

### **The Need for a Health Research Foundation in Nova Scotia**

Medical research is one of the pillars of any medical school and produces benefits far beyond the development of new knowledge and medical treatments. A vibrant research community attracts support from industry and government, leading to the creation of high technology jobs, but it also attracts the best physicians and researchers, which ultimately leads to better patient care. Patients may also benefit from novel treatments developed and tested in clinical trials. However, high quality medical research requires strong funding support from a variety of sources. Research funding from government sources is particularly important, both from a provincial and federal level. In these times of fiscal restraint, research programs are often threatened by large cutbacks and smaller provinces are hit harder by cutbacks due to existing funding inequalities for medical research.

On a per capita basis, Nova Scotia receives a disproportionately low amount of funding compared to many other provinces such as Ontario, Alberta and British Columbia. Although the population base of Nova Scotia represents 3.3% of the Canadian population, in 1993/94 it received only 2.4% of all Medical Research Council (MRC) grant money, and only received 0.2% of funding from the National Cancer Institute of Canada (NCIC). It is interesting to note that the Nova Scotia Cancer Society raised \$1.02 million for NCIC in 1993/94, yet NCIC only provided \$85 thousand of funding to support cancer research in Nova Scotia. There is clearly a gross inequality in the medical research funding system when monies raised in a province with financial difficulty are shunted away to wealthier regions of Canada. The argument that the NCIC funds are going to support the "best" research is insufficient to explain a funding discrepancy in which Nova Scotia receives less than 10% of the money it contributes. Clearly, Nova Scotian researchers are not receiving comparable levels of research funding from national funding bodies relative to many other provinces, even when considering statistics on a per capita basis.

Although it appears that the funding of Nova Scotian researchers by MRC is roughly proportional to the population size, there are some important problems that this statistic does not reveal. Most of the money from MRC given to Nova Scotian researchers is in the form of "Operating Grants". However, larger team grants are becoming increasingly important, as many projects require a multidisciplinary team of researchers. The fact that Nova Scotian researchers are having difficulty securing these types of large interdisciplinary grants is a cause for concern. The relatively small population base of Nova Scotia is a contributing factor, but this cannot account entirely for the present inequalities in funding from Federal granting agencies. In addition, since the Dalhousie Medical School is the only medical school in the Maritimes, the population base that it serves as a tertiary referral centre is much larger than just the population of Nova Scotia.

One of the fundamental reasons for the lower success rate of Nova Scotian researchers in securing money from national funding agencies is that there is not strong financial support of medical research at a provincial level. Consider, that of the eight provinces in Canada with medical schools, only Newfoundland and Nova Scotia do not have a provincial funding agency for medical research. This lack of provincial support creates an uneven playing field for researchers in Nova Scotia competing for grants against researchers from provinces with well-established provincial research foundations. Provincial support provides money to initiate research projects so as to demonstrate feasibility, as well as to provide the infrastructure needed to run successful research programs.

Currently, the majority of internal funding for medical research in Nova Scotia comes from the Dalhousie Medical Research Foundation (DMRF), a not-for-profit organization founded in 1978 by Dr. J. Donald Hatcher, the Dean of Medicine at that time, and Mr. Bill Sobey out of frustration over the lack of provincial research support. The DMRF funds research through equipment and personnel awards, but it does not provide operating grants, and depends on donations from the community. Although the DMRF supplies some funds to medical researchers in Nova Scotia, there is clearly a need for a provincial funding agency. At the request of the Department of Health, a proposal to establish a provincially funded Health Research Foundation was submitted to the Department of Health in 1996. To date, a medical research foundation has not become a reality.

An example of how a provincial research foundation can impact positively on medical research can be seen in the province of Alberta. In the early 1970's the Alberta provincial government invested \$360 million of their oil field profits into a unique provincial research and development endowment- the Alberta Heritage Foundation. Over the past two decades the Alberta Heritage Foundation has infused approximately half a billion dollars into medical research in that province. This has had a dramatic effect on the ability of Alberta scientists to attract money from Federal granting agencies. In fact, every dollar infused into research from the Alberta Heritage Foundation attracts two dollars from external sources. As a testament to the effectiveness of the Alberta Heritage Foundation there have been dramatic improvements in the research output of the University of Alberta. The April 1997 report of the Association of Canadian Medical Colleges shows that the University of Alberta improved from 11th position in 1977/78 to 5th place in 1995/96 in terms of research dollars invested per year for biomedical and health care research at that institution. These numbers are quite convincing and make the Alberta Heritage Foundation a model for the Province of Nova Scotia to follow.

The Government of Nova Scotia should establish a medical research foundation similar to the Alberta Heritage Foundation. In fact, in Nova Scotia we appear to be in an analogous situation to Alberta with the discovery of natural gas off Sable Island. Now is the ideal time for government to make the commitment to set up a Nova Scotian Health Research Foundation using a small percentage of the provincial profits from this multibillion dollar natural gas development project.

Dedicating even a small fraction of the provincial profits to research could dramatically impact health related research in Nova Scotia.

The economic arguments for a health research foundation are compelling. Much of the money would go into salary support for Nova Scotians employed in high technology jobs. In fact, 60% of most research grants go into personnel support and approximately 30% of this would return to the Provincial Government in the form of taxes. Once a provincial research foundation is established it will enhance the competitiveness of Nova Scotian researchers applying to national funding agencies. Clearly, Federal money will be attracted when the Provincial Government takes appropriate steps to support medical research in Nova Scotia.

The arguments in support of the formation of a Nova Scotia Health Research Foundation are overwhelming. The question remains as to why one has not been implemented. It is clear that the Provincial Government must provide the catalyst to produce a vibrant research community in Nova Scotia by providing a base of financial support. The returns will far outweigh the cost and all Nova Scotians will ultimately benefit.

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