

THE ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH: ITS FORMATIVE YEARS 1975-2005

*“Our province is rich in talented people
and we have outstanding scientists...
This permanent commitment to medical research...
made by the government...will provide an opportunity
for leadership in health research in Canada”⁽¹⁾*

Introduction:

2005 was a milestone year. Alberta celebrated its Centennial and The Alberta Heritage Foundation for Medical Research (AHFMR) celebrated its silver anniversary.

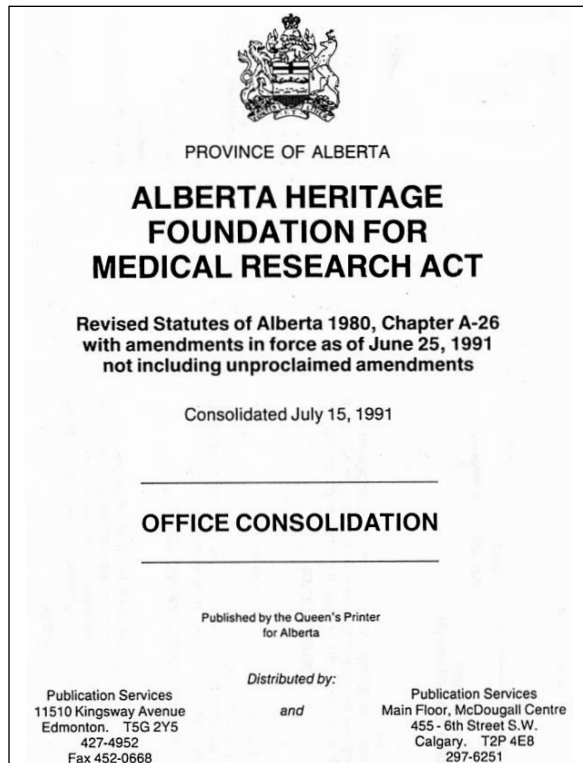
The AHFMR could look back over 25 years of leadership and contributions to medical research in Alberta and Canada. Through partnerships, collaborative effort, a validated framework, and a sound research granting policy, the AHFMR had built an enviable reputation and was admired far beyond its borders.

The AHFMR was incorporated in 1980 during the 75th anniversary of the province of Alberta. Premier Peter Lougheed referred to it as one of the significant legacies of his 1971-1985 premiership. With the formation of the Ingenuity Fund in 2000 during Premier Ralph Klein's premiership, Alberta became the foremost example of a province contributing to the Canadian goal of reaching the research spending levels in the USA, Japan, and Europe.

The Alberta Heritage Fund concept had its roots in the 1966 vision for the province, articulated by Peter Lougheed. In his maiden speech to the Progressive Conservative party of Alberta five years before he became Premier, Mr. Lougheed enunciated a set of guiding principles for the party to follow.⁽²⁾ One was to make investments that had long term horizons with the prospect of accelerating growth.

After becoming Premier in 1971, Mr. Lougheed and his Cabinet crystallized the 1966 principle into a series of Funds or Foundations. Each investment had a focus. Each title included the word “Heritage”. The Lougheed cabinet established three, and the Klein cabinet one Heritage Foundation. In 2005 the Klein Cabinet augmented the endowments of all four Foundations as a centennial gift to all Albertans.

The first Alberta Heritage Trust Fund (“Heritage Fund”) was created in 1975. That year the Medical Research Council of Canada was facing a serious medical research funding shortfall. Eight days after the proclamation of the Heritage Fund Act, the UofA and UofC Deans of Medicine approached the Premier with a second heritage opportunity, to fund medical research in Alberta. The cabinet of Premier Lougheed was already working on a Science and Research Policy for the province. In 1977 the



The AHFMR Act, RSA 1980, rev. 1991

1. Lougheed, Peter E. The Alberta Heritage Foundation for Medical Research. Seven-page Government of Alberta press release, March 5, 1979.
2. Wood, David G. “The Lougheed Legacy”, pages 55-56, Key Porter Books, 1985.

Lougheed cabinet agreed to research the idea and appointed Special Advisor Dr. John E. Bradley to search two continents to find a framework that would stand the test of time, operate at arm's length from government and provide the leadership needed for Alberta to contribute significantly to medical research world wide.⁽³⁾

Chance and timing played their part. In 1980 the Alberta Cabinet diverted \$300 million, earmarked for the Alberta Heritage Trust Fund, to fund the new AHFMR. The decision was made during the year for oil prices peaked following the mid 1970s Middle East oil crisis. Fortuitously for the AHFMR, interest rates remained substantially above 12% for the next decade. Oil prices followed a different cycle than did interest rates. Two years later would have been too late. It would be another fifteen years before the rise in the price of oil and natural gas created a similar opportunity for the Alberta cabinet.

Fully funding the semi-autonomous AHFMR gave it both autonomy and flexibility. While its formation was a vote of confidence in the ability of future Albertans to be resourceful and creative in their search for new medical knowledge, the strategy carried a risk. The return was unknown. But Albertans were accustomed to taking risks, at least in the petroleum industry.

The 1980 AHFMR Board, senior management, and the Scientific Advisory Committee faced a steep learning curve. From the outset, the peer review panels recommended funding the best ideas, proposals and projects. Subsequent International Boards of Review (IBRs) in 1986, 1992, 1997, and 2004, reaffirmed that approach and in doing so authenticated the AHFMR's framework.

While research to date has produced no Nobel prize winners, the AHFMR's structure and performance has been validated by every IBR visit. Medical research discoveries in Alberta have already had a worldwide impact.

In its first quarter century, the AHFMR granted over \$800 million to fund medical research proposals in Alberta. It initiated the construction of two (1986-1988) and two more (2004-2007) high-rise medical research facilities at the UofA and UofC. Using the Harvard investment formula that limited spending to

approximately 5% of the endowed capital, the value of the AHFMR's retained earnings increased to over \$1.0 billion (2005).

Over time the number of partnerships with other medical research funding agencies grew. Pre-existing partnerships increased their grants to Alberta researchers, including the Medical Research Council (now the CIHR/MRC), Canadian Foundation for Innovation, Canadian Research Chairs, Networks of Excellence, National Institute of Health, Pharmaceutical companies and voluntary health organizations. Medical research grants received by Alberta's two medical faculties exceeded \$250 million (2004), or four times the amount disbursed by the AHFMR.⁽⁴⁾

The most important legacy of the AHFMR was the reaffirmation of the Heritage concept. That occurred with the creation of the fourth Foundation, the Alberta Heritage Foundation for Science and Engineering Research, in 2000. The Ingenuity Fund as it became colloquially known, was established by Premier Ralph Klein's cabinet, with an opening endowment of \$500 million. It used the AHFMR framework. Development of the fund was fast-tracked with the appointment of AHFMR Board Chairman Alvin Libin as the first Ingenuity Fund Chair.

The AHFMR and AHFSER, when coupled with matching funds and grants from elsewhere generated more than \$300 million in research grants in Alberta (2004).

Medical Research in Alberta, 1915-1975:

The earliest roots of significant research (medical and non-medical) were recognizable in Alberta as early as 1915. They began on the UofA campus when the Faculty of Medicine was two years old. President H.M. Tory Ph.D., as the medical program coordinator, hired the third full time medical faculty member. He was the youthful biochemist James Bertram Collip, a high-energy teacher/researcher, with a Ph.D. not yet in his pocket. He came to the UofA in 1915 and replaced Dr. (Lt. Col.) H.H. Moshier when he went overseas with the CAMC in early 1916. By 1916, Professor Collip's medical research interests had polarized to "Internal Secretions". He presented a paper on that topic at the AMA annual meeting in

3. Lougheed, Peter E. Interview with Dr. Robert Lampard, July 15, 1998. Mr. Lougheed could not pinpoint the time and date when the International Board of Review concept arose. He thought it was first suggested by Fred Mannix Sr. following a visit to the Scripps Clinic in California.

