1- Title of situated project:**

## **Equitable Resilience in Toronto's Open Spaces**

**2- Summary of issues and research questions:**

The value of open space as critical infrastructure is increasingly visible as Toronto begins to experience more acute climate-related shocks (such as overland flooding and extreme heat). Chronic socio-economic stresses including rising inequality, housing unaffordability, and ageing infrastructure are now recognized as associated risks. This project aims to identify measure, assess, and evaluate the social and environmental value of Toronto's public open space assets as it relates to the city's overall resilience goals. It will explore the potential of the deployment of adaptation and mitigation strategies in open spaces to achieve more comprehensive sustainability objectives.. This investigation places a its focus on the impacts of climate change and associated resilience strategies by integrating climate and socio-demographic data with adaptation and mitigation planning and design in our public open spaces.

Municipalities are challenged with a growing legacy of ageing and inadequate park infrastructure in the context of changing community demographics and needs. What type of environmental, infrastructural, social, and economic mapping, inventories, and visualization tools are required to reveal the untapped potentials of open spaces? Can we structure the analysis to identify open space deficiencies and barriers to access? What would mobilize municipalities to invest more in public open space as a form of climate action? What are the intersections and barriers between climate change strategies and equitable access? What are

new and innovative design strategies for transformation, and how can these transformations act as critical drivers and anchors for change? Great research questions!!!

### **3- State of ethical approbation in your university:**

In-progress, internal forms completed, to be submitted in the next few weeks.

Signed letters from Toronto Environmental Alliance, and pending signatures from Waterfront Toronto and City of Toronto Parks Forestry and Recreation on the ethics form template.

### **4- Current state of exchanges with your partners:**

Waterfront Toronto is onboard, and some ongoing preliminary exchanges on the future role of visualization tools and illustrations in describing the extent of public engagement with parks and public realm have been undertaken.

Toronto Environmental Alliance is onboard and awaiting further meetings and discussions

Toronto Parks Forestry and Recreation is onboard and awaiting further meetings and discussions, they need some funding to send a representative to Montreal in August.

### **5- Summary of questions and current expectations by research site's partners:**

From the initial application, refinements and revisions pending:

For the research partners, this collaboration will provide much-needed research in how to improve the access, functionality, and quality of public parks in an effort to increase equity for Toronto's underserved populations. They are looking to better understand the opportunities and barriers to park improvements. How do we increase the legibility and understanding of the value of public open space as critical infrastructure? How do we position open space assets as tools in mitigating and protecting neighbourhoods and community open spaces from the shocks and stresses of climate change? Can we quantify the accessibility and value of Toronto's open spaces on the physical and mental health of Torontonians? What are the shared cultural uses and amenities needed to expand the use of parks today and to future-proof them for coming challenges?

Based on preliminary discussions:

Waterfront Toronto is looking to co-develop digital visualization tools and illustrations that describe the extent and value of the transformative potentials of public open spaces and parks on the waterfront. Specifically, the intersection of social benefit and their ability to address climate change impacts and sustainability objectives.

City of Toronto PFNR and the Toronto Environmental Alliance TEA will help the research team with community outreach and discussions. They are interested in the intersection of socio-economic demographic information and the role of everyday neighbourhood parks /open

spaces in Toronto's equity-deserving neighbourhoods, and what can be learned from quality/design excellence in Toronto's waterfront parks. TEA needs some financial support from the grant to carry out their participation.

## 6- Preliminary list of case studies:

### ***A- Existing case studies relevant to your situated project***

1. The Bentway

### ***B- Potential case studies to be developed during year 1***

1. St Andrews Playground
2. Trinity Bellwoods
3. Leaside Park
4. Sunnybrook Park
5. The Meadoway
6. Corktown Common
7. Toronto Islands Park
8. Underpass Park
9. Downsview Park

## 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

### *A- Doctoral students:*

- 
- 

### *B- Master's students:*

- Izzy Mink ([izzy.mink@mail.utoronto.ca](mailto:izzy.mink@mail.utoronto.ca))
- Jessica Hui ([jess.hui@mail.utoronto.ca](mailto:jess.hui@mail.utoronto.ca))
- Negar Ferdousi ([negar.ferdosi@mail.utoronto.ca](mailto:negar.ferdosi@mail.utoronto.ca))
- Luis Bendezu ([luis.bendezu@mail.utoronto.ca](mailto:luis.bendezu@mail.utoronto.ca))
- Yue Wang ([yyue.wang@mail.utoronto.ca](mailto:yyue.wang@mail.utoronto.ca))
- Ying Zheng ([yingz.zheng@mail.utoronto.ca](mailto:yingz.zheng@mail.utoronto.ca))

### *C- Undergraduate:*

- 
-

**RESEARCH SITE: Carleton University**

PRELIMINARY RESEARCH PROGRAM FOR YEAR 1

Date of submission: 2022 / 06 / 22

**Researchers:**

- Mariana Esponda ([Mariana.Esponda@Carleton.ca](mailto:Mariana.Esponda@Carleton.ca))
- Federica Goffi ([Federica.Goffi@Carleton.ca](mailto:Federica.Goffi@Carleton.ca))
- Mario Santana ([Mario.Santana@Carleton.ca](mailto:Mario.Santana@Carleton.ca))

**Citizen groups:**

- Heritage Ottawa

**Cities and procurement:**

Municipal:

- City of Ottawa
- National Capital Commission (NCC)

National:

- Heritage Conservation Services (HCS) at Public Services and Procurement Canada
- National Trust Canada
- Canadian Association of Heritage Professionals (CAHP)
- ERA Architects

International:

- International Council of Monuments and Sites (ICOMOS)
- Association Preservation Technology (APT)

**Professional Organizations:**

- Canadian Association of Heritage Professionals (CAHP)
- City of Ottawa

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**1- Title of situated project:**

## **Adaptive Reuse for a Sustainable Future**

**2- Summary of issues and research questions:**

This research aims:

- To understand the environmental benefits of adapting existing buildings in Canada by analyzing current sustainable practices to adapt to the current climate emergency.
- To analyze how existing buildings can be adapted to a new typology meanwhile sustaining socio-cultural and economic relevance, heritage values, and character-defining elements, providing spaces for community interaction, making sustainable interventions instead of wasting materials and embodied energy.
- Development of a matrix to evaluate the qualities of adaptive reuse projects in Canada by analysing case studies of significant architectural typologies that are threatened by change when the specific typology loses relevance in the context of present needs and cultural shifts, lack of maintenance and abandonment, or obsolescence, such is the

case for a large building stock of ecclesiastical buildings, hospitals and government centers across Canada.

Research questions:

- Define Adaptive Reuse / Adaptive Architecture: How has the terminology evolved? Degrees of adaptation and cycles of adaptation.
  - Literature review of the terminology and history of adaptive reuse and adaptive architecture
- How many building projects are about Adaptive Reuse in Canada (recent years and trends over the last 5-10 years)?
  - Which are the scales of intervention?
  - Which are the typologies and conversion types?
  - How old are the buildings that are being adaptively reused?
  - How is quality evaluated? Which are the parameters? How are these qualities specific to Canada?
- How many awards recognize adaptive reuse projects in Canada? What typologies and scales are being recognized? Are they designated heritage or not? Does the designation impact the quality of the adaptive reuse project? Which values and qualities should be assessed?
- Which are the policies that impact adaptive reuse projects in Canada, and/or elsewhere?
- Which are the existing methodologies to evaluate adaptive reuse: awards criteria; policies, etc.

### **3- State of ethical approbation in your university:**

We consulted with the ethics office, and we received advice on the list of documents that we need to produce to clear ethics.

### **4- Current state of exchanges with your partners:**

We are the early stages of connecting with partners and consultations. We plan to hold one meeting before the August conference to have a discussion on the objectives of the research for the first year of work.

### **5- Summary of questions and current expectations by research site's partners:**

We will seek the support of the partners in disseminating research outputs through collaborators' national and international activities, such as the yearly Canada's National Trust symposia, APT conferences and ICOMOS workshops.

We will request advise and consultation meetings with their experts on best approaches to answer fundamental questions put forth by our research cluster over time about the evaluation of quality in adaptive reuse and adaptive architecture projects.

We would request access to databases and records regarding awards that may have been issued by their organizations for adaptive reuse projects.

Some of the key questions for which we will consult our partners include:

Which are the criteria and methodologies to assess quality in an adaptive reuse project, awarded or not?

Are there strategies to adaptively reuse buildings that would otherwise be threatened by climate change, various forms of neglect, incorrect use, etc.?

- How many building projects are about Adaptive Reuse in Canada (recent years and trends over the last 5-10 years)?
  - Which are the scales of intervention?
  - Which are the typologies and conversion types?
  - How old are the buildings that are being adaptively reused?
  - How is quality evaluated? Which are the parameters? How are these qualities specific to Canada?

