

CARLETON UNIVERSITY STRATEGIC RESEARCH PRIORITIES SUMMARY 2014

OBJECTIVES

The key objectives and strategic actions of the plan will:

- position Carleton as a leader in applied and fundamental research;
- contribute to the evolution of sustainable communities;
- build capacity and recognition of the excellence of our researchers more broadly;
- build connections with the private and public sector and not-for-profit partners; and
- maximize our impact in scholarly forums and through knowledge mobilization.

STRATEGIC RESEARCH AREAS

The Strategic Research Plan identifies a common focal point that enables us to highlight our strengths and provides a basis for action. Specifically, in alignment with the University's Strategic Integrated Plan, Carleton's Strategic Research Plan will focus its research, training, and outreach priorities toward building **Sustainable Communities**.

To this end, we have identified four domains or points of connection, involving:

- People: the human condition and evolving societies;
- Place: changing environments;
- Technology: foundational sciences and technological innovation; and
- Policy: policy, governance, and economic activity.

By defining a common platform, we are highlighting Carleton's academic and research strengths that contribute to building sustainable communities, as well as providing an opportunity for our researchers to share their collective expertise to demonstrate leadership and work together moving forward.

The key is to foster points of connection across particular problem areas, and to articulate our activities and vision in a manner that highlights the relevance of our work to building a sustainable, healthy, and prosperous society for today and for future generations.

This entails attention to who we are as people, the environment or places in which we exist, the science and technologies that provide the basic tools for work, life, and leisure, and the social, cultural, and economic practices that govern our behaviors as individuals and as a society.

The research dimensions of connection

Carleton's researchers demonstrate excellence in many areas of scholarship and outreach. The risk in defining specific areas of excellence is that this creates boundaries, as well as a perception that unspecified perspectives and paradigms are excluded.

In fact, research clusters shift over time as problems evolve, and areas that aren't explicitly listed often operate at the intersections, bringing approaches together and creating the bridges that makes interdisciplinary work possible. In this regard, these less visibly obvious areas of scholarly activity are integral to the success of collaborative approaches, as they shape the dialogue and increase the capacity for successful engagement and uptake across disciplines and sectors.

Carleton recognizes that to take full advantage of our strengths, we need to make room for a plurality of perspectives and enable the flexibility for different configurations of expertise to come together depending on the problem definition, the solutions being sought, and communities being affected.

To this end, although we have identified four broad areas of research, they are intended to represent intersecting dimensions that contribute to building Sustainable Communities. Some research questions will fall clearly along a single dimension. Many research questions will be multi-dimensional; depending on the problem defined and the solution sought, a researcher or team may be working along all four dimensions at once, or the emphasis might shift over the course of a project.

Four Dimensions of Research Contributing to Sustainable Communities

1) The human condition and evolving societies

Building sustainable communities requires a nuanced understanding of the people who create them. There are variations between and within communities that provide a sociocultural basis that defines the issues with respect to cultural expression, heritage, current concerns, cross-generational and cross-cultural communication and relationships, norms and values, acceptable practices and goals, and visions of the future. Carleton has many programs of research that involve an understanding of people and how they relate to one another that are relevant to our efforts to build sustainable communities.

2) The changing environment

Sustainable communities are wholly dependent on the health of the planet. This includes the natural and physical environments in which we work and live, along with how we interact with and interpret these spaces. How we develop and protect our resources, and how we change the conditions of the planet, can have short and very long-term implications for generations to come.

3) Foundational sciences and technological innovation

Existing and emerging technologies are increasingly altering our capacity as individuals and as a society. They have already altered how we are related to one another, shifted the boundaries between work and home, influenced mortality and provided opportunities for independent living. The relationship between humans and our environment is changing fundamentally as technologies evolve. Their implications for the future, and our capacity to maximize how technology can be used to build a thriving society, are pivotal to any comprehensive approach to building a sustainable future.

4) Policy, governance, and economic activity

Policy is a broad tool that encompasses issues of accountability and governance and is critical for providing a framework for how people connect to one another, how responsibility and accountability for action is assigned, and for enabling action. Policy in this context is the articulation of how people need to govern themselves, how they are expected to interact with one another in a functional society, and how they interact with the environment in which they live in order to secure a sustainable future.

Carleton's emphasis on policy is increasingly cross-sectoral, focusing on the public, private and not-for-profit sectors.