4. AHFMR Fourth International Board of Review, 1998-2004, page 17, June 2004.

1916. It was one of the seventy-seven papers Collip published while at the UofA from 1915-1928.⁽⁵⁾

In 1919 UofA President H.M. Tory formed a scientific interest group at the UofA. In 1920 it was reorganized as the provincial Scientific and Industrial Research Council the first in Canada. Renamed the Alberta Research Council in 1928, the Council received provincial government funding that targeted fossil fuel and coal research, starting in 1920. The concept of government funded, university based research became a national one, when Tory became the president of the National Research Council from 1923-1935.⁽⁶⁾

In 1920 Dr. Tory did his utmost to obtain a Rockefeller Foundation Grant for the UofA, from the \$5 million that had been secured for Canadian medical schools by future Prime Minister Mackenzie King. Tory was successful, but the UofA grant of \$500,000 had conditions attached to it. The UofA was required to complete the planned medical school building, implement a full four-year MD curriculum, upgrade the clinical faculty, and reacquire the Strathcona (renamed the University) Hospital from the post-war Soldiers Civilian Re-establishment Commission. It demonstrated to Tory the power a grant could have.

The first applicant to be upgraded was Professor Collip. He began a worldwide tour of research centres, starting at the UofT medical research laboratory of Professor J.J.R. Macleod in April 1921. In December of 1921, Collip was assigned to the struggling Banting/Best team, to isolate and purify their pancreatic extract. Within a month Collip crystallized the active ingredient, now known as insulin.

Collip returned to the UofA in late 1922 and continued his endocrine research. He was awarded a D.Sc. (1924); isolated the active secretion from the parathyroid gland, parathormone (1925); and earned an MD along with the second UofA class of MDs (1926); before leaving for McGill University in 1928.

The Rockefeller grant conditions were met within three years and the funds were forwarded to the University of Alberta in December 1923.⁽⁷⁾ The grant would not be transferred to the medical school until 1947-1950. Interest from the grant was used sporadically, until the capital was transferred to the Special Services and Research Fund at the UAH in 1955.

The Depression of the 1930s curtailed all but absolutely necessary expenditures at the UofA medical school. The few resources that were available were earmarked for medical education.⁽⁸⁾ In 1938, the federally funded National Research Council (NRC) formed the Medical Research Council under Sir Frederick Banting. In 1946 Banting's successor Dr. Collip, separated MRC funding from NRC funding. Most grants went to university-based researchers, following the model in Alberta.

In 1938 a Calgary surgeon, Dr. John S. McEachern prompted, and then led the CMA to form the Canadian Cancer Society (CCS). He sat as the only physician on the King George V Cancer Silver Jubilee Fund, which had raised \$450,734 for cancer education and research in 1935. The capital funds were transferred by the federal government to the National Cancer Institute of Canada (NCIC) in 1947, to initiate the funding of cancer research in Canada for its first three years.⁽⁹⁾

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5. Noble, Robert L. "Memories of J.B. Collip." *CMAJ* 93:1356-1364, December 13, 1965. For more on Dr. Collip see (1) R. Lampard's profile of "Dr. James Bertram Collip;" (2) D. R. Wilson's article on "James Bertram Collip" in the Appendix to the 77th Annual General Meeting of the Alberta Medical Association and College of Physicians and Surgeons, pages 20-25, September 31-October 1, 1982; (3) M.L. Barr and R.J. Rossiter's "James Bertram Collip 1892-1965" in the *Biographical Memoirs of Fellows of the Royal Society* 19: 235-267, December 1973; and (4) Michael Bliss' *The Discovery of Insulin*, pages 84-128, McClelland and Stewart, 1982. An index and bound copy of Collip's seventy-seven papers written before December 1928, is deposited in the UofA Archive, Edmonton.
 6. Corbett, Edward A. *Henry Marshall Tory*, pages 157-184. Ryerson, 1954. The importance of University-based research to President Tory was stressed in his letter to Professor J. B. Collip on August 29, 1921. An excerpt was reprinted in Elise Corbet's *Frontiers of Medicine*, pages 168-169, 190-196, UofA, 1990.
 7. Fedunkiwi, Maryann "The University of Alberta and the Rockefeller Foundation - Wooing the Rockefellers," Part 2.
 8. Vant, J. Ross, Cashman, Tony *More Than a Hospital. The University of Alberta Hospitals 1906-1986*, pages 215-227, UAH, 1986. The paucity of funds between the two wars was detailed in (1) Elise Corbet's *Frontiers of Medicine*, pages 170-177; (2) John W. Scott's "The History of the Faculty of Medicine of the University of Alberta," page 15, UAH, 1963 and (3) A.C. McGugan's *The First Fifty Years: a History of the University of Alberta Hospital*, page 28, UAH, 1964. For further comments about the experience of one student see the Profile of "Dr. D.R. Wilson" in Part 1.
 9. Macbeth, Robert A. "The Origin of the Canadian Cancer Society," *Canadian Bulletin of Medical History* 22(1): 155-173, 2005. For a discussion of the NCIC see the Editorial on the National Cancer Institute of Canada, *CMAJ* 56:325-326, March 1949, and Dr. Allan Blair's "Cancer in Canada: Report of a National Survey," number 2, NCIC, 1948.

In 1946, Dr. Walter C. Mackenzie returned to Edmonton from the Navy, and in 1949 became the Professor and Head of the Department of Surgery. Dr. Mackenzie and Dean John W. Scott responded to the 1949 suggestion from of NCIC Executive Director Dr. Allan Blair, that they approach the Alberta Cancer Society to fund a cancer-focused medical research laboratory in Edmonton. The Alberta Cancer society was receptive, and the McEachern Research Laboratory was opened on the UofA campus in 1952 at a cost of \$150,000. It was named in honor of the CCS founder, Dr. J.S. McEachern.⁽¹⁰⁾ When the McEachern Laboratory opened, the Manning government declined to provide any funds for it, a reversal of the Alberta government stance in 1920. In 1953 and 1960 the McEachern Laboratory was augmented by the opening and expansion of the contiguous Surgical-Medical Research Institute. By 1977 the two labs had published over 500 papers in the medical literature.⁽¹¹⁾

In 1949, the UofA Faculty of Medicine research income totaled \$22,000. It was primarily from the Medical Research Council (MRC). The UofA research revenue figure increased to \$1.0 million (1970) and \$2.5 million (1974). The UofC revenue was \$0.8 mil-

lion, before the retrenchment years of 1974-75. In 1974 the total MRC funding in Canada amounted to \$42 million. By the early 1970s the MRC had replaced the National Institute of Health (USA) as the primary source of funding for medical research in Canada.

