

# **Review of the Personnel Programs of the Michael Smith Foundation for Health Research, April 2008**

## **1. Overview and Summary of Recommendations**

### **Background**

The Michael Smith Foundation for Health Research was established in March 2001 with a provincial mandate to build BC's capacity for excellence in health research. Two broad categories of programs are offered:

- 1) Personnel Programs which facilitate human resources training, recruitment, retention, and career development of students and researchers.
- 2) Infrastructure Programs to provide funding to enhance the productivity and competitiveness of BC researchers, and increase collaboration and training opportunities.

Since the inception of the MSFHR in 2001, eight Research Trainee and Career Investigator competitions have been held for awards provided through the Personnel Programs. A total of 1008 Research Trainee and 243 Career Investigator awards have been provided to students and researchers in BC, representing an investment of over \$145 million. (The outcome of the eighth Career award competition had not been determined at the time of the review.)

The review of the Personnel Program was designed to help inform MSFHR regarding program outcomes, operations and future directions.

### **Scope and Objectives**

The Review focused on the following programs collectively known as the MSFHR Personnel Programs:

#### Career Investigator Programs

- Scholar
- Senior Scholar
- Distinguished Scholar (discontinued)

#### Research Trainee Programs

- Junior Graduate Studentship
- Senior Graduate Studentship
- Postdoctoral Fellowship

The Review had three primary objectives.

1. To evaluate current award programs for their effectiveness and value add/ROI re MSFHR goals and objectives

2. To review current award programs (informed by package of MSFHR-prepared background documents)
3. To consider and advise on gaps and opportunities that would enhance the value of these programs in achieving MSFHR goals and objectives

### **Review Panel Members**

Chair: Dr. Mark Bisby, former Vice President, Research, Canadian Institute for Health Research

Dr. Andrea Baumann, Associate Vice President, International Health, Faculty of Health Sciences; Director, Nursing Health Services Research Unit, McMaster University

Dr. Marielle Gascon-Barré, Vice-president & Scientific Director, Fonds de la recherche en santé du Québec (FRSQ).

Dr. M.E. (Beth) Horsburgh, Associate Vice-President Research - Health (University of Saskatchewan) and Vice-President Research and Innovation (Saskatoon Health Region)

Dr. Jacques Magnan, Interim President and CEO, Vice President, Programs, Alberta Heritage Foundation for Medical Research

Ms. Colette Rivet, Executive Director, BioTalent Canada, Ottawa

Dr. Norm Rosenblum, Associate Chair of Paediatrics (Research), Professor of Paediatrics and Physiology, University of Toronto; Senior Scientist, The Hospital for Sick Children

Dr. Robert Sheldon, Associate Dean of Clinical Research, Faculty of Medicine, University of Calgary; Vice-President Research, Calgary Health Region

### **Preparation for the review**

MSFHR Staff prepared for the Personnel Program Review in the fall of 2007 and the winter of 2008. They undertook a number of extensive data collection activities including:

- Analysis of MSFHR data and competition outcomes (career and trainee awards)
- Environmental Scans, comparing similar programs offered by other health research agencies in Canada and abroad
- Applicant Follow-up Surveys
- Focus groups and Stakeholder Interviews
- General web survey of the BC research community

These materials were provided to members of the panel in advance of the stakeholder meetings in April, and were most helpful to the panel in identifying the key issues for dialogue during these meetings. The panel wishes to acknowledge the enormous amount of work by MSFHR staff in preparing these high-quality materials.

Stakeholders involved in the review, including those participating in the interviews, focus groups and the web survey, included

- Personnel Program Award recipients and applicants in all categories, including unsuccessful applicants

- Competition review panel members
- MSFHR Advisory Committee and Initiatives representatives, such as the Research Advisory Council and the Health Services and Policy Research Support Network,
- Senior health researchers
- Academic institution leaders
- BC ‘thought leaders’
- Health authorities
- Ministry of Health
- Industry representatives

### **Review format**

The face-to-face review of the Personnel Programs took place on April 27, 28 and 29, 2008. Invited representatives from each of the stakeholder groups and organizations met with the review panel to discuss issues in detail and respond to questions from the panel members. There were eight meetings, each meeting lasted one hour, followed by time for the panel to discuss the key issues raised and the recommendations that might be included in the final report. At each meeting, the interviewees were asked to present briefly their major concerns or comments about the MSFHR personnel programs, relevant to the mandate of the review panel. This was followed by in-depth questioning by the panel, after which the interviewees were offered an opportunity to have the last word in the form of their most important advice to the panel. MSFHR staff were not present at these meetings.

