Institut national
de la recherche
scientifique

SUMMARY

STRATEGIC RESEARCH PLAN 2025-2030

Canada Research Chairs Program

INRS

The Institut national de la recherche scientifique (INRS) is an academic institution dedicated exclusively to graduate research and training in strategic areas of importance to Quebec. Since its creation in 1969, it has pursued its mission of actively contributing to Quebec's economic, social, and cultural development. Its organizational structure is based on five research centres: Armand-Frappier Santé Biotechnologie (AFSB), Eau Terre Environnement (ETE), Énergie Matériaux Télécommunications (EMT), Ruralités durables (RD; a centre currently being established), and Urbanisation Culture Société (UCS). The INRS community comprises approximately 1,500 people, including students, postdoctoral fellows, faculty members, and staff.

The 2025-2030 Strategic Research Plan for the Canada Research Chairs (CRC) Program builds on the Institutional Strategic Plan, the research centres' scientific programs, and the Institutional Scientific Program. It also reflects the institution's commitments to equity, diversity, and inclusion (EDI) and sustainable development (in French only). The complete strategic planning process is defined in INRS Regulation 4 - Planning (in French only).

Key Objectives of the Strategic Research Plan

INRS uses the Canada Research Chairs Program as a strategic development tool to: consolidate and enhance scientific excellence; attract and retain internationally recognized researchers; support institutional strategic areas; maximize the societal impact of research; strengthen the training of highly qualified personnel; and increase the institution's international profile.

Priority Research Areas

Canada Research Chairs will support the development and strengthening of the five strategic focus areas identified in the 2025-2030 Institutional Scientific Program (in French only):

1. **Socio-ecological Transitions**: Supporting the social, environmental, and economic resilience of communities, adaptation to change, and the regeneration of ecosystems
2. **Healthy Live(s)**: Integrating human, animal, and environmental health for a systemic understanding of health and informed decision-making
3. **Polycrises**: Transforming the complexity associated with multiple crises into drivers for action to ensure community resilience and respond quickly and sustainably to the combined effects of crises
4. **Photonics and Quantum Technology**: Catalyzing innovation in photonics and quantum technology for purposes of technological development and transfer in the fields of (cyber)security, energy, advanced manufacturing, health, and telecommunications
5. **Science Governance and Knowledge Mobilization**: Steering science to effectively deploy knowledge, connect systems, foster innovation, and transform research results into practices, policies, and technologies

These strategic focus areas build on existing expertise within the research centres (Table 1), joint research units, and major institutional projects. They foster interdisciplinarity and collaboration across the natural sciences, health sciences, engineering, and social sciences.

TABLE 1: INSTITUTIONAL STRATEGIC FOCUS AREAS AND RESEARCH THEMES OF THE CENTRES*

	Priority Issues	Research Themes	Socio-ecological Transitions	Healthy Live(s)	Polycrises	Photonics and Quantum Technology	Scientific Gov. and Knowledge Mob.
AFSB	Interdependencies in Human, Animal and Environmental Health	1. Microbiome and Environment	●	●			●
		2. Host-Pathogen Interactions		●			
		3. Population Health and Anti-Doping		●	●		●
		4. Toxicology and Environmental Health		●	●		
	Prevention, Detection, and Responses to Health Challenges	5. Rare Diseases and Cancer		●			
		6. Diagnostic, Therapeutic, and Biotechnological Innovations	●	●		●	
EMT	Technological Sovereignty	1. Sustainable Energy, Sources and Uses			●	●	●
		2. Nanomaterials and Advanced Manufacturing Processes	●			●	
	Security and Defence (ICT)	3. Ultrafast Science and Photonics				●	
		4. Telecommunications			●	●	
		5. Biotechnology	●	●		●	
	Decarbonization	6. Numerical Modelling of Physical and Cognitive Systems		●	●	●	●
ETE	Climate Change and the Socio-ecological Transition	1. Geosciences for the Future			●	●	
		2. Hydroclimatology	●		●	●	●
		3. Integrated Ecosystem Management	●	●		●	●
	Anthropogenic Pressures and Pollution	4. Environmental Technologies	●	●		●	
UCS	Inequalities, Social Inclusion and Participation	1. Anti-Racism and Decolonization			●		
		2. Reconfiguration of Cultural and Political Agency	●		●		●
	Transformation in Cultural, Digital and Socio-economic Spheres	3. Digital Transformations of Knowledge, Relationships, and Practices			●	●	
		4. Imaginaries and the Politics of Everyday Life	●				●
		5. Crises and Socio-Ecological Transformations	●	●	●		
		6. Production and Reproduction of Inequalities		●	●		●

* These are targeted themes in which individual expertise is concentrated, without excluding researchers whose work is primarily aligned with other themes. The RD Centre does not appear in this table because its first faculty members took up their positions on June 1, 2026. Based on priority issues identified through a Quebec-wide consultation and needs-analysis process, its initial scientific program rests on the pillars of empowering rural populations, infrastructure and community resilience, governance, and resource sustainability. These issues are: Coexistence of Land Uses, Inequities in Services, and Sustainable and Preventive Rural Planning; and Technological, Social, Cultural, and Political Transformations of Sustainable Communities. They define the Centre's mission and are embodied in the following four themes: 1. Physical Planning and Rural Territorial Balance; 2. Technological Adaptation in Rural Contexts; 3. Health and Social Services in Rural Areas; 4. Vitality of Rural Living Environments.