The Canadian Medical research crisis of 1974:

After 1968 the MRC stressed to the Federal government, from its sole funding source the need for long-term planning and consistent financial support. The MRC developed an independent peer review system for awarding funds, and was beginning to foster multidisciplinary applications for grants.⁽¹²⁾

In the early 1970s, inflation rose to 10-11% per year. Federal medical research funding increases were limited to 5% per year. By 1974 there was a crisis. The MRC began curtailing its programs. Three Canadian medical research organizations responded by preparing a Tri-Party Brief. They reported, "Canada's position in medical research is overall, one of modest accomplishment, under conditions that until recently, were, for the most part, very difficult."⁽¹³⁾

The federal government contemplated its own medical research program in 1974 when federal Health Minister Marc Lalonde released his *New Perspective on the Health of Canadians*". The initiative was to encourage a greater commitment towards the improvement of the health of Canadians and secondarily to prevent disease. Lalonde did request "an ongoing dialogue between the health planners and the research committee on the priorities for mission-orientated health research as well as continued support for research consistent with the scale of the health care industry".⁽¹⁴⁾

The Origin of the AHFMR:

In 1966, Peter Lougheed presented his vision of Alberta's future at the Progressive Conservative party annual meeting. The elements of that vision were: 1) to recognize the important leadership role Alberta

A NEW PERSPECTIVE ON THE HEALTH OF CANADIANS

a working document

Ottawa, April 1974

by Hon. Marc Lalonde, Queen's Printer 1974

10. Corbet, Elise A. *Frontiers of Medicine*, pages 177-180, UofA 1990.
11. Corbet, Elise A. *Frontiers of Medicine*, pages 173-180.
12. Tri Party Statement "Medical Research: The Immediate Need for Increased Funding. A Statement" by the Canadian Society for Clinical Investigation and the Canadian Federation of Biological Sciences and the Association of Canadian Medical Colleges. Twenty pages, August 1974. Part I Financial Requirements. Part II Rationale for Future Support. Appendix: the Nature of Medical Research, Canadian Contributions, and the Interrelationship of Research with Education & Health Care. The number of Medical Schools had increased from twelve to sixteen (1968-71), the number of medical students by 90% (1965-75) while the number of medical students entering medical research positions had dropped from 10% of enrollment to 1%. The brief was deposited in the AHFMR Archives.
13. Tri Party Statement "Medical Research: The Immediate Need for Increased Funding," p. 18.
14. Lalonde, Marc *A New Perspective on the Health of Canadians*, page 7. Queen's Printer, April 1974. Quoted in the Tri-Party Statement on Medical Research, Part II pages 13, 14.

could perform in Canada; 2) to improve the public good; 3) to have a long range plan for the future development of the province; 4) to anticipate problems and prepare for shortages; and 5) to set as an object, a society that is not inferior to that in any province or state in North America.⁽¹⁵⁾

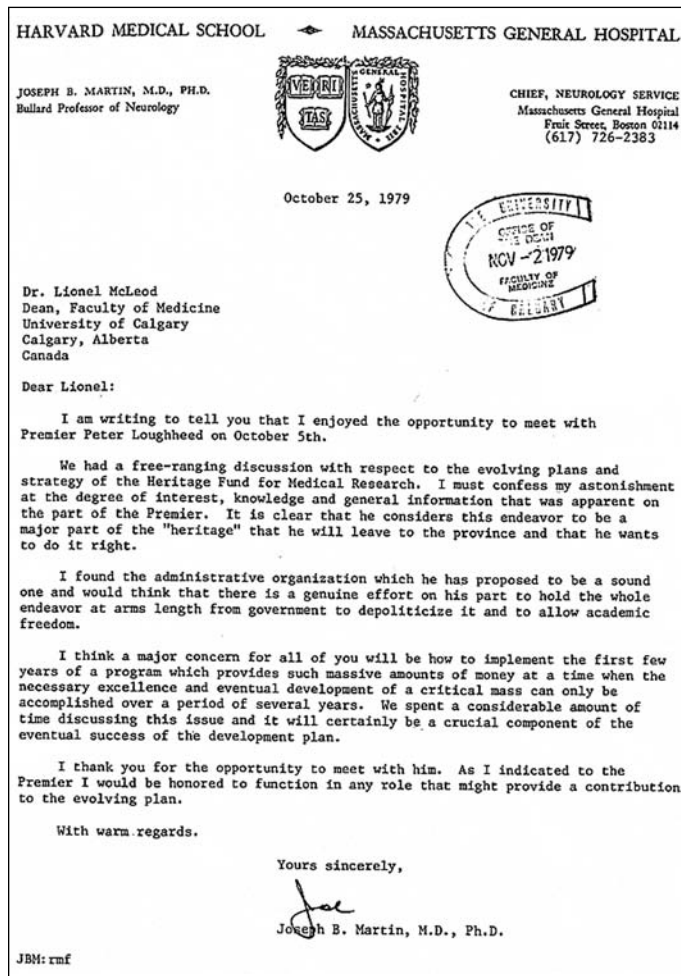
After the election of 1971, the new Lougheed government predicted it would be the beneficiary of a long-term increase in provincial oil and gas revenues. One of its four priorities was to set aside excess funds, for the rainy day when all of Alberta's oil and gas had been pumped and taxed.⁽¹⁶⁾ In a speech on September 6, 1974 to the Calgary Chamber of Commerce, Premier Lougheed outlined six government strategies. One was to encourage economic diversification through investments into what Lougheed called "brain industries".⁽¹⁷⁾ After the March 26, 1975 election Mr. Lougheed concluded the "mandate of 1975 was for Alberta to become a leader in Canada... It was our intention to invest significant funds in science and research and set aside 30% of the surplus oil and gas revenues to fund the Heritage Fund."⁽¹⁸⁾

In a pre-election announcement, the Lougheed government said it intended to make money available for brain industries. Cash-strapped, the MRC's executive director Dr. Malcolm Brown discussed the federal funding shortfall, with Alberta MRC members Drs. Keith McCannell (UofC) and Ernie McCoy (UofA). Dr. Brown suggested they approach the Alberta government to help address the shortfall. Instead they turned to their respective Deans.

The Deans first sought clarification from Premier Lougheed that brain industries included medical research. He acknowledged they did, but any application, he said, had to be a joint one. Deans L.E. McLeod (UofC) and D.F. Cameron (UofA) then appointed Drs. William G. Tatton (UofC) and Neil Madson (UofA) to prepare a joint proposal. It was

completed from February 10 to May 3, 1976. The 28-page report recommended the establishment of an "Alberta Heritage Health Research Fund".⁽¹⁹⁾

Eight days after the proclamation of the Alberta Heritage Fund Act on May 19, 1976, Deans McLeod and Cameron and the AMA President Dr. Bryce Weir presented the Heritage Health Research Fund proposal to Premier Lougheed and Ministers Gordon Miniely and Helen Hunley. Premier Lougheed commended the submission, but said it would have to



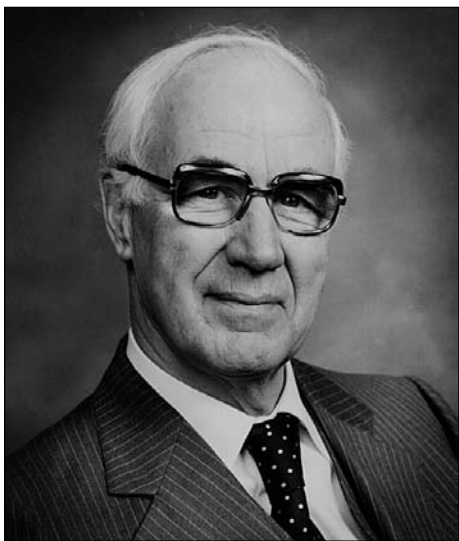
Letter from Dr. Joseph Martin to Dr. McLeod after the visit of Premier Lougheed to Harvard, 1979