GENDER REPRESENTATION

Carleton CRCs are currently exactly representative of the numbers of female tenure and tenure-track positions available nationally (measured by SSHRC vs. NSERC vs. CIHR related Chairs). Carleton University is committed to equity and has put in place active measures to ensure that equity considerations are part of its normal recruitment and selection procedures, which includes faculty recruitment for the CRC program.

ALLOCATION OF CRCs BY STRATEGIC RESEARCH AREA

<i>Dimension</i>	<i>Tier 1</i>	<i>Tier 2</i>	<i>Total</i>
The human condition and evolving societies	3	5	8
The changing environment	1	5	6
Foundational sciences and technological innovation	3	4	7
Policy, governance and economic activity	2	0	2
<i>Total CRCs</i>	9	14	23

INSTITUTIONAL SUPPORT FOR THE CRC AND CFI PROGRAMS

Carleton University works closely with faculty to provide the support necessary to maximize the research potential of individual researchers and research groups. Carleton has made a commitment to support its Canada Research Chairs through the creation of a strong and focussed research environment.

The university supports CRCs with administrative support on an ongoing basis, and provides the required operational support. A modest university cash contribution towards research is traditionally made to CRCs on an annual basis. An additional major area of support is for students (e.g. graduate scholarships, extra TA and RA positions for working in a CRC program). The university routinely attempts to match pledges from donors through its Advancement Services program, and also assists with interaction between a CRC and their industrial partners, including fundraising and commercialization, where appropriate. Carleton’s location in Ottawa allows the university to interact with a large variety of federal government departments and national laboratories. CRCs are generally allocated a substantially reduced teaching load.

Carleton considers the use of CFI funding, and especially the pre-allocated John R. Evans Leaders Fund (JELF), to be a vital tool used to help recruit and retain first class researchers at the university. New faculty hires whose research programs are an excellent fit with one or more of the university’s themes may be considered for CFI JELF program, either to complement CRC funding, or as a stand-alone grant. Established researchers whose laboratories may need a technology refresh may also be considered for CFI funding; faculty members who are renewing their CRCs for a second or third term are often considered as CFI applicants.

Carleton University continually identifies research synergies and potential for collaboration between researchers at the university, between other universities and the public and private sectors locally, nationally and internationally by fostering and managing relationships between Carleton University and research partners and by networking with other universities, public and private sector personnel to promote Carleton research strengths and directions.

ASSESSMENT OF RESEARCH PERFORMANCE & OBSERVABLE OUTCOMES

The university uses a number of metrics to evaluate its research performance, including the performance of CRCs. These metrics include:

- research funding/expenses;
- research outputs (journal articles, conferences etc);
- numbers of HQP of various levels (undergraduate research, master's, PhD and Post Doctoral Fellow, Visiting Scholar positions);
- level of industry interaction (supported contracts, adjunct professors appointed from industry positions, etc);
- interaction and joint research with federal government labs and departments
- degree of technology transfer (invention disclosures, patents, royalties paid to professors)

Carleton attempts to measure the degree of interdisciplinary research that is undertaken both within the University and with outside partners. An increase in cross disciplinary research is regarded as fundamental progress towards the university's research goals.

PLANNING AND APPROVAL PROCESSES

The allocation of CRCs at Carleton is the responsibility of the Vice-President (Research and International) (VPRI) who is assisted by the Deans and Chairs of the various university faculties and departments, and by the Vice-President (Academic) who is responsible for new faculty hires. New faculty who are to be nominated as CRCs will be approved by the VPRI before an offer of employment is extended to them.

New CRCs and Tier II CRCs that become free after two terms are always allocated according to the university's current strategic priorities.

The Carleton University CFI JELF allocation is managed centrally by the VPRI's office. As with CRC allocations, the VPRI consults at a senior level to ensure that projects of strategic importance are given the opportunity to apply to CFI for funding. Proposed projects must be in line with the university's strategic requirements before approval to apply is given.

The Strategic Research Plan is developed by the VPRI, and takes into account the university's overall strategic plan as well as input from a large number of stakeholders, Carleton University research Centres, and internal and external advisors. Individual faculties also produce strategic research plans that are specific to the work being conducted in those faculties, although many research endeavours are now planned to include an interdisciplinary, inter-faculty approach.