## 6- Preliminary list of case studies:

### **A- Existing case studies relevant to your situated project**

- Canadian Green Building Awards (CaGBC)
- CAHP Award: <https://cahp-acecp.ca/2021-awards/>
- National Trust Canada: <https://nationaltrustcanada.ca/what-you-can-do/awards>
- OTTAWA Heritage Awards: <https://ottawa.ca/en/planning-development-and-construction/heritage-conservation/awards-and-recognition/ottawa-heritage-awards#:~:text=This%20award%20recognizes%20the%20restoration,the%20Supreme%20Court%20of%20Canada>

### **B- Potential case studies to be developed during year 1**

We are willing every year to study 12 case studies with the same typology (1.- religious, 2.- industrial, 3.- Hospital, 4.- Office and commercial and 5.- other buildings). Those case studies should be adapted during the XXIst century. In that way we could make comparisons. Ideally 9 or 10 buildings will be in Canada and the rest elsewhere.

Year 1: Religious buildings converted to other uses

1. CHUM
2. Rideau Chapel, National Gallery of Canada, Ottawa
3. Sharon Temple, East Gwillimbury, Ontario
4. St Pieteris, De Petrus, Vught, Netherlands
5. Les Monastere des Augustines, Quebec
6. Wesleyan Methodist Temple now La Maison de la Litterature, Quebec
7. Trinity St Paul United Church, Toronto

Year 2: Industrial buildings

1. **Bata Shoe Factory Revitalization Architect of Record:** Quadrangle, Collaborating Design Architect: Dubbeldam Architecture + Design – Residential [Large] Award/ Prix résidentiel (grande taille) 2020 Canadian Green Building Awards<sup>1</sup>
2. Salt Building, Vancouver, BC

Year 3: Hospitals (health)

3. Casey House, Toronto

Year 4: Office & Commercial buildings, Department Stores

1. **The Wellington Building**, Restoration Award of Excellence by City of Ottawa, adaptive reuse for the House of Commons
2. **Sir John MacDonald Building** (1930) Former Bank of Montreal /House of Commons /. Adaptive reuse/rehabilitation

Year 5: Other buildings (prisons, etc.)

4. Ottawa Art Gallery (former prison)
5. Ottawa Conference Center Train Station
6. Le Grand Théâtre de Québec<sup>2</sup> (2021 Canadian Green Building Award; adaptive architecture)
7. The Don Jail: Bridgepoint Active Healthcare administration Building, Toronto.

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

*A- Doctoral students:*

- TBD

*B- Master's students:*

- Arkoun Merchant ([arkounmerchant@cmail.carleton.ca](mailto:arkounmerchant@cmail.carleton.ca))

- Melissa Lengies ([melissalengies@cmail.carleton.ca](mailto:melissalengies@cmail.carleton.ca))

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<sup>1</sup> <https://sabmagazine.com/awards/awards-winners-2020/>, accessed June 17, 2022.

<sup>2</sup> <https://sabmagazine.com/awards/the-winning-projects-of-2021-canadian-green-building-awards/>, accessed June 17, 2022.



**RESEARCH SITE: Laurentian University**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
*Date of submission: 2022/ 08 /10*

**Researchers:**

- Prof. Shannon Bassett ([sbassett@laurentian.ca](mailto:sbassett@laurentian.ca))
- Dr. Terrance Galvin (site leader) ([tgalvin@laurentian.ca](mailto:tgalvin@laurentian.ca))
- Dr. Thomas Strickland ([tstrickland@laurentian.ca](mailto:tstrickland@laurentian.ca))

**Citizen groups:**

- Coalition for a Liveable Sudbury
  - Naomi Grant ([grant\\_naomi@hotmail.com](mailto:grant_naomi@hotmail.com))
- Uptown Community Action Network (CAN)
  - Cortney St. Jean ([info@uptownsudbury.ca](mailto:info@uptownsudbury.ca))
- Will Morin, Indigenous artist and knowledge keeper ([willpower@ontera.net](mailto:willpower@ontera.net))

**Cities and procurement:**

- City of Greater Sudbury
  - Dr. Stephen Monet, Strategic and Environmental Planning ([stephen.monet@greatersudbury.ca](mailto:stephen.monet@greatersudbury.ca))
  - Dr. Jennifer Babin-Fenske, Coordinator, EarthCare Sudbury ([jennifer.babin-fenske@greatersudbury.ca](mailto:jennifer.babin-fenske@greatersudbury.ca))
  - Melissa Riou, Planner, Senior Planner ([Melissa.riou@greatersudbury.ca](mailto:Melissa.riou@greatersudbury.ca))
  - Geoff McCausland, Ward Councillor ([Geoff.McCausland@greatersudbury.ca](mailto:Geoff.McCausland@greatersudbury.ca))

**Professional Organizations:**

- Ontario Association of Architects (OAA) (<https://www.oaa.on.ca>)
- Northern Ontario Society of Architects (NOSA), regional chapter of OAA (no website)

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**1- Title of situated project:**

## **Material Culture and Social Prosperity in Northern Ontario**

**2- Summary of issues and research questions:**

The principles of quality are universal, and the same principles of quality that make a great car also make a great musical performance, a great conversation, a great slap shot, and a great place to live. Quality in design involves both the social and physical, the visible and the invisible:

- *comfort,*
- *reliability,*
- *timelessness/sustainability,*
- *efficiency/value,*
- *adaptability/inclusivity,*

- *durability/resilience,*
- *aesthetics, etc.*

Our LU cluster will develop our own matrix to evaluate projects of different kinds within our research group.

With our research cluster representing northern Ontario, (including LU, City of Greater Sudbury planners and environmentalists, a City Councillor, the OAA and key community partners), the umbrella question for our design is twofold:

- 1) **How does the study of Material Culture reflect the diverse cultures of the City of Greater Sudbury and our northern region (materials, building practices, winter cities, etc.)?;**
  - *Here we begin with the watershed and move through a series of scales from expanded landscape to built environment, exploring renewable resources, clean energy, and use of materials such as wood;*
  - *Where are the materials harvested, how far do they travel, and how locally available are they to the community who will occupy the building or place?*
- 2) **What constitutes Social Prosperity as a set of conditions, programs and policies when evaluating and assessing the intersections between the various stakeholders involved in this project?**
  - *Social prosperity is about social connections and creating places where 'you' belong. It is inclusive of all inhabitants, with agency and activity central to the process; Given our context in Greater Sudbury, 'prosperity' is intrinsically tied to the local environment, the use and management of our resources, and a systems-thinking approach that crosses scales and addresses climate change adaptation. This includes watershed management, earth care, regreening, urban design and strategic planning, landscape performativity, clean energy and climate change adaptation looking ahead to 2050?;*
  - *Social Prosperity also includes the wider perspectives of citizens and communities that are impacted by design decisions made by officials, builders, developers, etc.?.;*
  - *Affordable Housing is in such shortage across Canada, but this is an aspect of inclusive design that must be addressed in this PG, if social prosperity is to include all inhabitants*

### **3- State of ethical approbation in your university:**

LU's Ethics Approbation is in process in our ROMEIO system. It is going slow. Date TBA.

### **4- Current state of exchanges with your partners:**

The exchange with partners is taking shape through discussions during the summer. Our formulation of the research project is exciting, but is still a bit too open-ended, especially the part regarding social prosperity for northern Ontario. Our group is beginning to work together towards the August conference.

## 5- Summary of questions and current expectations by research site's partners:

Accessibility to material resources and defining what constitutes social prosperity for the north are two aspects of a multi-scalar and multi-disciplinary line of inquiry. Our **research plan for Year 1** will focus on creating a design process where social prosperity can be fostered. We will consult with Elders and knowledge carriers to see that we are on a good path regarding our intentions. From an indigenous worldview, **material culture** and **social prosperity** are linked through TEK (Traditional Ecological Knowledge). How can such an approach expand our definition of social prosperity to include well-being – not just of humans but of the natural world that we inhabit?

**Once precisely defined, how would such an approach affect the processes of design awards, sustainability awards, as well as guiding RFPs and other forms of procurement?**

Henry Glassie's term **Material culture** is widely used in architecture and design, referring to the materials used, the symbolism of objects, the rituals surrounding them and even the practices of tradition and invention. At the McEwen School of Architecture, the study of material culture has allowed us to focus on the use of wood in design; we have drawn upon indigenous Elders for lessons on respect for materials and in seeing *all life as interconnected*.