15. Wood, David G. *The Lougheed Legacy*, pages 55-56, Key Porter Books, 1985. Also see Lougheed's notes entitled "Suggested guideposts for the Alberta Progressive Conservative Party. 8 page speech, January 1966. Legislative Library, Edmonton.
16. Alberta Government Hansard, Fall 1974.
17. Bradley, John E. "The Alberta Heritage Foundation for Medical Research," pages 214-218, in *Medicine in Alberta: Historical Reflections*, by Drs. D.R. Wilson and W.B. Parsons, Alberta Medical Foundation, 1993. Kathleen Thurber the AHFMR Communications Director reviewed "The Launching of the AHFMR," in the AHFMR Research News, pages 4-5, Spring 2000.
18. Lougheed, Peter E. Interview with the Honorable Peter Lougheed, September 13, 1999 for the AHFMR. Copy in the AHFMR Archives. Taped by Lois Hammond.
19. Tatton, William G. Transmittal letter to Dr. L.E. Macleod, May 14, 1976. The Alberta Heritage Health Research Fund proposal was attached to the letter. UofC Faculty of Medicine Archives Temporary Box #9, File #9.06. Confirmed in an interview with Dr. W.G. Tatton by Dr. R. Lampard, November 9, 2000.

wait until the government's science and research policy was formulated and fully discussed.⁽²⁰⁾

In its policy statement, the Alberta government accepted that it had the primary responsibility for providing health and education services. The cabinet concluded ipso facto that it was the government's responsibility to fund health and education research.⁽²¹⁾

Premier Lougheed formed a cabinet committee and directed it to "develop a position paper creating a medical research foundation under the Heritage Fund ... Alberta should become Canada's think tank, a technological research capital".⁽²²⁾ The three cabinet ministers – Gordon Miniely (Health), Helen Hunley (Social Services) and Bert Hohol (Advanced Education) – appointed a Health Research Task Force to develop the position paper. The Task Force report was completed on March 24, 1977, and submitted to



39-1

Dr. John Bradley, Special Advisor to Hon. Peter Lougheed
1977-1980

the cabinet committee by chairman Dr. John E. Bradley.⁽²³⁾ The report defined research as having three components: basic, applied, and experimental. It recommended medical researchers be allowed to spend up to 25% of their time teaching and performing clinical duties. It further suggested that 1% of Alberta's health care and social services budget be used to fund medical research. The Task Force recommended research be centered in the Faculties of Medicine, with a guarantee of \$50 million over the first five years.

The cabinet asked for a formal proposal, and directed that it include the formation of a foundation. The revised Task Force report was tabled on June 2, 1977. The cabinet accepted the proposal to establish an Alberta Health Research Foundation.⁽²⁴⁾

Special Advisor on Medical Research, Dr. J.E. Bradley:

On August 2, 1977 the cabinet appointed Dr. John Bradley as Premier Lougheed's Special Advisor on Medical Research.⁽²⁵⁾ Two months later on September 28, 1977, Premier Lougheed spoke at the "Think West" conference. Lougheed concluded the Heritage Fund would increase "at the awesome rate of \$1.0 billion per year. One of the things we have to do as part of the economic diversification plan, is to fund applied medical research, build medical research centres, and develop some vehicle to effectively do pure medical research".⁽²⁶⁾

On November 3, 1977 Premier Lougheed gave Dr. Bradley the parameters to be followed. They were: 1) to fund medical research, not general health research, 2) to name the entity the Alberta Heritage Foundation for Medical Research, 3) to coordinate it with the government's research and science policy, although medical research was to be considered sep-

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20. Hammond, Lois Interview with the Hon. Peter Lougheed, September 13, 1999. Eight pages, AHFMR Archives.
21. Lougheed, Peter E. The 1999 Killam Lecture entitled "The Economic and Employment Impact of Research in Canada". The Killam Trusts, Halifax N.S. For further elaboration see the R. Lampard manuscript "The Origin of One of Alberta's Best Kept Secrets, The Alberta Heritage Fund for Medical Research", June 1, 2005. Manuscript in possession of the author and deposited with the AHFMR. Also see the Interview by Lois Hammond with Hon. Peter Lougheed, September 13, 1999.
22. Bradley, John A. "The Alberta Heritage Foundation for Medical Research," in D.R. Wilson and W.B. Parson's *Medicine in Alberta: Historical Reflections*, pages 214-218, AMF, 1993.
23. Bradley, John A., Kolesar, H., McPhee, J. "Report of the Health Research Task Force," March 24, 1977, page 1. AHFMR Archives.
24. Bradley, John A., Kolesar, H., McPhee, J. "Revised proposal for an Alberta Health Research Foundation." Attached to a two page memo by Mr. McPhee to Dr. Bradley, June 2, 1977.
25. Bradley, John E. "The Historical Development of the Concept, Proposal and the Legislation for the AHFMR." 31 page report tabled with the AHFMR Board September 16, 1981.
26. Bradley, John E. Special Advisor Volume 1, Consultations - Objectives - Government Policy Objectives.

arately, and 4) to be large enough to allow operating costs to be met through interest revenues.⁽²⁷⁾

Dr. Bradley met with the UofC and UofA Deans and their medical research committees in November 1977. He said the government's plan was to appoint a separate governing board and a scientific advisory committee to adjudicate grant requests. The board was to report to a committee of the legislature once every two to four years. Invited experts would conduct an international review every eight years.

The Deans replied that principal researcher costs were \$150,000 per year per researcher and space requirements were 1,500 square feet per researcher. There would be a need, they said, to fund graduate students, post-doctoral fellows, and visiting fellows. Grants, they asked, should be as long as possible, perhaps up to twenty years and subject to external reviews every five to seven years. Preference should be given to multidisciplinary applications with a clinical component.⁽²⁸⁾

1997 KILLAM LECTURE

BY PETER LOUGHEED

NOVEMBER 6TH, 1997 IN OTTAWA, CANADA

I INTRODUCTION

I consider myself very privileged to present the 1997 Killam Annual Lecture here in Ottawa.

"The purpose of the lecture series is to stimulate public discussion across Canada in both the public and private sectors of the vital importance to Canada's future of a healthy, vibrant, and well-financed program of research at Canadian universities."

The operative words for me today are - "stimulate" - "across Canada" - "Canada's future".

V A GOOD EXAMPLE OF CONFIRMING THIS BELIEF FOR ME IS HOW THE ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH HAS MET ITS EXPECTATIONS.

But there was a major issue to resolve - should the endowment funds be directed to basic research or to applied research, or to a mix of both? The decision we made was to direct all of the funds to basic research. We knew it would not be an easy message to communicate to the public but we felt in the longer term it would be the most beneficial.

As the International Board of Review - reviewing the Foundation in August, 1993 stated:

"This is an Alberta success story - it created a milieu for the advancement of research excellence in the bio-medical sciences."⁽⁶⁾

I have never regretted that decision. It is why I am so comfortable advocating public funds today for basic research at Canadian universities in these times of fiscal constraint.

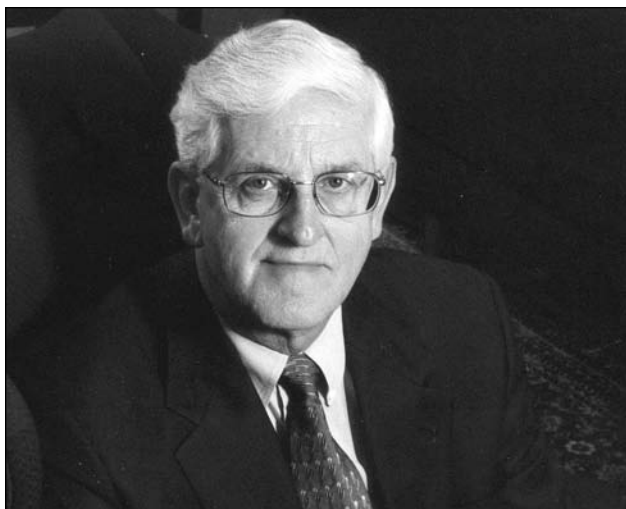
Hon. Peter Lougheed, Killam Lecture, 1997

The Deans' proposals were sufficiently detailed for Dr. Bradley to prepare the first draft legislation for an AHFMR Act in December 1977.⁽²⁹⁾ Then the Premier requested a private working dinner with 10-14 invited guests to discuss the progress to date. On March 19-20, 1978, Lougheed outlined his proposal at the first Premier's Dinner at Government House. The guests felt it would be generally supported by the people of Alberta and that Alberta would be making an international contribution to Canada and beyond.

