



Michael Smith Foundation for
Health Research

MSFHR Research Infrastructure Support Program Report Principles and Key Guidelines

Forward

Support for research infrastructure was identified by the Coalition for Health Research in British Columbia as second in importance only to trainee and career path awards as the key to building BC's health research capacity. Beginning in fiscal year 2003/04, the Michael Smith Foundation for Health Research will allocate \$25 million over three years for a Research Infrastructure Support Program to enhance researchers' productivity and competitiveness for national and international funding.

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Part I: Overview/General Program Principles

A. General Principles applying to the Research Infrastructure Support Program

1. Funding is for support of health research.
2. The program will evolve to meet the needs of the health research community, with the emphasis on increasing BC's competitiveness for national and international funding by:
 - a) Providing support to enhance the productivity of BC's major health research institutions,
 - b) Providing support to enhance the productivity of groups of researchers within institutions and organizations,
 - c) Providing support to network researchers (i.e. facilitate communications, and research collaborations, planning etc.) across disciplines, research streams, institutions, organizations and regions,
 - d) Working with partners to build new areas of research that are important to BC's health research community and health system.
3. The program is designed to provide graduated levels of support in recognition that BC research institutions and research units are at different levels in their development.
4. Funds will be awarded based on the excellence of multi-year research development plans, with provision for adjusting the funding based on the outcome of a regular review process.
5. Funds will be awarded to recipient institutions and organizations to augment existing health research budgets, not to replace existing funding or to take the place of funding that would otherwise be allocated to support health research in the absence of MSFHR funds.
6. Ability to leverage funding is a priority, and this will be reflected in application review criteria.
7. While balance across the four health research themes is a priority, Foundation funding programs are integrative, such that no single program is intended to meet all MSFHR objectives.
8. Funding recipients will be regarded as partners in building the case for long term funding of the Foundation:
 - a) MSFHR needs base line data on institutional and researcher productivity so that incremental improvements can be attributed to Foundation support,
 - b) MSFHR will indicate what it expects in terms of deliverables and translate that into expectations for grant applicants,
 - c) Research plans developed for funding applications will have measurable objectives; these will vary depending on what kind of infrastructure support is requested.

B. Program Components/Funding

1. Three components:
 - a) Institutional funding
 - b) Research unit funding
 - c) Networking funding
2. Proposed funding of about \$25 million (over 3 years) to be allocated:
 - a) About \$11 million for institutional
 - b) About \$11 million for research units
 - c) About \$3 million for networking

Note #1: While the three program components serve different needs, they are part of an integrated strategy to increase researchers' productivity and ability to compete effectively for national and international funding.

Note #2: Beyond 2006, continuation of this program is dependent on confirmation that funding for the Michael Smith Foundation for Health Research will be extended beyond the initial five-year funding envelope (2001-2006).

Part II: Institutional Component

A. Eligibility Criteria

1. A publicly funded institution with a mandate to conduct health research that provides common infrastructure for a range of researchers across multiple health research themes.
2. Clearly defined accountability mechanism for the institution's health research agenda (this will be distinct from a university division, department or faculty or, within hospitals, will be clearly defined for support of health research).

Note: The intent is to ensure that there is a mechanism by which institutions are accountable for using MSFHR funds for the purposes outlined in their research development plan. This does not mean that an institution has to create a whole new administrative structure to be eligible for funding but, at a minimum, it must have a mechanism — person(s) and pathway(s) — that will serve this purpose.

B. Application Process

1. Initially, BC's four major universities and four major teaching hospitals will be invited to apply (University of British Columbia, Simon Fraser University, University of Victoria, University of Northern British Columbia, Providence Health Care, Children's & Women's Health Centre of British Columbia, Vancouver Hospital & Health Sciences Centre and BC Cancer Agency).

Note: While it is not possible within MSFHR's initial funding envelope to broaden the invitation list beyond these eight major health research institutions, there are opportunities for other publicly funded organizations conducting health research to apply for funding as a Research Unit. (See Section III of this report for more details.) It is anticipated that should MSFHR funding be confirmed past 2006, there would be an opportunity to re-evaluate the list of invited applicants.

2. The one-time application process will have two parts:
 - a) Preliminary outline of a four-year research development plan for review by, and discussion with, MSFHR,
 - b) Development of the full plan, which will be reviewed with the assistance of external expertise and will be the basis on which funding amounts and terms will be determined.