**With the realization that we are an integral part of a living system and not apart from it, how does this impact design juries and criteria for awards?**

### Case Studies:

A central aspect of this *Partnership Grant* research revolves around the study of existing award-winning buildings, landscapes, or other design awards in order to evaluate, critique and compare what makes 'good design' and how 'quality' is determined in the built environment. Our research group will identify a series of case studies (both buildings and environmental) that will allow us to have a conversation. An appropriate award-winning building to begin this discussion is Sudbury's **Vale Living With Lakes Centre**, as its ambitious program responds to many critical questions regarding Sudbury's built form, landscape, and environmental issues (including water quality, climate change, biodiversity, research and teaching). We are in the process of composing a shared list of case studies that support this integrative approach to design.

### Collaborative Model:

Working with the City of Greater Sudbury planners and environmentalists, and with the support of a City Councillor, we intend to create a fruitful dialogue between stakeholders. In conjunction with our community partners (Uptown CAN and Coalition for a Liveable Sudbury), research faculty at the McEwen School of Architecture will facilitate events each year as we build a reference database for 'best practices' in northern environmental design. This process is intended to:

- Strengthen relationships between LU students, City of Greater Sudbury staff, faculty and community partners;
- Facilitate experimental projects that advance specific goals as well as explore **affordable housing design** from a broad range of environmental perspectives;

- Further define how **material culture** has a profound impact on resources and sustainability in the north;
- Further enhance a collaborative culture between the City and higher education that includes the voices of community partners and citizens in major design initiatives;
- Utilize comparative analysis in building a database of **case study projects** that moves toward our desired outcomes for designing the built environment;
- Contribute to the larger theme of the *Partnership Grant* that defines northern cities as equitable and environmentally innovative in planning and design initiatives;
- Engage Masters student(s) to evaluate the *Sudbury2050* competition submissions according to the quality of the built environment (focused on the social prosperity and quality matrices that we develop).

## 6- Preliminary list of case studies:

### **A- Existing case studies relevant to your situated project**

1. Vale Living with Lakes Centre (Sudbury)
2. McEwen School of Architecture (MSoA), (Sudbury)
3. Halifax Central Library (Halifax)
4. North Bay Regional Health Centre (North Bay)
5. Place des Arts (Sudbury) – new building

### **B- Potential case studies to be developed during year 1**

*(this list is still in discussion....some case studies might be gardens or even social processes)*

1. Nk'Mip Desert Culture Centre (Osoyoos, British Columbia)
2. TBA
3. TBA

## 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

### *A- Doctoral students:*

- N/A

### *B- Master's students:*

- Grace Wilson
- Abigail Hudyma
- TBA

### *C- Undergraduate:*

- Not in the first year of our contract

**RESEARCH SITE: University of Waterloo**  
 PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
 Date of submission: 2022 / 06 / 24

**Researchers:**

- Adrian Blackwell ([adrian.blackwell@uwaterloo.ca](mailto:adrian.blackwell@uwaterloo.ca))
- David Correa ([david.correa@uwaterloo.ca](mailto:david.correa@uwaterloo.ca))
- Jane Mah Hutton ([jane.hutton@uwaterloo.ca](mailto:jane.hutton@uwaterloo.ca))
- Maya Przybylski ([mmprzybylski@uwaterloo.ca](mailto:mmprzybylski@uwaterloo.ca))

**Citizen groups:**

- Climate Action Waterloo Region
  - Samantha Tremmel ([samantha.tremmel@climateactionwr.ca](mailto:samantha.tremmel@climateactionwr.ca))
- Masonry Council of Ontario
  - Andrew Payne

**Cities and procurement:**

- City of Cambridge
  - Brooke Lambert ([LambertB@cambridge.ca](mailto:LambertB@cambridge.ca))

**Professional Organizations:**

- None so far

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**1- Title of situated project:**

## The long-term cost of low-quality buildings

**2- Summary of issues and research questions:**

The Waterloo Region, composed of mid-size municipalities Waterloo, Kitchener, and Cambridge, is both a commuter suburb and an innovation hub centered around two comprehensive Universities. The Toronto-Waterloo Region Corridor, named the fastest growing “tech ecosystem” in the world in 2017,<sup>3</sup> has established forward thinking urban policies around transit and sustainability, including growth management, green purchasing, and the ION light rail line. These government initiatives have provoked a building boom in the region, and planned construction of condominium buildings along the Region’s transit spine. Over the next 20 years, this growth will contribute an estimated 12 Megatonnes of construction materials and 7.5 Megatonne of construction and demolition waste to the region.<sup>4</sup> This material use will contribute to the Region’s carbon footprint and its contribution to the climate crisis.

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<sup>3</sup> Region of Waterloo, “Innovation Culture,” <https://www.regionofwaterloo.ca/en/doing-business/innovation-culture.aspx>, accessed August 9, 2021.

<sup>4</sup> Mollaei, Aida, Nadine Ibrahim, Komal Habib, “Estimating the construction material stocks in two Canadian cities: a case study of Kitchener and Waterloo,” *Journal of Cleaner Production*, Jan. 2020: Part 2, Vol 280.

Building Scientists argue that high-rise condominiums are being built for obsolescence.<sup>5</sup> While concrete structures are durable, other materials systems will need replacement much earlier. The failure of these systems across Canadian cities will be a significant problem in the future. The rapid construction of condominiums in the Waterloo Region provides an urgent case study to examine the potential to better integrate these long-term material issues into architectural design through these questions:

- 1) How do the short life-cycles of materials in new condominiums contribute to climate change?
- 2) How can architects design condominiums for material durability, adaptation, disassembly, and material reuse?
- 2) How can the Region of Waterloo develop policies to develop sustainable material standards that mandate, durability, adaptability, and reuse?

### **3- State of ethical approbation in your university:**

Has been initiated, but not submitted, expected clearance is in August, 2022

### **4- Current state of exchanges with your partners:**

Initial conversations with stakeholders have been had or are scheduled to occur in the upcoming weeks

### **5- Summary of questions and current expectations by research site's partners:**

We look forward to developing these through conversation with our partners in the next two months.

### **6- Preliminary list of case studies:**

#### ***A- Existing case studies relevant to your situated project***

#### ***B- Potential case studies to be developed during year 1***

We will develop a set of case studies focused on appropriate methodologies for our research and then analyze a small set of condominium case studies in the Waterloo region to understand their life-cycles and possible approaches to refurbishment.

- York Condominium Corporation No. 82, 321-unit building in the Jane and Finch neighbourhood facing 14 M in essential repairs

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<sup>5</sup> John Straube, "Can Highly Glazed Building Facades be Green?" *Building Science Corporation, 2008*. <https://www.buildingscience.com/documents/insights/bsi-006-can-fully-glazed-curtainwalls-be-green>, accessed August 16, 2021; Ted Kesik, "The Glass Condo Conundrum," self-published, Daniels Faculty, undated.

## Initial bibliography

Goldman, Charles A., Kathleen M. Greely, and Jeffrey P. Harris. "Retrofit experience in US multifamily buildings: Energy savings, costs, and economics." *Energy* 13, no. 11 (1988): 797-811.

Kmeťková, Jana, and Michal Krajčák. "Energy efficient retrofit and life cycle assessment of an apartment building." *Energy Procedia* 78 (2015): 3186-3191.

Ma, Zhenjun, Paul Cooper, Daniel Daly, and Laia Ledo. "Existing building retrofits: Methodology and state-of-the-art." *Energy and buildings* 55 (2012): 889-902.

On deterioration and maintenance

Lujanen, Martti. "Legal challenges in ensuring regular maintenance and repairs of owner-occupied apartment blocks." *International Journal of Law in the Built Environment* (2010).

Silva, Ana, Jorge de Brito, and Pedro Lima Gaspar. "3. Physical service life." *CIB W080* (2021): 9.

Shipley, Robert, Steve Utz, and Michael Parsons. "Does adaptive reuse pay? A study of the business of building renovation in Ontario, Canada." *International journal of heritage studies* 12, no. 6 (2006): 505-520.

Bunting, Trudi E. "Invisible Upgrading in Inner Cities: Homeowners' Reinvestment Behaviour in Central Kitchener." *Canadian Geographer/Le Géographe canadien* 31, no. 3 (1987): 209-222.