The Premier asked for suggestions on the annual medical research revenue that would be required. The answers ranged from \$6-\$20 million/year. At the end of the evening Mr. Lougheed said the endowment figure he had in mind should be sufficient to create an annual revenue of \$30 million and therefore would need to be \$300 million. Everyone was astounded at the size of the endowment and the annual income it would generate.⁽³⁰⁾

In February 1979 Dr. Bradley tabled a proposed terms of reference for a Scientific Advisory Committee (SAC). It was to consist of thirteen Nobel laureates or their equivalent, who were "above the

27. Lougheed, Peter E. Memorandum to Ministers Hohol, Miniely and Hunley, dated November 16, 1977, in Special Advisor Volume 1, Consultations - Objectives - Government Policy Objectives. AHFMR Archives. The designation "Heritage" in the title was dropped in the report dated June 2, 1977. It was re-inserted by Mr. Lougheed on November 16, 1977 in his letter to Mr. Hohol. Mr. Lougheed tentatively called it, The Alberta Heritage Foundation for Medical Research. Hon. Lou Hyndman confirmed the use of the word "Heritage" by the Cabinet was intentional. Personal communication, November 16, 2000.
28. Bradley, John E. Minutes of Meetings with the Faculties of Medicine, UofC, November 14, 1977 and UofA, November 30, 1977, together with a seven-page reply from Dr. L.E. McLeod to questions raised by Dr. Bradley, dated December 20, 1977. Special Advisor Volume 1. Consultations - Program. Deposited in the AHFMR Archives.
29. Bradley, John E. Special Advisor Volume 1, Consultations - Legislation. Meeting with the Premier, December 1977.
30. Bradley, John E. Special Advisor Volume 3, First Government House Dinner, March 20, 1978. Confirmed in a personal communication with Dr. W.A. Cochrane, one of the guests.



Dr. Joe Martin, SAC member, 1982-1989, 39-2
IBR Chairman, 2004

battle". The SAC was to develop a peer review system for approving awards and grants. Their recommendations were to be forwarded to the AHFMR Board for approval and funding.⁽³¹⁾

The AHFMR Announcement:

On March 5, 1979 Premier Lougheed announced "Our province is rich in talented people and we have outstanding scientists working in our universities. This permanent commitment to medical research on a very major scale will attract truly outstanding research-orientated staff members... It is part of a commitment made by the government to invest in the future of health care... [It] will provide an opportunity for leadership in health research in Canada...[and] will assist in the diversification of the provincial economy through the creation of a science industry." He continued, "Initially the Foundation will be confined to the funding of medical research, basic and clinical. The total program is to be reviewed at 5-6 year intervals by the International Board of Review (IBR) to be appointed by the trustees".⁽³²⁾

On April 8, 1979, a joint faculty steering committee was appointed by the Deans McLeod and Cameron, to review Dr. Bradley's guidelines for the Scientific Advisory Committee. The SAC was to establish a peer review system, one that would meet international standards. The approval mechanism was to be similar to that used by the MRC.

INTRODUCTION OF BILLS

Bill 62

The Alberta Heritage Foundation for Medical Research Act

MR. LOUGHEED: Mr. Speaker, I request leave to introduce Bill 62, The Alberta Heritage Foundation for Medical Research Act. This being a money Bill, His Honour the Honourable the Lieutenant-Governor, having been informed of the contents of this Bill, recommends the same to the Assembly.

Mr. Speaker, the purpose of this Bill is to establish the Alberta Heritage Foundation for Medical Research. The objects of the foundation are to establish and support a balanced long-term program of medical research based in Alberta, directed to the discovery of new knowledge and the application of that knowledge to improve health and quality of health services in Alberta; in particular, to stimulate research in the medical sciences, to implement effective means of using in Alberta the scientific resources available in medical sciences, to support medical research laboratories and related facilities in Alberta, to promote co-operation in research in medical sciences in order to minimize duplication in and promote concentration of effort in that research, and to encourage young Albertans to pursue careers in research in medical sciences.

Mr. Speaker, the Bill provides for the establishment of an endowment fund of \$300 million from the Heritage Savings Trust Fund, with the income available to the foundation. The Bill provides for a foundation to be run by a board of nine trustees, appointed by government and designated institutions; after five years the government would not appoint the majority. The Bill provides, as much as possible, for the foundation to operate at arm's length from government; provides that the foundation's activities would only be reviewed every three years by a select committee of the Legislature through a triennial report . . .

Alberta Hansard, October 26, 1979

The second Government House dinner was held on June 28, 1979. The objectives of the AHFMR were discussed. They were: 1) to establish and support a long-term program of medical research; 2) to provide research career opportunities; 3) to provide long-term funding; 4) to approve projects to be funded; 5) to assist in the development of a "brain industry"; 6) to provide a vehicle for participation by gift or otherwise in funding for medical research. The last objective was dropped because Revenue Canada policies would have taxed all AHFMR income.⁽³³⁾

31. Bradley, John E. Special Advisor, Volume 4. Joint Faculty Steering Committee on the Scientific Advisory Committee. February 1979 to January 1980.
32. Lougheed, Peter E. Alberta Heritage Foundation for Medical Research. Press release, 7 pages. March 5, 1979.
33. Bradley, John E. "The Historical Development of the Concept, Proposal and the Legislation of the AHFMR," pages 6-8.

The Finishing Touches on the AHFMR

From 1977-1979, Dr. Bradley visited over 250 North American and European research programs. He summarized his search for an organizational framework to conduct medical research.⁽³⁴⁾ On October 5, 1979, Premier Lougheed visited Harvard University and met with the Director of Neurological Sciences, Dr. Joseph B. Martin. Dr. Martin was a 1962 UofA graduate who later became the Dean of the Harvard Medical School. He was impressed by Premier Lougheed's knowledge of medical research and agreed with his concerns about the implementation period, when such massive amounts of money became available.⁽³⁵⁾

Following the 1979 visit, Dr. Martin wrote to Dean McLeod, and closed his letter with the comment, "he [Mr. Lougheed] considers this endeavor to be a major part of the heritage that he will leave to the province and that he wants to do it right... The administrative organization is sound... and there is a genuine effort on his part to hold the whole endeavor at arm's



39-3

Dr. Lionel McLeod, first AHFMR President 1981-1990 length from government, to 'de-politicize' it and to allow academic freedom".⁽³⁶⁾ Dr. Martin joined the SAC in 1982 and chaired the IBR in 2004.

The AHFMR Act

The Act was introduced in October 26, 1979 as Bill 62. Premier Lougheed spoke at length at the second reading on November 9, indicating it was "the most thoroughly researched government policy enacted during his administration". It was consistent with the Lougheed government's conclusion that it was responsible to fund health and education, therefore it was also responsible for funding research.⁽³⁷⁾ All three political parties unanimously supported the Act. It was proclaimed on March 19, 1980 as the Alberta Heritage Foundation for Medical Research Act RSA1980, Chapter V A-26.

