



AIHS Collaborative Research and Innovation Opportunities (CRIO) - Population Resiliency

Program Guide

Background

“An idea is something an individual comes up with, but putting ideas into testing or practice requires teams. Anybody who tries to take a good idea across the goal line on their own will likely be held up at the one-yard line.”

Dr. Sam Weiss, University of Calgary, 2010 Gairdner Award Recipient

Alberta Innovates – Health Solutions (AIHS) recognizes the tremendous health research capacity in Alberta based on the ingenuity and dedication of individual researchers, clinicians and entrepreneurs. Building on this foundation of great ideas, AIHS offers a broad portfolio of collaborative research opportunities to bring people together in teams to address health issues that require an interdisciplinary approach.

The AIHS Collaborative Research and Innovation Opportunities emphasize the collaborative production of new knowledge, coupled with the translation of research findings to knowledge-/end-users for impact on the health of Albertans and/or the health care system. From a research perspective, evidence demonstrates that quality collaborative research leads to higher quality relationships, increased relative impact factors and improved publication outputs. There is also inherent value in linking researchers to knowledge-/end-users in collaborative research at the front end of the research process; and this linkage is expected to enable new knowledge to be more readily put to use leading to improved socio-economic and health benefits.

Focus on collaborative research

AIHS supports collaborative research to enable the proactive engagement of partners, networks, teams, and alliances and to establish Alberta and Canada as a global leader in health research and innovation. The results of such collaborative activity will be seen in quantifiable scientific, socio-economic and health impacts. Collaborative research aligns with key strategies identified in the [Alberta Health Research and Innovation Strategy \(AHRIS\)](#) under the enabling actions for Highly Skilled People to: “Enhance cross disciplinary research and innovation in areas of strategic priority.”



The AIHS Collaborative Research and Innovation Opportunities are focused on addressing health research needs, gaps or opportunities that:

- impact complex health issues;
- are defined with knowledge-/end-users engaged in the process;
- are aligned to the [Alberta Health Research and Innovation Strategy \(AHRIS\)](#) -defined areas of strategic priority;
- achieve results more efficiently and effectively through interdisciplinary and collaborative approaches

CRIO aims to bring together experts in different disciplines, fields and areas to tackle health problems in areas of strategic priority that would benefit from an interdisciplinary approach. CRIOS support health research and innovation activities aligned with the Alberta Health Research and Innovation Strategy (AHRIS) and may address priority issues identified by the Strategic Clinical Networks (SCNs) within Alberta Health Services (AHS).

Alberta Innovates – Health Solutions, in collaboration with Alberta Health, is supporting a \$3,000,000 CRIO competition in the mental health priority area of population resiliency before and after catastrophic events. The activity funded through this CRIO competition will address the factors that promote resiliency, with a specific focus on Aboriginal and child and youth populations.

The evidence produced from research and innovation supported through this CRIO initiative is intended to improve population resiliency and

Alberta's Health Research and Innovation Strategy: Areas of strategic priority

Wellness at Every Age

- Child and maternal health
- Mental health and addiction
- Chronic disease
- Infectious disease
- Health promotion
- Vulnerable populations
- Injury prevention, acute care and rehabilitation
- Environmental health

Innovative Health Service Delivery

- Effectiveness and efficiency
- Innovative delivery models
- Chronic disease management support systems
- Personalized medicine

Research and Innovation within Alberta Health Services

Strategic Clinical Networks (SCNs)

- Addiction & Mental Health
- Bone & Joint Health
- Cancer
- Cardiovascular and Stroke
- Critical Care
- Diabetes, Obesity and Nutrition
- Emergency
- Kidney
- Maternal, Newborn, Child & Youth Health
- Respiratory
- Seniors' Health
- Surgery



inform readiness planning for future natural disasters and other catastrophic events.

The funding for this CRIO is part of a \$50 million allocation made by the Government of Alberta in response to the 2013 flooding in Southern Alberta designated to provide support for flood victims' immediate and future mental health needs.

Objectives

The CRIO - Population Resiliency opportunity invites applications for funding in either (or both) of two areas of population resiliency: aboriginal and/or child and youth populations. This opportunity is to support the development and strengthening of population resiliency, pre- and post- disaster using a collaborative approach to the production of new knowledge, coupled with the translation of research findings to knowledge- /end-users for impact on the health of Albertans and/or the health system. There is not an expectation that the collaboration will necessarily continue beyond the duration of this non-renewable grant.

The objectives of the CRIO - Population Resiliency are to:

- Foster and support collaborative, interdisciplinary, multi-sectoral and/or multi-institutional research with a focus on achieving solutions that address disaster-related population resiliency.
- Help advance, at a public policy level, Alberta's programs and infrastructure to support population resiliency (when it comes to disaster recovery) in both the long and short term.
- Support mental health related research and innovation, an area of strategic priority aligned with Alberta's Health Research and Innovation Strategy (AHRIS); as well as the Mental Health and Addiction Strategic Clinical Networks (SCN) within Alberta Health Services (AHS). Alignment with the SCN is considered a strength but is not a requirement.
- Provide opportunities for interdisciplinary research training and mentorship.
- Encourage the use of this AIHS CRIO to connect Alberta to national and international initiatives and leverage additional opportunities.
- Engage knowledge-/end-users in the process to enhance impact on the health of Albertans and/or the healthcare system.