## 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

*A- Doctoral students:*

- TBD for Fall 2022

*B- Master's students:*

- Sylvie Wang ([s593wang@uwaterloo.ca](mailto:s593wang@uwaterloo.ca))

*C- Undergraduate:*

- TBD for Fall 2022

**RESEARCH SITE: Concordia University**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
*Date of submission: 2022 / 06 / 18*

**Researchers:**

- Carmela Cucuzzella (site lead) ([carmela.cucuzzella@concordia.ca](mailto:carmela.cucuzzella@concordia.ca))
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- Meghan Joy ([meghan.joy@concordia.ca](mailto:meghan.joy@concordia.ca))
- Carly Ziter ([carly.ziter@concordia.ca](mailto:carly.ziter@concordia.ca))

**Citizen groups:**

- Eric Craven ([dlp@atwaterlibrary.ca](mailto:dlp@atwaterlibrary.ca))
- Jean Marc Laforest ([coord@tcaim.org](mailto:coord@tcaim.org))
- Emmanuel Rondia ([erondia@cremtl.org](mailto:erondia@cremtl.org))
- Billal Tabaichount ([billal@grame.org](mailto:billal@grame.org))
- David Paradis ([david.paradis@vivreenville.org](mailto:david.paradis@vivreenville.org))
- Emmanuelle Hébert ([emmanuelle@campusdelatransition.org](mailto:emmanuelle@campusdelatransition.org))
- Anastasia Mourougova Millin (Nouveaux voisins) ([anastasia@darkmatterlabs.org](mailto:anastasia@darkmatterlabs.org))

**Cities and procurement:**

- Ville de Montréal
- Patrick Marmen ([patrick.marmen@montreal.ca](mailto:patrick.marmen@montreal.ca))

**Professional Organizations:**

- Ordre des architectes du Québec (OAQ)
- Sebastien Desparois ([sdesparois@oaq.com](mailto:sdesparois@oaq.com))
- Association des Architectes en Pratique Privée du Québec (AAPPQ)
- Lyne Parent ([lparent@aappq.qc.ca](mailto:lparent@aappq.qc.ca))

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**1- Title of situated project:**

## **Retrofitting Spaces for Health and Aging in the City**

NOTE: This is a combined project from our original two projects on clusters 3 and 4. At the moment this project is best situated in cluster 3.

**2- Summary of issues and research questions:**

**Background:**

This research axe will bring representatives of diverse, aging urban communities into direct dialogue with architects, city procurement officers, urban planners, and the students who will be designing and planning the cities of the future. Positioning older residents as a resource and source of knowledge rather than a design or health problem to be solved, this research will



provide a platform upon which aging citizens intervene directly into questions of urban access, urban design, and equity in the built environment.

Just as multiple voices are essential to building genuine social equity, so too is it necessary to open up the design professions and the political echelon to varied perspectives. This axe is driven by the recognition that spatial justice for aging urban citizens is an essential element of a sustainable society, and will actively foster the inclusion of diverse voices within urban policy discourse and practice, and the disciplines of architecture and urban planning.

In addition, the impact and experiences of climate change in cities for older adults is of crucial importance. Further, there are important alignments and tensions between smart and sustainable cities and aging. Municipalities have climate change strategies and age-friendly strategies but how are they aligned and how do they conflict when it comes to approaches to the built environment?

#### Context:

Cities worldwide, including Montreal, have been engaging in the World Health Organization's Age Friendly Cities movement and many have dedicated policy strategies to meet the needs of older adults. These policy strategies are not always reflected in the built environment. Aging citizens are the fastest growing demographic in Canada, yet their voices are rarely heard in the design and planning professions, much less within local government practices in these areas.

#### Research questions:

- How will listening to the memories and experiences of older citizens help to identify problems and
- needs for aging populations in relation to the built environment?
- How might members of the aging urban population themselves lead to a better understanding of the key limitations of the built environment for this group?
- How might intergenerational encounters facilitate meaningful exchanges between urban decisionmakers and the older users of a city?
- How can we retrofit our spaces to address aging populations from the lens of carbon neutrality, livability, and urban biodiversity?
- How do these types of qualities in the city help us align with UN SDGs?

**3- State of ethical approbation in your university:**

Completed. We have attached the confirmation from my Concordia University.

Name of Applicant:	Dr. Carmela Cucuzzella
Department:	Faculty of Fine Arts\Design and Computation Arts
Agency:	N/A
Title of Project:	Quality in Canada's Built Environment: Roadmaps to Equity, Social Value and Sustainability
Certification Number:	30016744
Date of Approval/expiration	June 3, 2022 – June 3, 2023

**4- Current state of exchanges with your partners:**

We are planning a meeting in early August with our citizen group, City of Montreal, and professional organization partners to prepare for the August convention. This meeting is intended to help everyone understand expectations and returns regarding this partnership.

**5- Summary of questions and current expectations by research site's partners:**

We are meeting David Paradis from Vivre en Ville to manage their expectations for the PG. They are a key citizen group partner as their mission is directly related to health and aging in the city. This meeting is scheduled for June 27.

We are also meeting with Emmanuel Rondia during the week of June 20th, as he is on vacation from June 27-July 17<sup>th</sup>. His mission is related to livability and greening the city. We will address his mission in a more general manner for the city and not only for health and aging.

We will have more information about the other partners' expectations after we meet in early August.

**6- Preliminary list of case studies:****A- Existing case studies relevant to your situated project**

1. The historic garden for the elderly is the garden of the former St Margaret's Home, a palliative care facility for women which occupied the Notman House on Sherbrooke in Montreal for almost a century.

<https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcynthiahammond.org%2F2019%2F08%2F06%2Filluminated-from-within-the-notman-garden-series%2F&data=05%7C01%7CCarmela.Cucuzzella%40concordia.ca%7C52c070756d6e4a8dc8f908da3f7314d8%7C5569f185d22f4e139850ce5b1abcd2e8%7C0%7C0%7C637892061791863459%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0>

[%3D%7C3000%7C%7C%7C&sdata=8gftl9AYaZ0rNmPcaoMuqSLxfOiy7T%2BsxDCqamgbw%3D&am p;reserved=0](#)

***B- Potential case studies to be developed during year 1***

1. Cavendish Mall in CSL where the engAGE Living Lab is located
2. 60 Richmond East Housing Co-Operative Toronto, ON, Residential architecture, Social housing

Teeple Architects [www.teeplearch.com](http://www.teeplearch.com)

2014 - Governor General's Medals in Architecture – Medalist

3. Apotex Centre, Jewish Home for the Aged, Baycrest Centre  
North York, ON

A.J. Diamond, Donald Schmitt and Company ; Boigon Petroff Shepherd Architects [dsai.ca](http://dsai.ca)

2004 - Ontario Association of Architects Awards Architectural Excellence - Institutional B: (less than \$10 million) - Award of Excellence, Ontario Association of Architects (OAA)

4. Seniors Residence, Scarborough ON
5. Matsui Baer Vanstone Freeman Architects  
1994 - Ontario Association of Architects Awards Residential Design Awards - Honourable Mention, Ontario Association of Architects (OAA)

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

*A- Doctoral students: these students are confirmed for the project*

- Morteza Hazbei ([morteza.hazbei@concordia.ca](mailto:morteza.hazbei@concordia.ca))
- Sara El Khatib ([sara.elkhatib@concordia.ca](mailto:sara.elkhatib@concordia.ca))

*B- Master's students:*

- none for now
- 

*C- Undergraduate:*

- none for now
-

**RESEARCH SITE: Université de Montréal**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
*Date of submission: 2022 / 06 / 22*

**Researchers:**

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- Izabel Amaral ([izabel.amaral@umontreal.ca](mailto:izabel.amaral@umontreal.ca))

**Citizen groups:**

- Institut universitaire en santé mentale de Montréal (IUSMM)
  - Alexis Beauchamp-Chatel ([alexis.beauchamp-chatel.cemtl@ssss.gouv.qc.ca](mailto:alexis.beauchamp-chatel.cemtl@ssss.gouv.qc.ca))
- Coopérative solidarité et soins (CSS)
  - Serge Hamel ([hamelserge66@gmail.com](mailto:hamelserge66@gmail.com))
  - Édouard Bonaldo ([ebonaldo@saintjeaninc.com](mailto:ebonaldo@saintjeaninc.com))
- Fondation Véro et Louis (FVL)
  - Sarah Huxley ([shuxley@fondationverolouis.com](mailto:shuxley@fondationverolouis.com))

**Cities and procurement:**

- Ville de Montréal, Service du développement économique, Gestion et planification immobilière + DesignMontréal
  - Patrick Marmen, chef d'équipe et commissaire au design ([patrick.marmen@montreal.ca](mailto:patrick.marmen@montreal.ca))

**Professional Organizations:**

- Ordre des architectes du Québec (OAQ)
  - Sébastien-Paul Desparois ([sdesparois@oaq.com](mailto:sdesparois@oaq.com))
- Association des Architectes en Pratique Privée du Québec (AAPPQ)
  - Lyne Parent ([lparent@aappq.qc.ca](mailto:lparent@aappq.qc.ca))
- Cécobois
  - Louis Poliquin, director ([louis.poliquin@cecobois.com](mailto:louis.poliquin@cecobois.com))
  - Caroline Frenette, technical advisor ([caroline.frenette@cecobois.com](mailto:caroline.frenette@cecobois.com))
  - Myriam Larouche, technical advisor ([myriam.larouche@cecobois.com](mailto:myriam.larouche@cecobois.com))

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**1- Title of situated project:**

# Material Innovation in Spaces for Special Needs

**2- Summary of issues and research questions:**

We propose to redefine quality in architecture through an inclusive design approach that promotes health and well-being while addressing critical aspects often neglected by norms.