The government immediately transferred \$300 million to the Endowment Fund of the Alberta Heritage Foundation for Medical Research. At the same time the government honored its commitment to education, by establishing the Alberta Heritage Scholarship Fund for Grade 12 students, and funded it with \$100 million.⁽³⁸⁾

On March 20, 1980 Eric Geddes was appointed as the first board chairman, joining nine colleagues. At

HERITAGE FOUNDATION FOR MEDICAL RESEARCH	RSA 1980
<p>1 In this Act,</p> <p>(a) "Endowment Fund" means the Alberta Heritage Foundation for Medical Research Endowment Fund;</p> <p>(b) "Foundation" means the Alberta Heritage Foundation for Medical Research.</p> <p style="text-align: right;">1979 c42 s1</p> <p>3 The objects of the Foundation are to establish and support a balanced long-term program of medical research based in Alberta directed to the discovery of new knowledge and the application of that knowledge to improve health and the quality of health services in Alberta and, without limiting the generality of those objects, to</p> <p>(a) stimulate research in medical sciences,</p> <p>(b) implement effective means of using in Alberta the scientific resources available in medical sciences,</p> <p>(c) support medical research laboratories and related facilities in Alberta,</p> <p>(d) promote co-operation in research in medical sciences in order to minimize duplication in, and promote concentration of, effort in that research, and</p> <p>(e) encourage young Albertans to pursue careers in research in medical sciences.</p> <p style="text-align: right;">1979 c42 s3</p>	

Excerpts from the AHFMR Act, 1980

34. Bradley, John E. The four volumes of source documents covering Dr. Bradley's work as the Special Advisor were: Volume 1, Consultations; Volume 2, Record of travels; Volume 3, Government House Dinner, March 20 1978; and Volume 4, Joint Faculty Steering Committee on the Scientific Advisory Committee, February 1979 to January 1980. They were deposited in the AHFMR Archives.
35. Martin, Joseph B. Letter to Lionel McLeod dated October 25, 1979. Filed in the UofC Faculty of Medicine Archives, Temporary Box #9, File #9.9.06
36. Martin, Joseph B. Letter to Dr. Lionel McLeod dated October 25, 1979. See insert on page 663. Published with Dr. Martin's approval.
37. Lougheed, Peter E. "The Economic and Employment Impact of Research in Canada." The 1997 Killam Annual Lecture. The Killam Trusts, pages 15-20, 1997. Reaffirmed in the author's interview with Mr. Lougheed, 13 January 2000.
38. Lougheed, Peter E. Interview with R. Lampard, January 13, 2000, p. 2.

their first breakfast, the Premier congratulated them before leaving with a parting wave, "I'll see you in six years [at the first IBR], but my door is open if you need any advice". Reporting to the Legislature was to be through the tabling of annual, triennial, and the six-year International Board of Review (IBR) reports.⁽³⁹⁾

The Board appointed Dr. John E. Bradley as the executive director and initiated a search for a President. An ad hoc SAC was appointed in July 1980. On September 16, 1980, the first visiting professor was invited to an international medical conference in Edmonton. He and other speakers stressed the need for the AHFMR to concentrate on truly excellent projects and not take a watering can approach to funding.

The AHFMR Act had taken three times as long as the Heritage Fund Act to formulate and proclaim. To fast-track its implementation, almost \$2 million was spent on awards and scholarships. The funds were to cover the costs for visitations, consultations, recruitment and planning. Initial grants supported the current medical research programs already underway. Start-up funds for new applications as well as salary guarantees and studentships followed. Grants were limited to five years with renewals subject only to peer review. By September 18, 1980, the AHFMR announced it had approved sixty-nine studentships and forty-two fellowships. Six researchers had the

opportunity to study outside Alberta. It was a unique 75th anniversary present from the government of Alberta to all Albertans.

The MRC supported the AHFMR initiative and continued to accept and fund applications from Alberta researchers. If an application was approved by both the MRC and AHFMR, the MRC agreed to fund it as it had for Quebec applications.

The AHFMR from 1980-2005

The start-up period was surprisingly seamless, facilitated by the selection of UofC Dean Dr. L.E. McLeod in March 1981 as the first president. The government honored its commitment and did not interfere in its operation. The timing was remarkably fortuitous. Interest rates exceeded 12%, while the price of oil dropped markedly, leaving the provincial government with billion-dollar deficits by the mid 1980s.

The Board appointed the first official SAC in March 1982. Applications were approved only after a peer review, and a recommendation from the SAC. Quality was to be the watchword. Not surprisingly, the medical research space available at the two faculties, particularly at the UofA, was soon over-committed. By 1984 two dedicated medical research buildings were needed. Construction was approved, and two medical research towers were built from 1986 to 1988 at the faculties of medicine in Calgary and Edmonton. The AHFMR contributed \$55 million to their construction.

The AHFMR evolved rapidly after 1980. Major milestones were passed, including the first grant competitions (1981), the acceptance of applications from clinical-medical investigators (1986), partnerships to expedite the development of creative ideas into viable commercial products or uses (the Technology Transfer or Forefront program) (1987), the initiation of a Population Health Program (1994), the L.E. McLeod Scholarship (1994), the acceptance of health research grant requests (1996), supplementary research allowances (1998), a recruitment fund to fast-track future researchers (1999); the awarding of meritorious research prizes totaling \$1.0 million per year (1999); the initiation of the Heritage Youth Research Summer Program (2000); and the management of other health research funds (2003).⁽⁴⁰⁾

To take advantage of matching federal grants for construction of additional facilities, the AHFMR initiated



AHFMR first Board of Trustees, 1980 ³⁹⁻⁴

Dr. Norman Wagner, Dr. Robert Francis, Dr. Bradley, Dr. Roy LeRiche, Mr. William Dickie, Justice Michael O'Byrne, Dr. Gordon Swan. (Seated), Justice Patrick Lawrence, Mr. Eric Geddes (Pres.), and Dr. Myer Horowitz

39. Simard, Rene

40. AHFMR

Personal communication with R. Lampard, May 2, 2001.

Alberta Heritage Foundation for Medical Research: International Board of Review (IBR). Quarterly Newsletters, Annual Reports, Triennial Reports, and IBR Reports for 1987, 1993, 1998, 2004.



AHFMR's first International Board of Review, 1986 39-5 (back L to R) Drs. John Laidlaw, Maxwell Cowen, Robert Salter, Edwin Krebs (front L to R) Robert Berliner, Professor John Evans, and Andre Archambault

a challenge offer in 2000, of up to \$40 million to a maximum of 20% of the cost for two more high-rise medical research centres. Planning and construction of the third and fourth medical research buildings occurred from 2004-2007 on the UofA and UofC (Foothills) campuses.

The AHFMR board continued to follow a modified Harvard formula in setting its annual grant quota each year. That formula limited the board's spending to 5% of the opening balance of the endowment provided it was not less than 70% of the previous year's expenditure. The foundation was thoroughly reviewed in 1998 by the IBR and a committee of the Legislature. Both concluded that it was better to leave the endowment fund intact and not jeopardize its stability, reputation, or the success of the AHFMR's program. By 2005 the Endowment Fund was valued at over \$1.0 billion. Total AHFMR expenditures on medical research in Alberta exceeded \$800 million in the first twenty-five years. (Table 1)

Over the first quarter century the number of senior medical researchers grew from zero to forty-nine (1983), to 130 (1993); and to 239 (2005). During that same period there were over 5,000 students and undergraduate researchers supported by the Foundation. Eleven different faculties submitted and received AHFMR grants. Annual disbursements fluctuated but remained above \$30 million per year after 2000. Total medical research revenue and expenditures set a record at UofA and UofC, exceeding \$250 million in 2004.

The competitiveness and quality of the medical research applications reached the point where grant

requests not approved by the AHFMR were accepted by the MRC/CIHR. Financial support from pharmaceutical companies through research, chair and construction grants increased dramatically. Both universities opened Level Three containment laboratories.