C. Funding

1. Approval of funding will be based on the excellence of the four-year research development plan. Content also to include:
 - a) Outline of how MSFHR funds will be used to increase the institution's health research capacity/productivity,
 - b) Description of the infrastructure request and how it will support the goals of the institution's research development plan. Application forms will clearly outline the types of infrastructure that are, or are not, eligible for consideration,
 - c) Clear indication that MSFHR funds will augment, not replace funds that have, or normally would be, allocated by the institution for support of health research,
 - d) Annual measurable objectives for use by the Foundation in measuring return on investment.
2. It is anticipated that successful applicants may qualify for funding ranging from \$150,000 up to \$800,000 per year. The amount is dependent on factors that will include the magnitude and the excellence of the ongoing and planned health research. Included in the funding formula will be the size of the institution as measured in numbers of researchers and peer review funding and the excellence of the research and research development plan. Items included in determining excellence will include the present and anticipated increase in productivity in terms of grants, patents, policy and treatment adoption, technology transfer, partnerships, successful recruitments, awards, publications, citations, etc.
3. Provision may be made for development funds to assist institutions in developing research plans.
4. Provision to ramp up funding over the course of two to three years to implement the research development plan.
5. Mechanisms that provide for funding to grow or shrink, based on external review of productivity (extent to which institutions did, or did not, achieve their research goals as set out in the research development plan). Could include transitional funding.
6. Possible for an institutional research plan to involve more than one institution, in which case the application must identify one institution as the host for purposes of administering the funds.

Part III: Research Unit Component

A. Eligibility Criteria

1. Defined group of researchers working in a focused area of health research.
2. Evidence of cohesiveness (e.g. shared ideas, shared work, shared planning, shared funding).
3. Eligibility to apply is based on having a minimum number of qualified researchers with a substantive level of peer review funding appropriate for the discipline.

Note: A qualified researcher is defined as one who holds peer review funding from an agency open to all BC researchers.

4. Has a clearly defined agenda (goals and accountability pathways) for a health research unit that is distinct from a traditional university faculty, department, or division or a hospital administrative unit.
5. A four-year research development plan. Content also to include:
 - a) Outline of how MSFHR funds will be used to increase the unit's research capacity/productivity,
 - b) Outline of the infrastructure request and how it will support the goals of the unit's research development plan. Application forms will clearly outline the types of infrastructure that are, or are not, eligible for consideration,
 - c) Clear indication that MSFHR funds are augmenting, not replacing funds that have, or normally would be, allocated to the unit by the host institution,
 - d) Annual measurable objectives for use by the Foundation in measuring return on investment.

Note: As appropriate, plans for networking or community participation will be regarded as strengthening a unit's research plan.

6. Researchers may figure in more than one Letter of Intent (LOI), but at the final application stage a researcher may be counted only in one research unit.
7. Researchers may be counted in an institutional funding application and in an application for a research unit that is part of the institution.
8. Research Units within institutions/organizations that apply for and receive MSFHR institutional funding may apply for unit funding, but must not apply for the same infrastructure that has been requested/supported in the institutional request. In addition, research units will be required to articulate how their development plan fits within the context of the appropriate institutional research development plan.

B. Funding

1. Funding will be approved based on the excellence of the four-year research development plan.
2. The purpose of research unit funding is to enhance the ability of researchers in the unit to qualify for more peer review funding, not to support unit operations or the direct expenses of projects funded by operating grants.
3. Two sizes of units: it is expected that the available program funding will be sufficient to support a total of 15 to 20 units.
 - a) Three up to a maximum of ten qualified health researchers (may apply for up to \$150,000 annually),
 - b) Over ten qualified health researchers (may apply for up to \$250,000 annually).
4. Include mechanisms that will enable funding to grow, or shrink, based on external review of productivity (i.e. extent to which research units did, or did not, achieve their research goals as set out in their research development plan). Could include transitional funding.
5. Research Unit applications must be signed off by the host institution(s).
6. Funds will flow to the Research Unit via the host institution's umbrella health research administrative framework.
7. Research Units may span more than one institution, in which case, the application must identify one institution as the host for purposes of administering the funds.