In this framework, design thinking is challenged not only by the specific phenomena linked to aging and special needs but also by the often contradictory and counterproductive effects of standards for security. More specifically, our project is located at the junction between the consideration of the neurodiversity of the users of architectural spaces and the potential of material innovation of wood as an emblematic material.

If the built environment plays an important role on the experience and well-being, its impact is tenfold in the case of people with autism, whose condition is characterized by an exacerbated sensitivity to their environment. This can have a major impact on their ability to adapt to their environment.

The relationship between the well-being of people with special needs and the built environment remain largely unexplored and projects are underway to identify best practices on the subject with our partners.

For security and risk management reasons, spaces for persons with special needs are usually subjected to very strict and normalized design standards. While safe, this approach tends to restrain innovative design practices therefore limiting the inherent quality of these spaces.

One such contradiction involves the materiality of the designed spaces. In the context of our approach, we will focus on wood in its many contemporary forms (mass timber, engineered systems, etc.) as well as an emblematic material at the intersection of cultural, social and economic issues.

Research questions:

- How is quality defined (and assessed, and even measured) from the point of view of users, and, in a more extreme way, from the point of view of users with special needs?
- What is the space for variables related to performance (security, sustainability, etc.) within a broader definition of quality?
- How does material innovation contribute to the level of quality?

**3- State of ethical approbation in your university:**

- Reference number of application: CERAH-2022-015-D
- Ethical approbation received on April 14, 2022, and valid for 1 year (until April 14, 2023)
- Annual yearly report to be filed by March 14, 2023

**4- Current state of exchanges with your partners:**

The citizen groups are part of the Virginie LaSalle's network and regular exchanges take place in the context of ongoing and upcoming research projects. Two of the three partners (CSS and FVL) have met with a researcher from the team during which the structure of the partnership and the calendar of upcoming activities were presented, and questions were answered. Both representatives of citizen groups signaled their interest in actively participating in the partnership and in attending the August 2022 convention. The third partner (IUSMM) was unable to join the session but will be met as soon as possible during the summer of 2022.

Regarding award organizations, representatives of Cécobois were met (including Louis Poliquin, manager of the organization). Although it is not yet clear who will be the official representative of this group within the partnership, the people present have confirmed both a strong desire to collaborate with other partners and researchers in the project, and their availability for the upcoming August 2022 convention in Montreal. Cécobois will cover transport and lodging costs for their representative at the convention.

Meetings are being organized with OAQ, AAPPQ and Ville de Montréal in July. More to come.

#### **5- Summary of questions and current expectations by research site's partners:**

The citizen partners express their particular interest in having architectural concepts and decisions put to the test of the users' experience, especially in the case of people with special needs (elderly and/or neuro-atypical profile). Questions are raised about the measurement of the perception of the quality of the built environment, for example through post-occupational evaluation (POE). This is an opportunity for these citizen partners to contribute to the development of a better understanding of the impact of materiality on users in the context of pilot projects (FVL) or projects to be designed and carried out in the coming years (IUSMM and CSS).

For award organizations, the work of the partnership on the multiple definitions of quality can contribute to a better structuring of annual awards categories. Cécobois is currently in a process of reimagining the categories of its annual awards of excellence and sees the research as a way to build a more solid and rigorous framework.

Regarding the question of materiality, the issue of wood integration is at a key moment, as innovations propose new materializations of wood (systems, assemblages, etc.) but current standards remain relatively non-permissive (e.g., the possibility of exposing wood in interiors). Refocusing these tensions on the notion of quality could help identify possibilities that go beyond the oppositions that block the contemporary debate. One specific approach that has emerged from our discussions with Cécobois is the study of the contribution of wood to the acoustic quality of the built environment, which is an issue that is central to the nature of spaces with special needs.

## 6- Preliminary list of case studies:

### ***A- Existing case studies relevant to your situated project***

Award-winning projects:

1. GoodLife Fitness Family Autism Hub (The Hub), NSDA Architects, Richmond, BC, Canada. Source: <https://architecture-excellence.org/award-winning-entity/goodlife-fitness-family-autism-hub-the-hub/>
2. Condos Origine, Yvan Blouin Architecte / Nordic Structures et WSP, Québec, Qc, Canada. Source: <https://architecture-excellence.org/award-winning-entity/condos-origine/>
3. Brock Commons Tallwood House, Acton Ostry Architects, Vancouver, BC, Canada. Source: [https://architecture-excellence.org/aea\\_award\\_event/2018-nat-acton-ostry-architects-brock-commons-tallwood-house-sab-mag-canadian-green-building-awards-residential-large-award/](https://architecture-excellence.org/aea_award_event/2018-nat-acton-ostry-architects-brock-commons-tallwood-house-sab-mag-canadian-green-building-awards-residential-large-award/)

Non-primed but considered projects

4. Maison de la Fondation Véro et Louis, Atelier TAG, Varennes, QC, Canada. Source: <https://fondationverolouis.com/le-projet/>
5. Canadian Cancer Society Kordyban Lodge, NSDA Architects, Prince George, BC, Canada. Source: <https://www.naturallywood.com/project/canadian-cancer-society-kordyban-lodge/>
6. Classe nature, Bonneville Architecture. Source: <https://classenature.com/>

### ***B- Potential case studies to be developed during year 1***

Award-winning projects:

1. Le centre d'accueil Armand Lavergne, Blouin, Blouin et associés, architectes. Montréal, QC. Source: <https://architecture-excellence.org/award-winning-entity/le-centre-daccueil-armand-lavergne/>
2. Centre intergénérationnel la Station (reconversion de la station-service de Mies Van Der Rohe), Les architectes FABG. Île-des-Sœurs, QC, Canada. Source: <https://architecture-excellence.org/award-winning-entity/centre-intergenerationnel-la-stationreconversion-de-la-station-service-de-mies-van-der-rohe/>
3. Réaménagement et agrandissement de l'aile Saint-Vincent, Maison de la Providence, Les architectes Boutros et Pratte. Montréal, QC. Source: <https://architecture-excellence.org/award-winning-entity/reamenagement-et-agrandissement-de-laile-saint-vincent-maison-de-la-providence/>
4. Le Centre de la santé mentale communautaire (Hôpital Saint-Luc), Réal Paul architecte. Montréal, QC, Canada. Source: <https://architecture-excellence.org/award-winning-entity/le-centre-de-la-sante-mentale-communautaire-hopital-saint-luc/>

5. C.L.S.C. Centre-Sud, Les architectes Boutros et Pratte. Montréal, QC, Canada. Source: <https://architecture-excellence.org/award-winning-entity/c-l-s-c-centre-sud/>

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

*A- Doctoral students:*

- Achraf Alaoui Mdaghri ([achraf.alaoui.mdaghri@umontreal.ca](mailto:achraf.alaoui.mdaghri@umontreal.ca))
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- Paloma Castonguay-Rufino ([p.castonguay-rufino@umontreal.ca](mailto:p.castonguay-rufino@umontreal.ca))
- Mylène Charette ([mylene.charette@umontreal.ca](mailto:mylene.charette@umontreal.ca))
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- Mahmood Ramezanzade ([mahmood.ramezanzade@umontreal.ca](mailto:mahmood.ramezanzade@umontreal.ca))
- Laurence Roy ([laurence.roy.4@umontreal.ca](mailto:laurence.roy.4@umontreal.ca))

*B- Master's students:*

- Victorian Thibault-Malo ([victorian.thibault-malo@umontreal.ca](mailto:victorian.thibault-malo@umontreal.ca))

*C- Undergraduate:*

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**RESEARCH SITE: University of Calgary**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
*Date of submission: 2022 / 06 / 22*

**Researchers:**

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- Dr. Matt Patterson ([matt.patterson@ucalgary.ca](mailto:matt.patterson@ucalgary.ca))
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**Citizen groups:**

- Calgary Alliance for the Common Good
  - Ryan Andersen ([ryan@calgarycommongood.org](mailto:ryan@calgarycommongood.org))
- Calgary Homeless Foundation
  - Matt Nomura ([mattn@calgaryhomeless.com](mailto:mattn@calgaryhomeless.com))
- Federation of Calgary Communities
  - Leslie Evans ([leslie.evans@calgarycommunities.com](mailto:leslie.evans@calgarycommunities.com))
- Sustainable Calgary
  - Celia Lee ([celia@sustainablecalgary.org](mailto:celia@sustainablecalgary.org))
- Vibrant Communities Calgary
  - Lee Stevens ([lee@vibrantcalgary.com](mailto:lee@vibrantcalgary.com))
- Building Equality in Architecture Calgary
  - Lindsay Andreas ([beapcalgary@gmail.com](mailto:beapcalgary@gmail.com))

**Cities and procurement:**

- City of Calgary
  - David Down ([david.down@calgary.ca](mailto:david.down@calgary.ca))

**Professional Organizations:**

- Alberta Association of Architects
  - Barbara Bruce ([bbruce@aaa.ab.ca](mailto:bbruce@aaa.ab.ca))
- Calgary Construction Association (in discussion)
  - Bill Black

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## 1- Title of situated project:

# Designing Inclusive, Sustainable and Healthy Cities

## 2- Summary of issues and research questions:

The Calgary research is intentionally interdisciplinary, intersectoral and collaborative in approach – with an overarching objective to positively address Quality of Life (QoL) in the city's buildings, landscapes, spaces and places. To realize such ends, and with an eye to manageability of the research, the situated project considers design of the built environment in three ways: as a vehicle to foster inclusivity, to heighten sustainability and to improve public health.