Some of the most notable successes have led to 1) the development of techniques to stimulate brain cells to grow; 2) the transplantation of islet cells into diabetics that continue to produce insulin years after their infusion; and 3) the isolation of the first antiviral compound to treat Hepatitis-B carriers. It became one of a cocktail of three antivirals that markedly improved the effectiveness of the treatment regimes for HIV patients and contacts.

While the story is exciting, there were still promising scientists lost to other centres. Along with them went their research knowledge and future discoveries and patents. Competition for medical research dollars and personnel remained ever increasing, requiring longer grant commitments and more financial support to retain the best applicants. The 2004 IBR further recommended the AHFMR focus its resources and designate and support up to three or four world class centres of excellence.⁽⁴¹⁾

Recognition of the AHFMR:

It came in diverse ways. Similar funds were established in other provinces: Newfoundland, Nova Scotia, Saskatchewan, Manitoba, and BC, joining those already in existence in Quebec and Ontario. Similar foundations were established in Quebec and BC. By demonstrating the leverage effect of research grants, the federal government was persuaded to markedly increase its funding in the late 1990s, not just on medical research, but for all scientific research and discovery.⁽⁴²⁾ Medical research again became a viable career choice. Summer programs that targeted high school and medical school students started to entice the brightest students into careers in medicine and medical research.

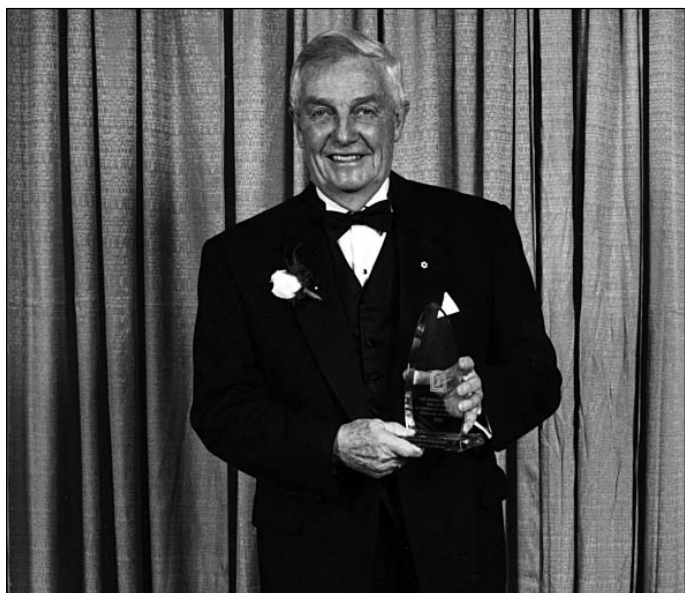
The relationship between the Alberta government and the medical profession, was strengthened through this joint endeavor. The IBR maintained the unique framework that had been developed for government funding of research programs. Its presence and reports preserved the Foundation, maintained its structure and stability, increased its reputation, and gave credence to the vision of its incorporators.

41. International Board of Review Fourth International Board of Review (1998-2004), page 12, June 2004.

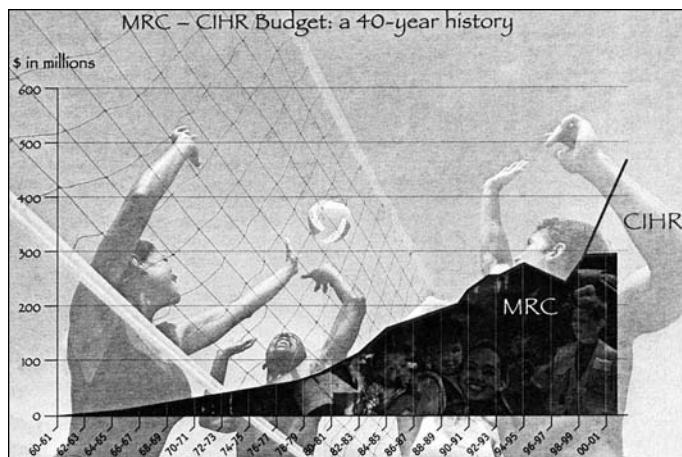
42. Friesen, Henry "The CIHR," in Health Policy Forum, pages 20-21, Spring 2000 and Robert McMurtry's "An Overview of Health Research Funding in Canada." Hospital Quarterly, pages 16-18, Summer 2000.

The discovery of the first drug to treat Hepatitis B garnered the prestigious Prix Galien for Dr. L. Tyrrell. The Edmonton Protocol for transplanting islet cells from the pancreas, though expensive, was offered to diabetics worldwide. Annual MRC/CIHR grants to Alberta researchers rose from 7% to 12% of their total disbursements. The Peter Lougheed Medical Research Foundation was established to fund medical research scholarships in partnership with the Canadian Research Chairs program of the MRC/CIHR. There was a ripple effect across the country. With only 0.25% of the world population, Canada became 7th in world authorship, publishing 3% of the articles and abstracts that appeared in the medical literature in 2002.⁽⁴³⁾

BC's Nobel Laureate Michael Smith, Ph.D. credited the AHFMR in 1998 on its success. "The AHFMR is a wonderful resource for Alberta whose programs have demonstratively benefited biomedical research in Alberta at the highest level. As such, it is not only something which all Albertans should take great pride, it is also a national treasure. Long may it flourish." In the same report MRC president Dr. Henry Friesen observed the "world-class scientific research it has fostered in the province of Alberta has enriched the entire Canadian research community and remains a source of pride both nationally and internationally".⁽⁴⁴⁾



Induction of the Hon. Peter Lougheed into the Canadian Medical Hall of Fame, 2002 39-6



MRC/CIHR Budget, 1960-2001 39-7

The Honorable Peter Lougheed and Dr. John E. Bradley were inducted into the Canadian Medical Hall of Fame in 2002. Mr. Lougheed became the second non-physician to be so recognized, after the Honorable Tommy Douglas. Mr. Lougheed also received the CMA's Award of Merit in 2003, the most prestigious award the CMA could grant to a non-physician.

Medical and Non-Medical Research in Canada and abroad:

In 1997 the federal government initiated the national Canadian Foundation for Innovation (CFI) and substantially increased its funding for infrastructure development, and capital grants to purchase research equipment. Health research applicants received about 25% of the total grants. Thirty percent of the \$200 million in the federally initiated (1999) Canadian Research Chairs Program flowed to the health field. The federal government also endowed the Canadian Health Services Resource Foundation with \$100 million. The Canadian Network of Centres of Excellence created seven networks in the health field, of the seventeen that were funded. On April 1, 2000, the MRC merged with the National Health and Research Development Program to become the Canadian Institute of Health Research (CIHR).⁽⁴⁵⁾ Its annual budget has increased to over \$700 million per year (2005).

Using the GERD definition of health research, the amount spent on health research in Canada (2000)

43. Rich, Pat

44. Smith, Michael, Friesen, Henry

45. McMurtry, Robert

Canadian Medical Researchers hold their own internationally. Medical Post, page 45, February 1, 2000. Third AHFMR IBR Report covering 1993-1998, pages 1, 11.

"An Overview of Health Research Funding in Canada." Hospital Quarterly, pages 16-18, Summer 2000.

Bill 1
Alberta Heritage Foundation for
Science and Engineering Research Act

MR. KLEIN: Thank you, Mr. Speaker. I beg leave to introduce Bill 1, the Alberta Heritage Foundation for Science and Engineering Research Act. This being a money bill, Her Honour the Honourable the Lieutenant Governor, having been informed of the contents of this bill, recommends the same to the Assembly.

