

SUMMARY

STRATEGIC RESEARCH PLAN

CANADA RESEARCH CHAIRS PROGRAM



Institut national
de la recherche
scientifique

Key objectives of the strategic research plan

INRS is a graduate research and training institution whose mission is to carry out scientific activities based on specific key issues in order to contribute to the social, cultural, and economic development of contemporary society. At INRS, research takes place in four centres and five joint research units focusing on major themes that are interdisciplinary and intersectoral by nature.

Strategic research planning at INRS involves three interconnected phases. The first is **institutional strategic planning**. This is followed by scientific programming for each centre that is organized around the centre's major interdisciplinary fields of interest, and more specifically the issues and needs identified by the industry, the community, and specialists in the fields. Finally, the institutional scientific program adds a scientific layer to the institution's strategic plan, uniting and elevating the centres' scientific programs to provide a global development vision. All of the scientific programs resulting from this approach can be found (in French) **here**.

The most recent strategic planning exercise considers INRS's current context, in which the faculty is undergoing significant renewal and recruitment efforts. This puts support for the career development of young researchers and the principles of equity, diversity, and inclusion (EDI) at the forefront. As part of the planning process for the Canada Research Chairs (CRC), INRS is broadly aiming for a return to the original distributions between tiers and funding agencies when it comes to the allocation of chairs through the CRC program (CRCP). This will improve flexibility and agility in the pursuit of EDI goals, create better balance, and allow INRS to better support its junior faculty.

Priority areas for research and training

The 2021–2025 institutional scientific program identifies seven major orientations that guide the actions to be taken in pursuit of INRS’s mission. It does so by specifying both the focuses of scientific activities and the conditions and resources to be established.

Orientations 1 and 2 define the institutional priorities for research and training. As for the priority issues, they come from the environment in which INRS operates and are aligned with its mission of economic, social, and cultural development for Quebec. These issues are consistent with the centres’ scientific programs and research focuses. The thematic focuses of the institutional program point to areas of development for the entire institution; they are identified based on the internal capacity in terms of expertise and infrastructure and the presence of a favourable window of opportunity. The planning of scientific activities takes into account all of these dimensions (Table 1).

SCIENTIFIC ORIENTATIONS	1	Encouraging scientific activities based on priority issues
	2	Strengthening research and innovation around promising thematic focuses
	3	Fostering interdisciplinary, intersectoral, inter-centre, and inter-institutional collaboration
	4	Integrating reconciliation approaches, EDI, and consultation into research and innovation activities
	5	Demonstrating leadership in responsible research
	6	Supporting excellence in the training and development of scientific personnel
	7	Enhancing knowledge transfer and mobilization capacity

Table 1. Summary of issues and thematic focuses

PRIORITY ISSUES		THEMATIC FOCUSES					
1	Changing relationship between society and science	Environment and ecosystems	Sustainable food systems	Human and animal health	Living environments and systems	Energy transition	Enabling technologies, data, and digital identity
2	Conservation and development of land and natural resources						
3	Response and adaptation to climate change						
4	Community well-being and fighting against social inequalities						
5	Digital and industrial transformations						

Gender representation in Canada chair appointments and monitoring progress

INRS recognizes that people from equity-seeking groups, including women, racialized minorities, people with disabilities, Indigenous people, and people from LGBTQ2+ communities face systemic barriers. INRS is committed to taking concrete actions to eliminate these barriers, as described in its **EDI Action Plan** (available in French only) as part of the CRCP.

Chair allocation strategy

INRS recognizes that CRCs must benefit society as a whole. When a CRC contributes to a faculty member’s development, it is only as valuable as the benefit to the institution in achieving its core mission. INRS has a policy on research chairs focused on the collective interest. It regulates all types of chairs, including CRCs. The CRCs are a valuable collective lever, and every effort is made to award these CRCs to exceptional candidates, who receive substantial institutional support. Whether it involves recognizing them as pillars of the scientific program or concentrating research resources and institutional funding and canvassing efforts, INRS is eager to devote its energy to supporting its CRCs and their holders throughout all of its institutional activities. INRS favours newly established faculty members when it comes to equipment acquisitions. In fact, the institutional quota of the Canada Foundation for Innovation’s John R. Evans Leaders Fund is reserved for them, whether they are CRC chairholders or not.