After concluding the face-to-face meetings, the panel spent over three hours *in camera* formulating its recommendations to the MSFHR, after which the draft recommendations were presented to the Chair of the Board and senior executives of the Foundation. The recommendations in this final report, which has been approved by the members of the panel, do not differ in content from those initially presented.

### **Summary of recommendations**

1. MSFHR and stakeholders (universities, health authorities, relevant ministries of the BC government, agencies and research foundations) must work together urgently to develop an academic health research workforce plan, to guide the MSFHR in setting an appropriate and sustainable number of career awards at the different levels that exist today, without reinstating the Distinguished Scholar award.
2. MSFHR should conduct regular compliance audits of the recipient institutions to ensure that all aspects of the award agreements are being adhered to, the career paths for all career awardees have been mapped out, and any difficulties identified and resolved as early as possible.
3. By working closely with academic partners, the Ministry of Health, and the Health Authorities, MSFHR should facilitate the development of payment plans

and other joint funding strategies that move compensation for health professional scientists closer to parity with their professional norms within the academic environment.

4. MSFHR should depart from its generic approach to training and career awards in the case of health professionals, and review the approaches taken by other funding agencies to encourage their participation in research careers. It should then work with the research institutions, the Ministry of Health and the health authorities to develop a “made in BC” approach to support research training and careers for all types of health professionals that recognizes the needs of the public health and healthcare systems.
5. MSFHR should do more to showcase the achievements and return on investment of the trainees and career investigators more widely across BC, and increase its efforts to evaluate the outcomes (and not merely the outputs) of the research performed by those funded through its personnel support programs in order to provide a compelling message for stakeholders.
6. MSFHR, in collaboration with institutions, industry representatives, the Ministry of Economic Development and the BC Innovation Council, develop a strategy to support training and career development of highly qualified researchers, prepared with the skills and knowledge to meet the needs of BC’s successful, and still developing, biotech industry.
7. MSFHR should be more aggressive and proactive in forming partnerships to further develop its Personnel Program.
8. MSFHR should continue to be especially sensitive to the challenges faced by small institutions in accessing personnel awards, and employ tactics such as networks, strategic initiatives, regional partnerships, applicant education, and distance mentorship to help small regional institutions become more successful in increasing the number of awards they receive, and sustain their nascent health research communities.
9. MSFHR should consider introducing innovative multi-disciplinary training programs to build research capacity selectively, in order to address emerging provincial health priorities.
10. The Foundation should be certain that it leads international best practices with regard to personnel policies and benefits that encourage women applicants, and support for women in their research careers, and use its honest broker credibility to ensure other stakeholders do likewise.
11. MSFHR broaden its panel membership to reflect more diverse stakeholder perspectives, including representatives from the health authorities; industry; the

Ministries of Health, Advanced Education and Economic Development; etc. where appropriate to the type of research and category of award under consideration.

12. MSFHR should permit British Columbians whose training has been primarily in BC, or who seek to train in areas of study where the acknowledged centres of excellence or study populations exist outside BC, to pursue some or all of their postdoctoral studies in locations outside the province, in Canada or abroad.