CRIO - Population Resiliency Portfolio

The CRIO portfolio recognizes the need for flexibility to optimize the value of various types and sizes of collaborations required to meet defined health outcomes. Applicants to CRIO - Population Resiliency competition may request support as a CRIO Project, as a CRIO Program or as a CRIO Team. The total amount of funding available for the CRIO - Population Resiliency initiative is \$3,000,000 distributed over 3 years.

CRIO Team

Objective: To foster and support a large interdisciplinary collaborative team or network with national or international stature. The complexity of the health issues of interest will require the involvement of many stakeholder groups.

Level of funding: Up to \$1,000,000 per year.

Term: Up to three years, non-renewable

CRIO Program

Objective: To support a group of collaborators (three to five principal collaborators) who may already have an informal arrangement or shared funding to support interdisciplinary work, or have specific plans to develop such arrangements. The focus is on a more complex program of health research and innovation, than that of a single project.

Level of funding: Up to a maximum of \$500,000 per year.

Term: Up to three years, non-renewable.

CRIO Project

Objective: To allow a small group of collaborators (at least three) to come together to complete a defined project that requires the collaboration to exist. The focus is on a particular project, with a defined set of deliverables. There is no expectation that the collaboration will necessarily continue beyond the duration of this non-renewable grant, but this opportunity may also provide a framework for collaborators who may want to evolve their project into a more complex Collaborative Program or Collaborative Team.

Level of funding: Up to a maximum of \$250,000 per year.

Term: Up to three years, non-renewable.



Eligibility

Full applications will **only** be accepted from those potential applicants that have submitted an Expression of Interest (EOI) and at least one group member was present at the CRIO – Population Resiliency workshop.

Each eligible CRIO - Population Resiliency application will include:

- Collaborative Lead: The Collaborative Lead must be an individual with an established career and proven Leadership skills and experience. The Collaborative Lead will act as program director and will (in collaboration with their organization) assume administrative responsibility for the grant. It is expected that the Collaborative Lead will devote a significant and appropriate portion of her/his time to these tasks. There can be more than one Collaborative Lead. At least one of the Collaborative Leads will have their primary appointment at an Alberta-based organization.
- Membership must include at least two additional appropriate collaborators with established track records in their field.
- Collaborative members will have an extensive record of success, be creative and original in their approach to research and its translation, and have experience working in teams. The specific contribution of each collaborative member, where applicable, must be described in the application.
- Collaborative groups with a nucleus of experienced investigators are encouraged to include promising new investigators as part of their group.
- Knowledge-/end-users and decision makers for the knowledge translation of the resulting research must be identified as part of the collaboration.
- Multi-institutional, multi-sectoral, and multi-jurisdictional collaborations are all strongly encouraged.
- CRIO Programs and Teams are required to have the direct involvement of a project manager.
- CRIO Programs and Teams are required to have an appropriate governance structure including arm's length Scientific Advisory Councils and defined approaches to conflict resolution.
- Collaborators from outside of Alberta who make a substantial intellectual contribution to the program must be listed as collaborators.



- Specific and justified requests that AIHS funding be used for work performed outside of Alberta will be considered. However, it is expected that the great majority of the funds will remain in Alberta.
- Co-funding from philanthropic, national or international organizations is encouraged and should be declared as part of the submission.

Allowable Costs

AIHS funding can be used for a broad range of collaboration-related costs including research infrastructure, research operating costs, core administrative/management costs, scientific support for the team, collaborative/linkage activity, knowledge exchange/translation activity, and training support. The following costs are allowable:

- Research operating costs for the proposed collaborative activity. These costs must be distinct in their objectives from those for which team members currently receive other sources of funding. Operating costs could include the costs of developing and applying intervention projects as part of the research program.
- Support for research infrastructure including the purchase of equipment and maintenance contracts for common services and shared/core facilities.
- Costs of data collection, database and maintenance of information holdings directly related to the collaborative research activities.
- Costs of regional, national and international networking activities, including collaboration, planning, and knowledge exchange activities. Such activities must be directly related to the collaborative research activities.
- Salaries of research assistants, coordinators, technicians, administrative staff, knowledge exchange/translation coordinator, and other personnel who will enhance the collaborative research productivity of the team.
- Release-time payments to enable employees of practice-, policy- or community-based partners to participate in the research program. These payments are limited to 50% of salary costs, up to a maximum of \$100,000 per Collaborative Research Opportunity per year.
- A maximum of \$25,000 annually for a release-time stipend for the Collaborative Lead(s).
- Only participants who are trainees or research staff or associates may receive a salary, stipend, or honorarium from a Collaborative Research Opportunities Grant. The only exception to this rule is for the release-time stipends for the



Collaborative Lead and employees of community partners as described.