C. Competitions

1. One competition per year. After the first competition, recipients will be advised that funding for the full three-year term of the award is dependent on confirmation that the Foundation's funding will be extended beyond 2006.
2. Three-step process beginning with applicants registering their intent to apply and then submitting a preliminary funding proposal. Preliminary proposals will undergo a review process to determine which applicants will be invited to submit full proposals. A second review process will determine how many full proposals will be recommended to the Board for funding.

Part IV: Networking Component

Background

Experience in other provinces, notably Quebec (FRSQ) which has more than ten years experience in the area, indicates that a networking program must be strategic and directive to promote networking.

Through their experience, FRSQ has identified the following success factors:

- Leadership — scientific credibility, people mover, vision, commitment,
- clear assessment of strengths and weaknesses in targeted theme,
- start with a few strategic initiatives, with large collective impact,
- start with key people, with good ideas; avoid the large collective bandwagon of people and lists of projects,
- funding is tied to scientific excellence and attainment of objectives,
- networks may have funding increased or networks may be shut down at any time depending on performance.

Based on consultation with other provinces and with BC health research leaders representing all sectors of health research, the following definition, principles and implementation strategy have been approved as the framework for MSFHR networking program.

Networking Component

A. Definition

Networking infrastructure is defined as the resources required to bring together individual researchers across disciplines, research streams, institutions, organizations and regions (e.g. support for communications, research collaborations, joint planning, etc). The result is a network of individuals, not of centres and institutions.

Note: disciplines to include those outside traditional health disciplines.

B. Purpose

To support/develop networking as a way of doing research in British Columbia.

1. to improve our ability to address health issues,
2. to align with national/international research and funding priorities in order to improve our competitiveness for external funding.

C. Principles

1. Complementary: the networking component will complement, not duplicate, support provided by institutional and research unit components of the Infrastructure Support Program.
2. Strategic & Directive: MSFHR has limited funding (about \$3 million) for networking and the need to show a fast return on investment.
3. Funding will be tied to scientific excellence and attainment of objectives.
4. There will be provision to boost funding or to shut down networks at any time based on regular performance reviews

D. Implementation Process

1. Process for Selecting Targeted Themes

- a) MSFHR will assess BC strengths and weaknesses in CIHR Institute Themes (i.e. will use national priorities as the framework for prioritizing networks).
- b) MSFHR staff will consult with opinion leaders (starting with the Foundation's Research Advisory Council) to identify themes and theme leaders within this framework that are of strategic importance to BC and have the potential to show value-added outcomes quickly.
- c) The key criteria for ranking/prioritizing potential networking themes will be:
 - the quality, commitment and availability of the leader,
 - the potential for the network to show value added outcomes within 2-3 years, e.g. build capacity, enhance competitiveness, etc.
- d) A list of themes/leaders will be compiled by MSFHR staff and ranked by the Research Advisory Council and appropriate external representatives.
- e) MSFHR Board will approve three for funding.

Note: While three networking proposals are the maximum that may be supported effectively within MSFHR's current funding envelope, as/if other funding becomes available (through partnerships, flexibility due to phasing in of other programs, attrition), other proposals may be considered.

2. Phased Funding

Recognizing that it takes time to amass the individuals and to develop networking as a way of working and competing, funding for networking will be phased.

- a) The leader will be provided with development funding based on his/her vision, credibility and contacts in the health research community - e.g. \$60,000 to \$100,000 over 6-8 months to develop an action plan. After 6-8 months, the networking proposal must be ready to go to the next stage of development or it will be dropped.

Note: Networking funding includes provision to support the leader (free-up his/her time to develop the network). Estimate a minimum time commitment of 2 days per week.

- b) Action plans will be reviewed by staff and also by the Foundation's Research Advisory Council. If satisfactory, the plan will go forward to the Board for review and approval of an appropriate level of funding to support the development of a full application (18-24 months). Funding might range from \$300,000 for first 12 months to \$400-500,000 for the next 12.

Note: It is expected that as fledgling networks evolve, they will begin applying for external funding for common infrastructure needs and research projects while still in the process of developing their plan for submission to MSFHR.

- c) Full plan to be delivered within 18-24 months. This will be internationally reviewed and, if approved, would be eligible for up to e.g. \$1 million/yr for X years.

Note: Funding will be dependent on confirmation that the Foundation's funding will be extended beyond 2006.

- d) Just as funding may be boosted, decreased or stopped at key milestones during the development of the full proposal, fully funded networks may have funding reduced or stopped based on the outcome of regular performance reviews.