## 2. Details of the Panel’s Review and its Recommendations to MSFHR concerning the Personnel Programs

### Preamble

The review panel is of the opinion that the MSFHR is highly regarded within the province and nationally, for its approach to building research capacity in British Columbia through its Personnel Programs. Throughout the interviews with all interviewees, the panel members heard about an extraordinary level of admiration and gratitude for the

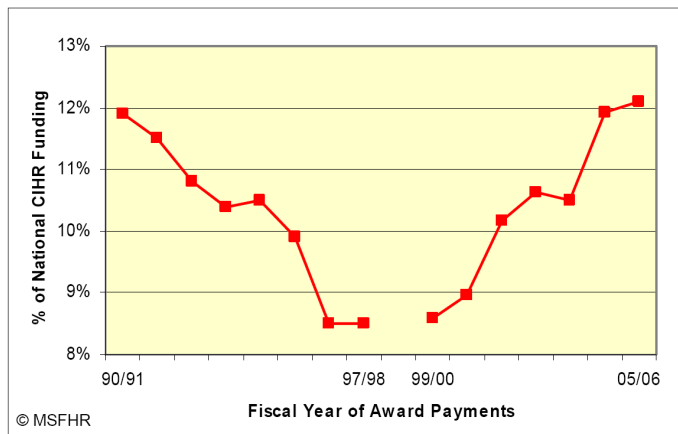


Figure 1: BC Share of MRC/CIHR National Funding 1990/91 - 2005/06

Foundation and what it has accomplished since 2001. In the words of one senior BC researcher, “When we think of research in BC before the Foundation and since the Foundation – the differences are like night and day.” The panel was convinced by the data presented that the outcome of the MSFHR’s investment in personnel awards had been remarkable in terms of its contribution to rebuilding and rejuvenating the health research community in BC, which, coinciding with enhanced federal investment in health research, had reversed a long-standing decline in BC’s competitive position within Canada (Figure 1). The 2007 report by MSFHR, “Evaluating British Columbia’s Performance in Health Research”, from which Figure 1 is taken, shows that since 1999, BC has become Canada’s most improved jurisdiction in the competition for health research funding. It is much more difficult, and indeed it may be still too early, to discern attributable impacts on economic development or the health and well-being of British Columbians, and the panel encourages the Foundation to continue its efforts to evaluate the wider program impacts and outcomes.

There was a very high level of satisfaction with how the programs are operating, from the application process to the review and reporting process. The panel considered the

structure, policies and processes of the personnel programs, and, except where noted in the listed recommendations, did not feel that major changes were warranted at this time. For example, while a career in health research is never a path to riches, the value and duration of the awards seemed in general to be in line with those of sister agencies in Canada.

As a second example, the panel found no evidence of bias in the competition processes of the Foundation. As well, the panel heard high praise for the staff of the Foundation, with many researchers, at all stages of their careers, noting their accessibility, responsiveness, support, expertise, and patience for all involved in the research community.

Health research in BC involves a number of stakeholders, with varying perspectives and roles in this sector. The panel also heard several interviewees emphasize that the MSFHR has a unique role among those organizations with a stake in the health research enterprise in BC – that of convener or facilitator. Its reputation as an “honest broker” and its successes to date with other multi-stakeholder initiatives places it on firm ground for moving forward with the panel’s recommendations.

The panel believes that the MSFHR is appropriately focused on building capacity for health research in BC, with a specific focus on the early part of the career pathway of researchers. The strategy of supporting the best people early on in their careers, who will then go out and compete successfully in national and international competitions for project and program funding, has worked for other provincial health research funding agencies, and the panel recommends that MSFHR stick to this winning strategy, avoiding the temptation to invest heavily in operating grants.

To kick-start the urgent rebuilding of health research in BC, MSFHR adopted a “one-size fits all” approach in order to spread the benefits of its investment as soon and as widely as possible, in both the geographic and thematic sense. This approach to date has largely met the needs of a diverse group of stakeholders. Having climbed up the steep part of the hill, and built a fine reputation, MSFHR may wish to become more strategic, selective, and innovative. The review panel’s recommendations are in large measure intended to deal with places where the “one-size” has not fit very well, and deal with more subtle aspects of the Personnel Programs relevant to specific stakeholder requirements.