- Collaborative Research Opportunities are expected to provide a superior interdisciplinary training environment. Support can be requested for all levels of trainees as long as the interdisciplinary nature of their training is emphasized.
- Costs involved in linkage with and dissemination of research findings to those who would use the results, as appropriate for the program. This may include any knowledge-/end-user groups such as other researchers, the public, practitioners, policy makers, community partners, and the private sector.

Peer Review Process

Applications will be assessed by reviewers who represent interdisciplinary, cross-sectoral perspectives from across the research continuum. Reviewers will include senior investigators with excellent track records of either fostering or conducting interdisciplinary research and/or in leading interdisciplinary research teams from academic and industry sectors, as well as individuals that can provide knowledge-/end-user perspectives.

Application Assessment Criteria

While separate research components may be included in the application, each application will be evaluated as a single, integrated entity. Applicants must demonstrate that the collaboration not only brings added value but is essential to the group's approach to the complex research question and the health issue being addressed, as well as the group's ability to generate new knowledge and translate it into improvements in health or in the health care system. General criteria for assessing applications are listed below.

Significance and Innovation

- Is the relevance to the stated research priority area clear?
- How important is the health issue/question being addressed? Will the anticipated findings be of broad interest and applicability?
- How original are the hypotheses or the questions to be addressed, and how clearly are they formulated? Does the Collaborative Research Opportunity challenge existing paradigms? Does it use novel concepts, approaches, methodologies or tools?
- Is the research plan cutting-edge and innovative?



- How well will the Collaborative Research and Innovation Opportunity enhance the understanding and accelerate the resolution of the health question, problem or issue identified in the research proposed?
- How important and original are the contributions expected from the research proposed? What is the potential for important new knowledge or impact on health, health research or the health care system?
- Which specific knowledge-/end-user group would have a particular interest in the results of the proposed research? How is that knowledge-/end-user group being engaged and targeted for specific knowledge transfer and exchange activities?

Approach

- How will the proposed research address the hypotheses or research questions?
- Why have previous discipline-focused approaches not been successful in solving the problem?
- Does the proposed program of research bring together, in a meaningful collaboration, researchers from different disciplines?
- Why is the interdisciplinary approach of the collaborative group necessary in addressing these hypotheses or questions?
- Is more than one research discipline represented in a meaningful way in the team members and the proposed research? Are the appropriate research disciplines across the research continuum included to carry out the proposed collaborative activities?
- Where applicable to the type of research proposed, does the proposal take into account the social, cultural and environmental factors surrounding the research problem?
- Has the relevant literature been appraised and evaluated in a critical fashion?
- Is the health question, problem or issue approached through an original, cohesive/integrated and feasible research plan that will generate valid, reliable and useful knowledge?
- How does the collaborative group have a plan for linking with, and dissemination of research findings to knowledge-/end-user groups who will utilize and apply the results?
- Has the collaborative group identified the roles and contributions of all the parties in planning, execution, and evaluation as well as management activities?



- What is the likelihood that the collaborative group can do the work proposed?

Collaborators

- How appropriate is the training or track record of the team members to the research proposed? Has the role of the individual team members been clearly defined?
- How significant is the recent productivity of the applicants?
- What is the experience of the Collaborative Lead in leading a large research team? Does he/she have experience in leading interdisciplinary research teams?
- How does the expertise and experience of the co-principal investigators complement and augment that of the Collaborative Lead?
- What contributions are the multiple disciplines bringing to the pursuit of the stated research goals?
- Will processes be put into place to encourage development and ongoing success of collaborative interactions?
- Does the team include junior and senior investigators?

Environment

- Will the research training and mentoring environment provide a superior, interdisciplinary experience for trainees, including those with a health professional background?
- Does the research environment contribute to the probability of success?
- Is the environment poised for uptake, adoption and implementation research findings?
- What is the degree of institutional support for the collaborative group? Is there evidence of a discrete process for inter-institutional support?

Engagement with knowledge-/end-user collaborators and/or partners

- Are governance and management structures in place to ensure the meaningful integration of knowledge-/end-user partner groups?
- How are partners involved and committed to the research program?
- What aspect of the research are knowledge-/end-users going to be involved in (e.g. formulating the research agenda, providing input into the development of research and training projects, disseminating findings or otherwise supporting knowledge translation)?



- Does the proposal demonstrate the involvement of the necessary local, regional, provincial, territorial, national and/or international partners in the planning and execution of the research plan, and the application of the research results? Will this involvement facilitate research activities and outcomes that would not otherwise be possible?
- Are knowledge-/end-users ready and able to implement research outcomes?
- Is there an appropriate knowledge translation plan to mobilize the research results for meaningful socio-economic and health impact(s) and is it feasible?

Contact Information

For further information on the CRIO - Population Resiliency, please contact:

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