CRCs are awarded in key areas of the INRS scientific program (Table 2) that are collectively determined and strategically supported by management. These chairs are not automatically renewed internally; instead, renewals are evaluated and the number of CRCs per centre is determined according to the sector’s performance, as well as EDI factors. INRS has used several adaptive measures to meet its CRCP equity targets over the past three years.

Table 2. CRC* distribution grid by issues and focuses in the 2021–2025 institutional scientific program. For chairs associated with more than one agency, we have identified its primary area in **BOLD** and its secondary area(s) in **ROMAN** type.

ISSUE	FOCUS					
	Environment and ecosystems	Sustainable food systems	Human and animal health	Living environment and systems	Energy transition	Enabling technologies, data, and digital identity
Improving the relationship between society and				SSHRC 2		SSHRC 2
Developing Quebec’s land and natural resources	NSERC 2 NSERC 1		NSERC 2		NSERC 2	
Response and adaptation to climate change	NSERC 1 NSERC 1			SSHRC 2 NSERC 1		
Improving community well-being and fighting against social inequalities			CIHR 1 NSERC 1	SSHRC 2		NSERC 2
Digital and industrial transformations					NSERC 1	NSERC 1 NSERC 1 SSHRC 2

*CRC occupied as of November 18, 2021



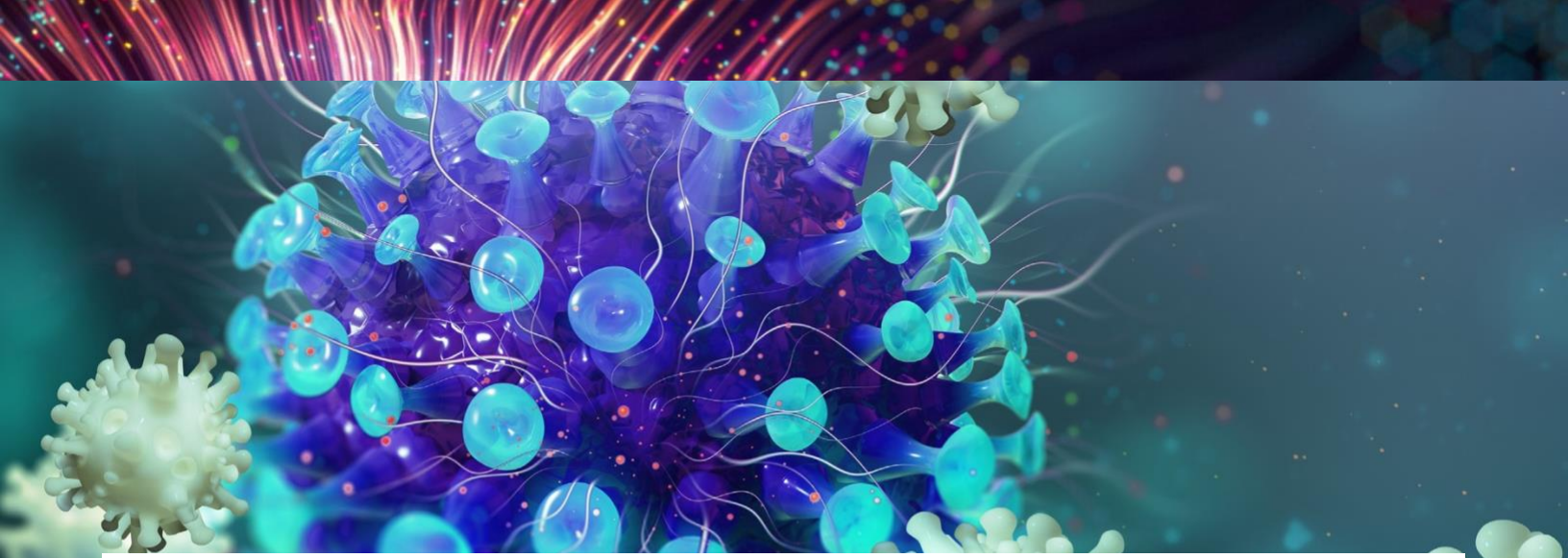
The strategic choices in the allocation of CRCs can be summarized as follows:

- New CRCs are awarded to INRS centres based primarily on the average of the grants those centres have received from federal agencies over the past three years.
- The research area is ultimately decided by executive management, but recommended by the centres' faculty assemblies based on the centre's five-year scientific program, as well as the institutional scientific program and the strategic plan.
- For external recruitment, the call for candidates is published in major journals and newspapers and announced through networking among members of the institution. For internal recruitment, the call for candidates is sent to the entire faculty of the centre receiving the CRC. This stage casts a wide net and aims at excellence.
- INRS also takes its EDI targets into account when assigning CRCs.

By 2025, it is expected that the flex moves will be reversed, allowing the institution to regain the flexibility to meet the **proposed new targets** by 2029 if necessary. With the faculty renewal in our four centres and the recent creation of joint research units, INRS is looking at the possibility of offering a larger proportion of CRCs to early-career researchers. Additionally, over the next few years, CRCs will be attributed with a view to better covering all of the identified issues and thematic focuses while remaining closely aligned with the centres' programs.

Development of research and research training

INRS sets itself apart from traditional universities by organizing itself by major interdisciplinary strategic sectors rather than disciplines. This allows it to stand out both in the design and execution of research projects and in the training it offers graduate students. The institution also functions in a unique way. Professors work exclusively for the institution, which fosters teamwork, supports a concerted effort to share research resources, and guides training orientations by focusing all energy on institutional development for the benefit of society. What's more, it allows students to benefit from the full attention of the faculty. In addition, the research laboratories are fully shared, with each laboratory being managed and developed according to a business plan that is periodically reviewed by the institutional authorities. The CRCs are part of this multidisciplinary framework; they help build institutional research capacity and high-calibre research training to make INRS an essential academic research institute for partnerships and the training of scientific leaders.



Planned collaboration between institutions and sectors

Since its inception, INRS has always encouraged its research and training centres or sectors to collaborate with its main partners in the academic, public, and private sectors. INRS is already working with more than a hundred public and private partners in Quebec, Canada, and beyond in pursuit of innovation. The institute's objective is to expand and enhance these partnerships to become a key player in research and development in Canada. To do so, it draws on some of its greatest strengths: its outstanding faculty, highly qualified research staff, and driven students and alumni, all of whom are making their mark in major strategic sectors for Quebec. It has also developed several structures in pursuit of this goal. In particular, it has recently formed five joint research units with regional institutions to create community-oriented centres of expertise. It has also reworked its **policy on the recognition of emerging research clusters**, which aims to encourage concerted research efforts while promoting INRS's expertise in order to position these clusters in the competitive arena formed by the funding programs of the granting agencies. The CRCs are involved in these strategic actions, as the chairholders play an active role in collaborative research initiatives and synergies.

Evaluation of progress

INRS tracks the results of its strategic planning and scientific programming by undertaking an annual planning process while monitoring actions and indicators. The evaluation process for individual members of the faculty and the scientific community feeds into some of these indicators. One goal of the evaluation process is to verify the achievement of the objectives set by the scientific community. To that end, an annual report is made to the institution's board of directors. The Scientific Council and the Studies and Research Council are also kept closely informed about planning, developments, and results. INRS intends to continue this process while paying special attention to the performance of CRC holders.

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