## **Issues and Recommendations**

### **Developing a Plan for the Provincial Academic Health Research Workforce**

Based on what it heard from several interviewees, the panel is concerned that a situation has arisen where the careers of MSFHR-funded investigators may be perceived to be at risk. This is a serious threat to the health research enterprise in BC, and dangerous for the reputations of some of the leading institutions involved in it. MSFHR has focused - rightly in the view of the panel - on supporting the early stages of a

research career, and its support only extends for the first 11 years of academic-level appointment.

MSFHR funds provide tremendous value in recruiting top researchers to the province, but for the capacity-building investment of MSFHR to return value to the people of BC over the long-term, those recruited on MSFHR funds and who maintain a high level of productivity must be sustained by the academic institutions and research hospitals within BC after direct MSFHR support ends. The panel doubts that all institutions have the capacity to do this. This looming problem has been exacerbated by the abolition of mandatory retirement. If numbers of talented health researchers, at the peak of their careers, have to uproot their families and leave the province, the blow to BC's reputation will make subsequent recruitment very difficult.

At present MSFHR is making 40-50 new career awards each year, and there are in total 243 career recipients in the "pipeline". Recognizing that some will be always be attracted to opportunities elsewhere, and others may not sustain the highest levels of research productivity, what is the true capacity of the institutions to pay the salaries of these researchers when their MSFHR funding expires?

The panel believes strongly that the solution to these current sustainability challenges is a shared responsibility among all stakeholders, and that they must work together to develop an academic health research workforce plan that will guide the MSFHR in supporting an appropriate and sustainable number of career awards at the different levels. The panel was emphatic in noting that the solution is **not** for MSFHR to provide a more senior award (or re-instate the Distinguished Scholar), which merely defers the problem for another few years and creates even more of a downstream co-dependency model of support. The longer the delay before this problem is directly addressed, the more difficult it will become.

*Recommendation 1*

**MSFHR and stakeholders (universities, health authorities, relevant ministries of the BC government, agencies and research foundations) must work together urgently to develop an academic health research workforce plan, to guide the MSFHR in setting an appropriate and sustainable number of career awards at the different levels that exist today, without reinstating the Distinguished Scholar award.**

In addition to the necessity for a well-defined career trajectory and process for on-going support for productive investigators, there was much discussion regarding the environment in which award recipients are working. The panel was concerned to hear about different arrangements, varying even from department to department within the same institution, in how institutional salary dollars displaced by the receipt of an MSFHR award were applied to the benefit of the research program of the award recipient.

The panel also heard concerns about imposition of teaching and clinical service loads that infringed on the 75 per cent protected research time commitments made by

institutions when supporting an award application. Most seriously, the good faith of some institutions in committing to continued salary support at the conclusion of Senior Scholar award was questioned by individuals who were uncertain and worried about their futures in BC. While the panel had no way of substantiating these allegations, it believes that it would be beneficial for all if the Foundation played a more active role in ensuring that all parties involved in investigator support are performing appropriately and consistently. The panel noted that an MOU was in place between MSFHR and the institutions that received funding, and that in addition to the usual financial audits, regular compliance audits should also take place.

*Recommendation 2*

**MSFHR should conduct regular compliance audits of the recipient institutions to ensure that all aspects of the award agreements are being adhered to, the career paths for all career awardees have been mapped out, and any difficulties identified and resolved as early as possible.**

**Targeted Strategies for attracting and supporting health professional scientists**

One of the biggest challenges facing health research in the developed world is to attract the new generation of health professionals into research careers. (For this report, the term health professional scientist refers to clinician scientists and allied health professional researchers.) They are the key link in bench-to-bedside translational research and in ensuring the timely translation of clinical, population health, and health services research into improved standards of practice, and into system and policy reform. It is not surprising, nor unique to BC, that MSFHR's training and career awards programs have not succeeded in attracting a high proportion of health professional scientists. Only 12-33 per cent of training award and 15 per cent of career award applicants have been health professionals.

The panel believes this is one area where the Foundation should now take a hard look at the "one size fits all" generic approach. While the panel found no evidence that the award competitions discriminated against clinically-based applicants, (in fact, when they applied, these individuals did well), the challenge is to attract more of these applicants by either providing incentives or by lowering the disincentives to a career in health research.