The Calgary team has delineated our core principles as follows:

- Our research proposal acknowledges that **the built environment has significant, demonstrable impacts on our quality of life**, wellness and happiness
- **Fostering equity, diversity and inclusion are critical aspects to be considered and pursued** by policy makers, planning and design professionals, community groups and citizens alike
- Understanding the built environment, and **addressing intensely complex problems**, requires an **interdisciplinary approach**: through a **holistic lens**, this research investigates the diverse yet interconnected determinants of health & wellbeing, including across environmental, physiological, sociological, psychological, cultural and spiritual dimensions

Specifically, the site's research tackles the following three inter-related questions. We are in the process of developing and shaping methodological aspects of our situated research. It will be important to deploy methods that allow us to rigorously interrogate identified 'awarded' cases, while concurrently engaging in open, inclusive and productive conversations, around quality, with our partners. We are very mindful of the need to ensure equitable + ethical space as the community conversations take shape and transpire. We are viewing these conversations as a key vehicle to explore, in an inter-sectoral manner, the three vital research questions.

- How can our understanding of design excellence be broadened, beyond a current focus on form and aesthetics, to also encompass **inclusion, sustainability and health**?
- How can we reconsider and redesign our spaces, places, buildings and neighborhoods to respond to our new broader and more equitable definitions and **understanding of quality in the built environment**?
- How do we contribute to **strengthening and advancing inclusion in Calgary communities**? And what role does **design** play, within this pursuit, to heighten inclusion, improve public health, and secure a more sustainable future?

### 3- State of ethical approbation in your university:

Our ethics application process is underway and advancing well. The University of Calgary ethics ID for our project is **REB22-0765**. The RSO will hopefully be able to release the funds as soon as they have that number, even if ethics approval is pending. We are considering, at present, a series of questions raised by the ethics board – these questions are, in a positive manner, encouraging the research team to develop approaches that will be methodologically sound while fostering thoughtful, sensitive and fair approaches to community engagement. The ethics approbation process is effectively progressing.

### 4- Current state of exchanges with your partners:

At present we are communicating with ALL partners within the Calgary project team. We are planning more in-depth 1:1 sessions with each partner, which will continue to happen through early summer. Our intention is to hold a collective working session with all Calgary partners, in July or early August, prior to travel to Montreal for our opening convention.

### 5- Summary of questions and current expectations by research site's partners:

During the development stage period of the SSHRC Partnership Grant Proposal the research team at the University of Calgary worked collaboratively with all partners in shaping the directions and aspirations of the research project. Each of the partners, whether drawn from Citizen Groups, Cities + Procurement, or Professional Associations, have current agendas, pursuits and initiatives which were identified and considered. Now that the SSHRC PG has been approved, the Calgary team needs to revisit directions, methods, inputs, outputs and expectations, especially as the Montreal in-person convention approaches. Our goal for the summer is to explore such matters to present our site's work succinctly and clearly at the Montreal congress. Given the considerable number of partners comprising the Calgary site, and the complexity of research questions being examined, this work will take some time. As previously noted, we are planning 1:1 meetings between the research team and each partner, to open conversations around specific expectations and aspirations. These individual meetings will be followed by a Calgary site conversation, in the summer and in advance of the national convention in Montreal late August 2022.

Each of the researchers in our interdisciplinary team has research underway, and personal connections with our many partners, which will help to guide, inform and inspire our SSHRC Partnership Grant's overall planning, specific engagement, and research activities over Year One.

The research questions, as noted above, that we are exploring as a team in Calgary are:

- How can our understanding of design excellence be broadened, beyond a current focus on form and aesthetics, to also encompass **inclusion, sustainability and health?**

- How can we reconsider and redesign our spaces, places, buildings and neighborhoods to respond to our new broader and more equitable definitions and **understanding of quality in the built environment**?
- How do we contribute to **strengthening and advancing inclusion in Calgary** communities? And what role does **design** play, within this pursuit, to heighten inclusion, improve public health, and secure a more sustainable future?

These questions, which were developed as a team (across Summer|Fall 2021) in anticipation of our grant proposal submission, are seen as the starting point for conversations in Calgary around the actual conduct of the research. No doubt, as we discuss the project, and listen to other teams from across Canada, these questions will be reconsidered, revised, refined, supplemented and augmented. Our goal is to have much greater clarity, especially around methodological vectors, by the commencement of the Fall 2022 semester.

At present, from a methodological perspective, the Calgary team envisions a number of distinct yet related activities. These include the study and analysis of 'awarded' cases, several community conversations or partnership roundtables, and the conduct of several Common Integrative Seminars. Each of these three tactics offers opportunities to better understand Quality in the Built Environment. Each of these approaches demand their own strategies, and sensitivities, in their contributions to our overall progress towards understanding quality.

The case studies comprise, in our first consideration of twelve 'projects,' a series of awarded buildings, landscapes, urban initiatives, adopted policies and approved plans. Our research team has carefully selected projects to address a series of scales, disciplines and parameters. We contend that the lenses we use to study such cases, and the processes for selecting more cases moving forward, will need adjustment and refinement considering growing understanding as the 5-year project unfolds. We accept, at the present juncture, that many of the awarded cases under investigation are connected, in numerous ways, to power, privilege and the status quo. Certainly, our site has expectations that our research will uncover limitations in the ways we define, view, acknowledge and operationalize quality – and that the research needs to reveal deeper, more appropriate, ways of grasping and ensuring design 'excellence.'

For the Calgary situated project, TWO community conversations, or Roundtables, will be held in Year One - specifically one in Fall 2022 and one in Winter 2023. These Roundtables will intentionally be de-coupled from the specific 'awarded' cases being studied on the scholarly side of our enterprise. Rather than focusing on these higher profile cases, which we feel could inappropriately guide the discussion, roundtables will foster more open and 'safe' considerations of quality spaces and places within the city. The roundtables will center on our research questions, with structure, format and dialogue providing opportunities for all partners to bring forward examples and ideas drawn from their work in the community and in consideration of the distinctive needs of their constituents. In Year One we accept that we, as a team, will be learning to collaborate, will be listening to partners' aspirations, and will be exploring means + mechanisms through which to interrogate, analyze and otherwise understand 'quality'. The roundtables present unique opportunities for open, fair and inclusive conversations around our understanding of quality, the barriers that limit our abilities to realize quality,

and the identification of meaningful and successful built environments (regardless of formal design awards or other more 'official' acknowledgements of excellence). The third research activity, which again contributes to our greater understanding of quality in the built environment, is the development and delivery of Common Integrative Seminars (CIS). The Calgary site will prepare and offer, in conjunction with other SSHRC PG sites, two online seminars. The first seminar of the grant period, addressing Indigenous Ways of Knowing, will be presented in Fall 2022 in conjunction and cooperation with Laurentian University and the University of Manitoba. It is important to underscore that each of these three primary site activities, while being related, are viewed as discrete. Each will be developed in a manner that supports the goals and objectives for the particular undertaking. For example, our community conversations, or roundtables, need to be separated from the analysis of selected awarded building/landscape cases – in this way ensuring that the views and voices of all community partners are given weight and respect. While some partners are immersed and versed in the jargon and disciplinary nuances associated with the design professions, others see the built environment in quite different ways. Our approach to roundtables is to honor this diversity and invite unique and differing perspectives to be safely presented and afforded equal weight in our explorations + deliberations. The three research activities – namely case studies, roundtables and integrated seminars – will all proffer data and results that together will inform our steps, present new ways of understanding, and build our individual/collective positions on Quality. The Calgary site, our partners and the research team understand that this SSHRC PG venture is novel and largely unprecedented. As such, we accept that our planning, methods and activities will, by necessity, be taking shape and gaining definition as we proceed. As such, the present progress report is tentative, preliminary and subject to change.