Equity, Diversity, and Inclusion

INRS recognizes the existence of systemic barriers affecting several equity-seeking groups, including women, Indigenous people, racialized minorities, persons with disabilities, and people of LGBTQ2+ communities. To continue promoting equitable representation within the CRC Program and throughout the institution's activities, the *2025-2030 Action Plan for Equity, Diversity, and Inclusion* identifies 57 actions around three areas: 1- support the integration of practices that comply with EDI principles into the institutional culture of INRS; 2- leading major strategic initiatives to improve EDI by eliminating barriers to admission, hiring, and career progression, supporting the well-being of community members, and maintaining a zero-tolerance approach to inappropriate behaviour; and 3- evaluate the impact of actions undertaken and highlight the results.

Within the CRC Program, competitions will remain transparent, widely advertised, and accompanied by measures designed to mitigate bias in the evaluation of applications.

Strategic Use of Canada Research Chairs

INRS considers CRCs a major lever for scientific and institutional development. By 2030, their allocation will aim to achieve better coverage of the five strategic focus areas while ensuring close alignment with the scientific programs of the centres (Table 2).

The guiding principles for the allocation of CRCs are as follows:

- allocation of new CRCs according to the demonstrated research capacity of the centres, particularly on the basis of federal research funding secured;
- selection of research fields based on recommendations from faculty assemblies and institutional priorities;
- allocation exclusively to faculty members already in position, since recruitment at INRS is based entirely on research capacity, thereby ensuring the creation of a pool of competitive internal candidates; an external recruitment process may be initiated if the institution is unable to award a chair to an internal candidate, either because the quality of internal applications is insufficient or in order to meet its equity, diversity, and inclusion targets;
- competitive assessment of chair renewals: CRC holders must apply on the same basis as other candidates;
- systematic consideration of EDI objectives.

INRS reserves its institutional allocation under the Canada Foundation for Innovation’s John R. Evans Leaders Fund primarily for new faculty members to support the acquisition of equipment, whether or not they hold a CRC.

TABLE 2: DISTRIBUTION* OF CANADA RESEARCH CHAIRS BY STRATEGIC FOCUS AREA, TIER, AND COUNCIL

Institutional strategic areas	Tier 1	Tier 2
Socio-ecological Transitions	**NSERC / NSERC / CIHR** NSERC / NSERC	**NSERC / NSERC** NSERC
Healthy Live(s)	**NSERC / CIHR** NSERC / CIHR	NSERC
Polycrises	**NSERC / SSHRC** NSERC	**NSERC / SSHRC**
Photonics and Quantum Technology	**NSERC**	**NSERC / NSERC / NSERC**
Science Governance and Knowledge Mobilization	NSERC / SSHRC	SSHRC

* Distribution of active CRC as of September 15, 2026.

Note: when a chair's research program falls within more than one strategic focus area, the primary area is shown in bold and the secondary area or areas in regular type.

Research and Training Development, Collaborations, and Partnerships

INRS differs from traditional universities through its interdisciplinary organization around major strategic sectors, a distinctive feature reflected both in the design and conduct of research projects and in the education offered to master's and doctoral students. Its institutional operating model is equally distinctive. Faculty members devote their professional service exclusively to the institution, which fosters teamwork, requires coordination in the sharing of research resources, and guides educational priorities by concentrating all efforts on institutional development for the benefit of society.

Since its creation, INRS has consistently made cross-sectoral collaboration a priority. The institution and its faculty members have numerous partners across the academic, government, private, and community sectors. Indeed, each year INRS works with nearly 150 partners in Quebec, Canada, and internationally to foster innovation. INRS now aims to expand and deepen these partnerships to become a key national player in research and development. Among the mechanisms established by INRS for this purpose is the creation of five joint research units that, in partnership with regional institutions, generate locally anchored hubs of expertise. CRCs contribute to these strategic INRS initiatives through the active role of chairholders in collaborative research initiatives and synergies.

Assessment of Progress

The INRS Executive Committee monitors progress on the Strategic Plan and the Institutional Scientific Program at least twice a year, as well as the associated annual reporting to the institution's Board of Directors. In addition, the faculty assemblies of each centre annually prepare and adopt a progress report on the achievement of objectives related to their respective scientific programs, along with an activity plan for the following year. The Scientific Commission annually assesses each centre's contribution to the achievement of institutional objectives and submits its recommendations to the Board of Directors. INRS intends to maintain this process while giving particular attention to the performance of CRC holders.

Furthermore, given that impact-oriented research is one of the three strategic priorities of the 2025-2030 institutional strategic plan, INRS intends to establish its first institutional framework for assessing the societal impact of its activities. This evolving framework will aim to demonstrate coherence among the scientific programs, the institutional values of engagement, collaboration and accountability, and the institution's commitment to la société.