The panel believes that the desired level of funded health professional scientists within BC will not be realized unless this group is compensated at a level more commensurate with their practice-oriented peers in the same academic institutions. Wider implementation of alternative payment plans would likely improve the situation, and the panel noted that slow progress is being made in this area. The MSFHR has a reputation as a facilitative and impartial broker, and as such, is in a position to lead in improving the situation for health professional scientists.

*Recommendation 3*

**By working closely with academic partners, the Ministry of Health, and the Health Authorities, MSFHR should facilitate the development of payment plans and other joint funding strategies that move compensation for health professional scientists closer to parity with their professional norms within the academic environment.**

Many health professional scientists are struggling to find the balance between clinical requirements and research requirements. Those we heard from described work weeks of 60 hours or more, with actual time spent on research activities varying from 50 – 75 per cent, despite the absolute MSFHR requirement for 75 per cent research protected time. This challenging lifestyle is unlikely to be attractive to many medical or other health professional students. MSFHR should consider being more flexible in the time protection allotments for health professional scientists to recognize the reality of the demands on individuals. Obviously, stipend arrangements would be similarly flexible.

Of particular concern to the panel was the low participation of non-physician health professionals in the MSFHR programs. In six years, only 13 allied health professionals received funding out of 243 career awards. Again, the challenge is recruiting these individuals to apply for awards, not how they fare in competition when they do apply.

The panel noted that there are interesting and innovative approaches to these problems being tried by a number of health research funding agencies and governments, such as the recent agreement for compensation of clinician scientists in Quebec, and support programs such as the Burroughs Wellcome Fund Clinical Scientist Awards in Translational Research, the NIH Pathway to Independence Award (K99/R00), or the CIHR Clinician-Scientist Award.

The panel also heard many good suggestions from interviewees for targeted programs of support that would attract more health professionals into research careers. Representatives from a health authority argued that the requirement for a full-time academic appointment to apply for an MSFHR career award is a significant barrier to increasing community-based health research, and that MSFHR should accept adjunct appointments. They felt that this policy change would allow for more and more meaningful research partnerships between universities and health authorities. Others wanted to see specific funding programs and protected funding for certain health professional groups.

Many noted the importance of mentorship during training and early years as an investigator, particularly in the case of health professionals who are not MDs. The panel suggests training opportunities for these health professionals be better integrated within MSFHR infrastructure awards or in funding training programs in priority areas (see Recommendation 9). In partnership with the health authorities, this would provide these individuals with

- enhanced mentoring,

- a better sense of their important role in a multidisciplinary research environment and
- Increased understanding of the interface of research and the health system.

These are difficult and complex problems, and the panel was not able, in a couple of hours of discussion, to come up with a definitive prescription for solving them. Its recommendation therefore has to be rather general.

*Recommendation 4*

**MSFHR should depart from its generic approach to training and career awards in the case of health professionals, and review the approaches taken by other funding agencies to encourage their participation in research careers. It should then work with the research institutions, the Ministry of Health and the health authorities to develop a “made in BC” approach to support research training and careers for all types of health professionals that recognizes the needs of the public health and healthcare systems.**

*The four recommendations above were the highest priority in the view of the panel since they are fundamental to the overall long-term success of the MSFHR.*

**Improving Communications with Stakeholders: always room for improvement**

The panel was impressed by the transformation of the research enterprise brought about by the MSFHR health research personnel programs, but it was dismayed by the lack of awareness of some key stakeholders about the achievements and contributions of the funded awardees. This was surprising since MSFHR has by no means neglected its communications function, and has paid particular attention to fostering close relations with the BC government. However, this is particularly challenging during a period of transition in portfolio responsibility for MSFHR, and will become critical as the Ministry of Health develops a provincial strategy for health research.

The panel urges the MSFHR to do more to showcase the achievements and return on investment of the trainees and career investigators more widely across the province, for British Columbians generally, and especially for key stakeholders such as the Ministries of Health, Advanced Education and Economic Development. These showcases, which might take the form of annual or semi-annual research workshops or symposia for award recipients, will also provide increased opportunities for networking by young investigators, an expressed wish of the trainees with whom the panel met.