## **6- Preliminary list of case studies:**

The following cases, presented as an initial 'working' list, were selected to cover a range of scales, disciplines, types and circumstances. Our research team debated the development of this list, acknowledging that conventionally 'awarded' projects carry with them underpinning based on power, privilege and the status quo. We believe that there are many lessons to be learned in analyzing 'conventional' architecture, landscape and urban projects, plans and policies. We also, and importantly, acknowledge that study of normative projects may be limited and limiting. To this end we are exploring means to also study cases that, while not official awarded are nonetheless meritorious, appreciated and enjoyed. The community conversations, or roundtables, to these ends present us with a key vehicle to stray beyond the 'safety' of awarded buildings to better grasp the qualities of the built environment that contribute to user satisfaction, place attachment and meaningful encounters. The following list is subject to change following dialogue with our partners and our participation in the Montreal Convention.

## SSHRC PG CALGARY SITE - POTENTIAL CASE STUDIES YEAR ONE

### PROJECT NAME

1	BOW BUILDING
2	CALGARY PUBLIC LIBRARY
3	SIMMONS BUILDING
4	MACKIMMIE COMPLEX REDEVELOPMENT @ UC
5	SHANE HOMES YMCA
6	KING EDWARD ARTS HUB
	ST. PATRICK'S ISLAND PARK
7	4TH AVENUE FLYOVER
8	WEST EAU CLAIRE PARK
9	PARK PARK
10	CITY OF CALGARY INDIGENOUS AFFORDABLE HOUSING POLICY
	WEST DISTRICT MASTER PLAN
11	
12	

### 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

At present the Calgary research team is busy determining the number and loads of student research assistants. We have both SSHRC funding, and internal dollars, to support students in our work. Our strategy at present, which is subject to change, is to equally distribute SSHRC annual funding among our four participating faculties (School of Architecture, Planning + Landscape; Faculty of Social Work; Faculty of Arts, and the Cumming School of Medicine). We intend to create a common workspace where student research assistants, regardless of major, can work together (under the guidance of scholars) on the research activities including, critically, the analysis of cases. The following are potential Research Assistant positions, noting SSHRC funding as well as additional internal institutional funding. Please note that most of our student hiring will happen after the Montreal Convention, once methodological clarity is heightened and as the academic year opens with the arrival of new students.

*A- Doctoral students:*

- Nooshin Esmaeili ([nooshin.esmaeili@ucalgary.ca](mailto:nooshin.esmaeili@ucalgary.ca)) – School of Architecture, Planning and Landscape (SSHRC \$5K) (plus SAPL \$) | Montreal Convention Student Representative
- Faculty of Social Work (SSHRC \$5K)
- Faculty of Arts (SSHRC \$5K)

*B- Master's students:*

- Cumming School of Medicine (SSHRC \$5K)
- School of Architecture, Planning + Landscape – MEdes, MArch, MPlan, MLA (SAPL \$)
- Faculty of Social Work (Graduate Practicum 400 hours)
- Faculty of Social Work (Graduate Practicum 400 hours)
- Faculty of Arts (FoA \$)

*C- Undergraduate:*

- Faculty of Social Work (Undergraduate Practicum 500 hours) • Faculty of Social Work (Undergraduate Practicum 500 hours)

**RESEARCH SITE: Université Laval**

PRELIMINARY RESEARCH PROGRAM FOR YEAR 1

*Date of submission: 2022 / 06 / 22***Researchers:**

- Jacques White, FAAAD, École d'architecture
- Pedre Ressano Garcia, FAAAD, École d'architecture
- Stéphane Roche, FFGG, Département de Géomatique
- Pierre Blanchet, FFGG, Sciences du bois et de la Forêt
- Roxane Lavoie, FAAAD, ESAD
- Michel de Blois, FAAAD, École de design

**Citizen groups:**

- (type A) Vivre en ville
- (type A) Conseil de quartier du Vieux-Limoilou
- (type A) Conseil de quartier Maizerets
- (Type A) Votepour.ca

**Cities and procurement:**

- (type B) Ville de Québec (Division de la planification stratégique du territoire)

**Professional Organizations:**

- (type C) Écobâtiment
- (Type C) AAPPQ (Association des architectes en pratique privée du Québec)
- (Type C) OAAQ (Ordre des Architectes du Québec)

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- 1- **Title of situated project:** *VOLET 4* : Processes & policies supporting the re-invention of built environment

## **Multiple voices, scales and criteria defining the quality of the built environment**

### **2- Summary of issues and research questions:**

**Situated project approach (Université ULaval) : « Multiples voix, échelles et critères définissant la qualité de l'environnement bâti »**

This situated project is part of the **Grappe thématique #4 « Processus & politiques supportant la ré-invention de l'environnement bâti »**

Question: In the context of revitalising the built environment, how can we deploy multi-scale design approaches and mixed methodologies to better define spatial and social coherence, sustainability and resilience?

- Context: Capitale Nationale, projet Innovitam
- Building type: Neighbourhood complex, mixed economic zone, innovation zone

Main themes/concerns: The concept of quality in the built environment through innovation processes, the resilience of intersecting perspectives and the coherence of intervention scales



within an innovation zone (actors and agendas). Beyond the economic perspective, capturing quality conditions in the design of the built environment (covering environmental, societal and health dimensions). Facilitating and promoting proximity between players and stakeholders, the attractiveness of cities, interstitial zones, the social landscape and heritage issues, population diversity, spatial and social justice issues, living environments for a diverse population.

- **Phase A1. (April 2022 to March 2023) Situation report:**

Document and inform about the issues/criteria/parameters that define multiple notions of quality of the built environment based on the study of innovation zones.

Initial inventory, **analysis and assessment/limitations of existing practices and concepts (in Quebec): documents, guides, protocols and processes for projects, innovation and public consultation.**

### **3- State of ethical approbation in your university:**

We officially submitted our application on June 13 with all the required documents, based on UdeM's CERAH application. Our file is currently under review, and we are awaiting their feedback with any questions or adjustments we may need to make. We should have further developments in the course of the summer.

### **4- Current state of exchanges with your partners:**

The partners have been contacted and informed of our approach. We're planning individual exchanges with them over the summer to formally establish their contributions and concerns. Our targeted InnoVitam project allows us to envisage cross-fertilization perspectives, as all these partners are already involved.

### **5- Summary of questions and current expectations by research site's partners:**

As we have not yet been able to have a general meeting with all our partners, it is difficult at this stage to specify all their questions.

### **6- Preliminary list of case studies:**

#### ***A- Existing case studies relevant to your situated project***

1. – Lake View Village
2. – Place des Canotiers, Québec
3. – Faubourg Québec
4. – Corridor de biodiversité St-Laurent
5. – Waterfront Toronto

***B- Potential case studies to be developed during year 1***

1. – Hôpital Universitaire CHU Québec
2. – Centre Social autogéré Maizerets
3. – Baie de Beauport
4. – Zones d'innovations exemplaires à travers le monde (Amérique et Europe principalement)
5. – Oslo, Copenhague, Nantes, Melbourne, etc
6. – etc.

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

We are currently recruiting and expect to complete the team by the end of the summer.

***A- Doctoral students:***

- Matheus Roberto Cabral
- + 1 autre

***B- Master's students:***

- 2 étudiants cet automne

***C- Undergraduate:***

- à déterminer

**RESEARCH SITE: University of Manitoba**  
 PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
 Date of submission: 2022 / 06 / 22

**Researchers:**

- Shauna Mallory-Hill, Ph.D. ([s.mallory-hill@umanitoba.ca](mailto:s.mallory-hill@umanitoba.ca))
- Mercedes Garcia-Holguera, Ph.D. ([Mercedes.GarciaHolguera@umanitoba.ca](mailto:Mercedes.GarciaHolguera@umanitoba.ca))
- Shawn Bailey, Assistant Professor ([shawn.bailey@umanitoba.ca](mailto:shawn.bailey@umanitoba.ca))
- Shirley Thompson, Ph.D. ([S.Thompson@umanitoba.ca](mailto:S.Thompson@umanitoba.ca))
- Sylvia McAdam, L.L.B, University of Windsor ([sylvia.mcadam@usask.ca](mailto:sylvia.mcadam@usask.ca))

**Citizen groups:**

- Aboriginal Education Research Center
  - Alex Wilson, Ph.D.
- One House Many Nations
  - Mylan Tootosis ([mmt655@mail.usask.ca](mailto:mmt655@mail.usask.ca))
- Mino Bimaadiziwin
  - Shirley Thompson, Ph.D. ([S.Thompson@umanitoba.ca](mailto:S.Thompson@umanitoba.ca))

**Cities and procurement:**

- Opaskwayak Cree Nation
  - Alex Wilson, Ph.D. ([alex.wilson@usask.ca](mailto:alex.wilson@usask.ca))
- Big River First Nation
  - Rose Whitefish ([pridejoseph@hotmail.com](mailto:pridejoseph@hotmail.com))
- Garden Hill, Wasagamack, York Landing, Brokenhead
  - Shirley Thompson, Ph.D.