Obviously it is easier to have an impact on those who need to know about the value of investment in the MSFHR when you have a compelling message. The panel encourages MSFHR to increase its efforts to evaluate the outcomes (and not merely the outputs) of the research performed by those funded by its personnel support programs, particularly in areas of health research that complement the Ministry of Health’s strategic directions, as they are enunciated. Improved follow-up of the career paths of trainees is

also desirable, particularly since the preliminary data the panel received showed that most trainees continue in their research careers.

*Recommendation 5*

**MSFHR should do more to showcase the achievements and return on investment of the trainees and career investigators more widely across BC, and increase its efforts to evaluate the outcomes (and not merely the outputs) of the research performed by those funded through its personnel support programs in order to provide a compelling message for stakeholders.**

**Strengthening MSFHR by Strengthening Partnerships**

The panel was surprised by how little discussion there was among any interviewees regarding the potential importance of MSFHR personnel awards to contribute to BC's growing biotech industry, or about how industry could support the Foundation in its review process and mentoring opportunities. Industry may feel similarly detached, because an originally planned meeting with representatives of industry had to be cancelled.

This report has already noted concerns about the capacity of BC's academic institutions to absorb the funded scholars, so clearly most of the 1000-plus trainees are going to find their futures outside academic research and/or outside BC, and this army of MSFHR-funded, well-trained young scientists ought to be regarded as a key resource for the future development of biotechnology in BC, if they have had the training experiences that equip them with the knowledge and skills that industry and other employers outside academia require. Several interviewees made comments about the lack of awareness of trainees about potential careers in industry, perhaps because academic health research was the only environment they have experienced. There is an opportunity for the Foundation to explore partnerships with industry, and even the health authorities, for joint academic-industry trainee or career programs, within the existing programs or as a separate funding stream.

*Recommendation 6*

**MSFHR, in collaboration with institutions, industry representatives, the Ministry of Economic Development and the BC Innovation Council, develop a strategy to support training and career development of highly qualified researchers, prepared with the skills and knowledge to meet the needs of BC's successful, and still developing, biotech industry.**

The panel commends the MSFHR for developing its Trainee Partnership Program, which provides an opportunity for not-for-profit organizations, foundations, and other interested groups to jointly fund BC health research trainee awards in their respective areas of interest. This has been important especially in building capacity in the under-developed area of population health. The panel believes there are further opportunities for forming partnership arrangements, with industry as noted above, and also with disease-specific agencies, regional health authorities, and provincial agencies in fields

such as education and social services, responsible for promoting the broadest definition of health. In addition to increasing the number, regional distribution, and diversity of trainees, such partnerships allow MSFHR to be responsive to the priorities of British Columbians, and widen the circle of advocates for the Foundation.

*Recommendation 7*

**MSFHR should be more aggressive and proactive in forming partnerships to further develop its Personnel Program.**

**Promoting Regional Capacity for Health Research**

Interviewees representing organizations and institutions not affiliated with UBC, UVic or SFU, particularly those remote from the lower mainland, expressed concern about their success in obtaining awards, and the challenges they face in building health research capacity. The panel believes that the MSFHR is fair in its adjudication processes, though the small number of applications from smaller academic institutions makes it difficult to ascertain if there is any selection bias against candidates from these institutions. The panel noted that the Foundation has adjusted the weightings it places on a criterion related to research environment to further reduce the likelihood of bias against small institutions. The overall allocation of the personnel awards is similar to the distribution of CIHR funds to the institutions, an indicator of institutional capacity for health research. The determining factor for selection of awardees is excellence, and the panel does not advocate any lowering of the bar for applicants from smaller institutions, which, in the long run, would work against those institutions.

This being said, the panel recommends that the primary tool used by MSFHR to support the growth of health research at these smaller institutions and by their investigators should be its infrastructure programs, and future targeted strategic initiatives (see recommendation 9) which may be developed in partnership with the health authorities in the regions, universities in smaller centres and other organizations. Rather like the CIHR's Regional Partnership Program, MSFHR might consider working with the health authorities and the smaller academic institutions outside the lower mainland to create regional partnerships to support additional training awards, and possibly career awards.

The MSFHR is also in a position to foster mentorships between senior scholars in larger centres and applicants for PDFs or career awards in smaller institutions. For example, a fellow or scholar working in a small institution could be connected by Foundation staff to one or more established researchers based in larger one, in order to provide the same collegial support enjoyed by young investigators working in an institution where there is a strong interdisciplinary team. Such a mentoring role might be an expectation for those receiving Senior Scholar awards. Annual awardees meetings (showcases) as suggested in Recommendation 5 will also help to make researchers in small institutions feel more immersed in the mainstream of health research in BC and build support networks.

All institutions and potential applicants must have equal opportunity to engage with MSFHR staff and to be fully informed about funding opportunities and to discuss local and/or unique needs. Staff are encouraged to continue and expand their information meetings and workshops in research institutions outside the Vancouver area. It is also important that review committees include members who can educate other committee members about the realities of the research environment and the special opportunities for certain types of health research that exist in the smaller institutions.

*Recommendation 8*

**MSFHR should continue to be especially sensitive to the challenges faced by small institutions in accessing personnel awards, and employ tactics such as networks, strategic initiatives, regional partnerships, applicant education, and distance mentorship to help small regional institutions become more successful in increasing the number of awards they receive, and facilitate the development of their nascent health research communities.**

**Thinking about Research Priorities**

At the outset, MSFHR faced a major rebuilding task, and appropriately addressed it through an approach to its personnel programs which was based on the excellence of the candidate and the planned research, irrespective of the discipline or topic of the research. While not abandoning a commitment to support excellence across the entire range of health research, the Foundation should consider whether it is time to select specific research areas for deliberate capacity-building. The “generic” rebuilding job may be approaching completion, given the previously-mentioned difficulties of institutions to absorb MSFHR-funded researchers at the end of their period of support, yet certain types of research and researchers, particularly health professional researchers, remain in short supply. The Ministry of Health has embarked on identifying major health system and health care research priorities, and it seems likely that these may be reflected in conditions attached to future budget allocations to the MSFHR. It would be wise for the Foundation to anticipate this development.

The panel heard strong support from research leaders for the concept of training programs as strategic tools to address research priorities, perhaps as part of an integrated approach that included network and other infrastructure support. As noted these may also provide more favourable environments for training and supporting health professionals in a research career, and may also benefit smaller institutions.

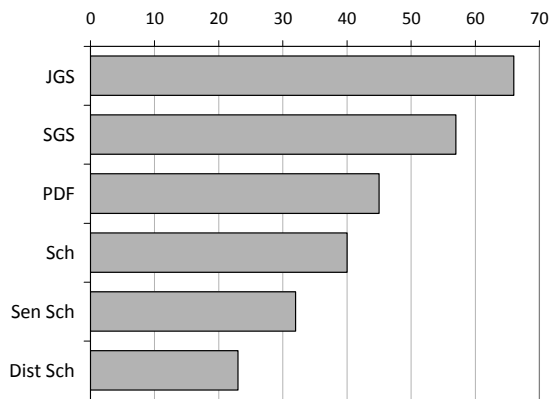
*Recommendation 9*

**MSFHR should consider introducing innovative multi-disciplinary training programs to build research capacity selectively, in order to address emerging provincial health priorities.**

## Helping Women to Pursue Research Careers

The panel notes the declining involvement of women in progressively more senior career awards. At the most junior level, women account for 66 per cent of funded award recipients. At the senior scholar level, this number falls to just under 32 per cent

Figure 2. MSFHR personnel programs 2001 - 2006:  
% of women awardees



(Figure 2), and was even lower for the discontinued Distinguished category. It is important to note that there is no evidence of gender bias in the Foundation's selection processes. The problem is that at each career step a lower proportion of applicants are women. This represents an important loss of talent to the academic health research enterprise.