**Professional Organizations:**

- TBA, Manitoba Association of Architects

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 1- Title of situated project:

## Quality in Architecture: Community-Led Pathways to Affordable & Sustainable First Nation Housing

2- Summary of issues and research questions:

The project has two main streams of investigation with related, but unique, research questions.

Stream 1: Roadmap to Sustainable Housing Design (Energy independence)

1. What are the perspectives, world views, beliefs and values that non-indigenous designers and academics bring to indigenous design collaborations?
2. How can we build effective communication skills, prioritize building relationships and indigenous ways of knowing in collaborative design, materials innovation, and performance evaluation?

3. What are the barriers to the design and building of affordable and sustainable housing faced by First Nation Communities?
4. What can we document and learn from existing case-studies, including ongoing efforts by OHMN and Mino Bimaadiziwin, that can feed forward into present and future collaborative design and building processes in FN communities?

#### Stream 2: Roadmap to Material Independence

1. What are the perceptions that indigenous communities have about material quality, and how biomaterials fit in these perceptions?
2. What socio-cultural barriers prevent development and implementation of biomaterials in remote communities?
3. How can we re-define material quality standards because of indigenous co-creation processes? What extended ramifications emerge from these processes? How do these affect current design methodologies?
4. What are the implications of re-defining materials quality under the lens of indigenous knowledge in the context of the housing crisis? How can biomaterials local production help support resources independence for remote communities?

### **3- State of ethical approbation in your university:**

The ethical probation has been submitted on 22<sup>nd</sup> June, 2022. University of Manitoba Research Ethics Board (REB) typically requires three to six weeks to review. The next meeting of the REB2 is on 6 July 2022 so the earliest date of certification would be first week of August 2022. The REB does not meet again until September (submission deadline 1 Sept 2022).

### **4- Current state of exchanges with your partners:**

We have had two meetings with the research/citizen/community team, primarily for the purpose of completing the REB application. We have circulated the *Instructions for Partner's* video to all partners, along with the information about the Q&A sessions.

We have lost our MAA representative and will need to establish who the replacement person will be.

We will be travelling to meet with FN community representatives in-person on 22-25 June 2022.

### **5- Summary of questions and current expectations by research site's partners:**

1. We are still confused about the current project year/deliverables. Did it begin 1 April 2022?! It will be difficult to get ethics approval and hire students before September 2022.
2. We would like to see some options for a hybrid in-person convention that would allow some remote participation of stakeholders who cannot travel for whatever reason (generally financial).

3. We would like to highlight the request for childcare again. It might be difficult for some participants to attend the in-person conference without the possibility of childcare.

## 6- Preliminary list of case studies:

### **A- Existing case studies relevant to your situated project**

1. – Tiny House Project / Nutana Project – OHMN, Making the Shift Projects
2. – Demonstration Home – EDIT prize winner. OCN
3. – Garden Hill/Wasagamack – Design-build
4. – Design Trailer/House Studio
5. – Dakota Passiv House Project

### **B- Potential case studies to be developed during year 1 (Max. 12)**

In addition to the case-studies identified above, the following award winning case-studies are being suggested at this point

1. Indigenous Ecological Knowledge: A Blanket Of Warmth Macpherson Engineering Inc. – Technical Award – Insulation design solutions for First Nation Housing Stock
2. “The Confluence” — a living building in southern Alberta
3. Hinterhouse: La Conception, Québec
4. Habitations Saint-Michel Nord / Saia Barbarese Toupouzanov Architectes, Montreal Canada.
5. Les Rochers, La Shed
6. House in Minohshinmachi - Live in the city of boundary
7. -

## 7- Preliminary list of research assistants (even if the contracts have not yet been signed):

### *A- Doctoral students:*

- Kanza Rauf ([raufk@myumanitoba.ca](mailto:raufk@myumanitoba.ca))

### *B- Master's students:*

- TBA

### *C- Undergraduate:*

- TBA

**RESEARCH SITE: Athabasca University**  
PRELIMINARY RESEARCH PROGRAM FOR YEAR 1  
*Date of submission: 2022 / 06 / 22*

**Researchers:**

- Josie Auger ([jauger@athabascau.ca](mailto:jauger@athabascau.ca))
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- Gina Martin ([gmartin@athabascau.ca](mailto:gmartin@athabascau.ca))
- Veronica Madonna ([vmadonna@athabascau.ca](mailto:vmadonna@athabascau.ca))
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- Tobias Wiggins ([twiggins@athabascau.ca](mailto:twiggins@athabascau.ca))

**Citizen groups:**

- Black Architects and Interior Designers Association (BAIDA)
  - Shane Laptiste ([shane@laptiste.ca](mailto:shane@laptiste.ca))
- Building Equity in Architecture Calgary
  - Lindsay Andreas ([beapcalgary@gmail.com](mailto:beapcalgary@gmail.com))
- Building Equity in Architecture Toronto
  - Maya Desai ([mdesai@ocadu.ca](mailto:mdesai@ocadu.ca))

**Cities and procurement:**

- Town of Athabasca, Rob Balay (Mayor) ([mayorbalay@athabasca.ca](mailto:mayorbalay@athabasca.ca))

**Professional Organizations:**

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**1- Title of situated project:**

## **Regenerative Communities**

**2- Summary of issues and research questions:**

This Project Theme would explore the re-invention of Canada's Built Environment through the environmental, economic and social regeneration of rural and regional communities. As the International Living Future Institute has suggested, we will help create communities that are "Socially just, culturally rich and ecologically restorative," but we would add that these communities should also be healthy (for the body and mind) and economically fair and sustainable. Over the course of 5 years, this research site will embark on a situated project to engage over 5000 students and community stakeholders in a series of activities to re-invent the regional and rural built environment.

The key research questions are designed to address the key tenets of regeneration as expressed above:

1. Considering the need for affordable housing in First Nations Communities in Northern Canada, can inclusive design and culturally relevant innovation contribute to empowering communities?  
Can community-based infrastructure allow for better social integration in rural communities?
2. What community-based infrastructure and services are necessary to support a variety of gender, race, culture and economic perspectives?

In addition we would like to address the related questions of:

1. How can all types of buildings be retrofitted to reduce energy consumption and costs, and create healthier places to live and work?
2. What forms of energy transition in rural areas will enhance ecological sustainability, social well-being and environmental justice?
3. How do we learn from Indigenous and traditional knowledge of the land?
4. How can communities develop new revenue streams that build on their existing assets and create circular, local economies?

### **3- State of ethical approbation in your university:**

A Certificate of Ethical Approval was issued by Athabasca University's Research Ethics Board on June 21, 2022.

### **4- Current state of exchanges with your partners:**

We held a charette with our partner, the Town of Athabasca on June 16, 2022. We have also held a charette with Fort Macleod on June 20, 2022. On May 20, 2022 we held a Needs Assessment with the Kehewin Cree Nation. On June 21, 2022, we held a Needs Assessment session with the Samson Cree Nation.

In the following months we will also hold the following sessions:

- Sunde – Needs Assessment and Charette
- Samson Cree Nation – Charette
- Kehewin Cree Nation – Charette.

### **5- Summary of questions and current expectations by research site's partners:**

Based on the exchanges listed above, it is evident that the lack of affordable housing is the key issue that cuts across all of regional and rural Alberta (and in all probability across all of Canada). This is, however, not just a question of construction but also an economic one in terms of how housing can serve as a catalyst for financial sustainability (through job and business creation).

### **6- Preliminary list of case studies:**

#### ***A- Existing case studies relevant to your situated project***

1. Kehewen Cree Nation
2. Samson Cree Nation
3. Town of Athabasca
4. Fort Macleod
5. Sundre

***B- Potential case studies to be developed during year 1***

1. Cooperative Housing
2. Passive Systems for Regenerative Design
3. Active Systems for Regenerative Design
4. Wildfire Housing Project
5. Equity Inclusion and Diversity (Powered by Artificial Intelligences from Ametros Learning)
6. Housing in Mature Urban Neighborhoods -a Design and Business Model for Gentle  
Densification

**7- Preliminary list of research assistants (even if the contracts have not yet been signed):**

*A- Doctoral students:*

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*B- Master's students:*

- 
- 

*C- Undergraduate:*

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