This trend of fewer women in more senior roles is common to all comprehensive research funding agencies and

jurisdictions, and is more pronounced for biomedical research than for the other three "pillars". Like most of the issues identified in this report, the solution is complex and a shared responsibility of the Foundation, the research community itself, the institutions and government policy.

For its part, the MSFHR's existing personnel policies are pretty standard, and a number of women interviewees commended the Foundation for its receptivity and flexibility in assisting with their particular circumstances. However, the panel felt that the Foundation should be proactive and ensure that it employs international best practices with regard to personnel policies and benefits that encourage women applicants, and support for women in their research careers, and use its honest broker credibility to ensure other stakeholders do likewise. For example, it could consider part-time remuneration for award-holders (of either gender, but more often women) taking maternity/parental/caregiver leave. In the panel's experience most award-holders continue some research activity, such as writing up publications, while on leave.

The importance of good mentorship is a recurring theme in this report and in this instance also the Foundation might consider compensating mid-career and senior women researchers who undertook to act as coaches for more junior women seeking mentorship.

### *Recommendation 10*

**The Foundation should be certain that it leads international best practices with regard to personnel policies and benefits that encourage women applicants, and support for women in their research careers, and use its honest broker credibility to ensure other stakeholders do likewise.**

### **Broadening Review Panel Composition**

While there was very broad support and approval for the MSFHR peer-review processes for its Personnel Program competitions, the panel heard some concerns about the difficulties in reviewing multi-disciplinary and cross-pillar applications. For this reason, and to further increase stakeholder engagement with, and knowledge of the Foundation, and to broaden the membership to add emphasis on assessing the potential outcomes of research projects, the panel recommends increased representation by a variety of stakeholders on the review panels for all categories of awards.

<i>Recommendation 11</i>
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<b>MSFHR broaden its panel membership to reflect more diverse stakeholder perspectives, including representatives from the health authorities; industry; the Ministries of Health, Advanced Education and Economic Development; etc. where appropriate to the type of research and category of award under consideration.</b>
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### **Widening Trainee Horizons**

The panel and a number of interviewees questioned the MSFHR policy that post-doctoral fellowships may only be taken up within the province. The panel believes it would be beneficial, in the long-term, for the quality and diversity of health research in BC to permit exceptions to this policy. Those British Columbians whose training has been primarily in BC, or who seek to train in areas of study where the acknowledged centres of excellence or study populations exist outside BC, should be permitted to pursue some or all of their postdoctoral studies in locations outside the province, in Canada or abroad. When outstanding individuals from this postdoctoral diaspora are recruited back to the province as independent researchers, they will enrich research in BC by bringing with them cutting-edge methodological and conceptual advances.

The panel noted that MSFHR has an existing exchange relationship with the Fonds de la recherche en santé du Québec (FRSQ) and that this could be used as a model upon which to build exchange mechanisms with other provincial health research agencies.

<i>Recommendation 12</i>
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<b>MSFHR should permit British Columbians whose training has been primarily in BC, or who seek to train in areas of study where the acknowledged centres of excellence or study populations exist outside BC, to pursue some or all of their postdoctoral studies in locations outside the province, in Canada or abroad.</b>
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### **Tough Choices**

Finally, the panel appreciates that its recommendations will impose an increased financial burden on the MSFHR. If it is unfortunately necessary to find increased funds for key priorities within restricted budget envelopes, the panel believes, and a number of interviewees shared this opinion, that the lowest priority in terms of the range of

valuable personnel programs offered is the junior graduate student award, and therefore that this funding for students in Masters programs could be re-allocated.

There were three reasons for this belief:

- it is difficult to evaluate individual candidates without prior research experience;
- not all who enter a Masters program have a demonstrated commitment to a research career; and
- alternate types of stipend support are available for this relatively short-term training period.



Mark Bisby, on behalf of the Review Panel

May 29, 2008

### **Acknowledgements**

The panel wishes to acknowledge the remarkable assistance provided by the MSFHR staff in conducting this review. While the panel was entirely free to explore any matter related to the personnel programs, staff stood ready to provide any information required.

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