Mr. Speaker, this bill puts into place a \$500 million endowment to enhance science and engineering research in Alberta. Hopefully it will help to keep the brightest and keenest scientific minds right here in our province.

[Motion carried; Bill 1 read a first time]

Alberta Hansard February, 2000

was \$2.3 billion.⁽⁴⁶⁾ The Association of Faculties of Medicine of Canada (formerly the Association of Canadian Medical Colleges) estimated that 32% of the \$2.5 billion Canadian medical faculties spent was on basic medical research. Represented another way, spending on basic medical research was about 0.6% of the \$60 billion that Canada spent on Medicare in 2002.

The pessimism that pervaded Canadian government involvement in medical research for decades, turned into optimism under the 1999 MRC expansion plan developed under Dr. Henry Friesen. The Friesen plan was to fund national chairs, approve longer grants, and provide capital grants for more space.⁽⁴⁷⁾ A major federal funding increase followed. (Table 2) The millennium began as a new era in medical research in Canada.

The rest of the medical research world did not stand still. The National Institute of Health (NIH, USA) doubled its research grants from \$13 billion (2000) to \$28 billion (2006).⁽⁴⁸⁾ In the United States, Japan and Europe research spending levels averaged about 3% of GDP. Canadian spending on all research remained stalled at the 1% of GDP level.

Alberta at the Millennium:

The second rapid and sustained rise in the world price of oil and gas created a provincial budgetary surplus in Alberta starting in the late 1990s.

The government of Premier Klein first retired the \$20 billion provincial debt. In February 2000, it created the sister Alberta Heritage Foundation for Science and Engineering Research (AHFSER), or Ingenuity Fund, by passing Bill 1 in the new millenium. The initial endowment was \$500 million.⁽⁴⁹⁾ The 1990 appointed Board chairman of the AHFMR, Mr. Alvin Libin, became the chairman of the AHFSER.

The Alberta tradition of guaranteeing success by ensuring stability through the appointment of dedicated, experienced Albertans, continued. In the first twenty-five years, the AHFMR had only two Presidents: Drs. Lionel McLeod and Mathew Spence, and three Board Chairmen: Eric Geddes, Alvin Libin, and Harley Hotchkiss.

As a centennial gift to the citizens of Alberta in 2005, the Klein government increased the AHFMR and AHFSER endowments by \$500 million over a five year period. It also increased the Heritage High School Scholarship endowment by \$200 million. The future of the AHFMR and its sister foundation the AHFSER (Ingenuity Fund) never looked brighter.

“On a per capita basis nothing like this has happened in the history of science before anywhere – not only in Canada or North America but anywhere. No population of scientists has ever been given the kind of opportunity that we have in Alberta. With that opportunity comes an incredible responsibility.”

Dr. George Drummond
Member, Scientific Advisory Council

AHFMR Triennial Report, 1980-1983

46. Statistics Canada Statistics Canada uses the International G-7 definition of research which is, “any creative work undertaken on a systematic basis to increase the stock of scientific and technical knowledge and to use this knowledge in new applications.” It was referred to as GERD or the Gross Domestic Expenditure on Research and Development.

47. Friesen, Henry “The CIHR,” in Health Policy Forum, pages 20-21.

48. Tyrrell, D. Lorne Presentation to the Red Deer Canadian Club, December 6, 2000 and interviews during the completion of the Tyrrell profile from 2005-2007. Confirmed in the CMAJ 177(8): 825, 844-845, October 9, 2007.

49. Alberta Government The Alberta Heritage Foundation for Science and Engineering Research Act, RSA 2000 Chapter A-22. For the verbatim discussion see the Alberta Legislative Hansard for February 1, 2000 (First Reading); February 23, (Second Reading), and March 20, 2000 (Third Reading)

Dedication:

This Perspective is dedicated to five Albertans: three physicians and two politicians.

The three physicians were locally known as the Wainwright Mafia. Drs. J.D. Wallace and J.E. Bradley closed their Wainwright practices in 1960 to enter the unknown world of medical management. Dr. Wallace became the Alberta Deputy Minister of Health, the Executive Director of the UAH and the TGH Hospitals, and the Executive Secretary of the CMA. Dr. Bradley became the CEO of the Glenrose Hospital, the chairman of the Alberta Hospital Insurance Commission, the Deputy Minister of Health, and the Special Advisor to Premier Lougheed on the formation of the AHFMR. Their Wainwright protégé, Dr. L.E. McLeod, became a Canadian renal dialysis pioneer, Professor and Head of Medicine at the UofC/Foothills Hospital, Dean of Medicine at the

UofC, and the first President of the AHFMR (1981-1990).

The two political leaders are Premiers Lougheed and Klein. Together with their Cabinets they demonstrated confidence in future Albertans, through the forward-thinking decisions they made to establish and endow the AHFMR and AHFSER. The AHFMR acknowledged that foresight by creating two annual Peter Lougheed and Ralph Klein \$100,000 medical research prizes in 2005.

Related Profiles: McEachern, Rankin, Collip, Mackenzie, D.R. Wilson, McLeod, Tyrrell

Related Perspectives: The University of Alberta and Rockefeller Foundation

Keywords: AHFMR, AHFSER, Collip, Insulin, McEachern Laboratory, MRC, Premiers Peter Lougheed and Ralph Klein, Dr. John Bradley

Dear Friends,

The Alberta Heritage Foundation for Medical Research (AHFMR) began as an idea more than 25 years ago. Today it has grown into one of the most highly regarded health research funding organizations in North America which has supported more than 6000 people over the decades with a total funding investment of over \$780 million. The health research supported by AHFMR has yielded remarkable advances in our understanding, new knowledge, and treatment of disease.


As we mark our 25th anniversary year and the centenary of our great province, we are proud that AHFMR is a leader in supporting the growth and advancement of health research—embracing life sciences, medicine, nursing, law, physical education, rehabilitation medicine, psychology, language, economics, population health, and health services. We also take great pride that AHFMR sets the highest standards of excellence for the people we support. As a result, our vibrant provincial community is recognized as internationally competitive.

The story of AHFMR is part of Alberta's history and very much a part of its promising future. That's why our stories are your stories. As you turn the pages of this calendar you will read about just a few of the hundreds of dedicated researchers whose work is making a difference to our knowledge of human health, and to the care of people in our province and around the world. †

With best wishes for a healthy and happy 2005.

Harley Hotchkiss
Harley Hotchkiss
Chairman, AHFMR Board of Trustees


Kevin Keough
Kevin Keough, MD
President & CEO (as of July, 2004)



Left to right: Dr. Kevin Keough, Dr. Matthew Spence
Seated: Mr. Harley Hotchkiss

The people who govern the foundation are also recognized as leaders in their own right.

After 14 years at the helm of AHFMR, Dr. Matt Spence stepped down in July of 2004. Dr. Spence expanded the Foundation's portfolio into population and health services research and brokered innovative partnerships to administer funding and develop research capacity in the province. Our new President and CEO, Dr. Kevin Keough, left an eminent double career as a researcher and professor at Memorial University in Newfoundland and as Canada's first-ever Chief Scientist at Health Canada in Ottawa to come west and head the Foundation. Mr. Harley Hotchkiss, a Calgary businessman and philanthropist is the Chairman of AHFMR's highly committed and knowledgeable nine-member Board of Trustees. Informed by senior staff, the Trustees plan for the future, and make the decisions about the amount and disbursement of AHFMR funding. †

AHFMR  ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH



Preston Manning

Every day, the news is filled with complex scientific issues: Kyoto and the debate about climate change; mad cow disease; stem-cell research and genetic advances—to name just a few. The public's understanding of these issues often hinges on scientists' ability to explain them clearly. But society's response often hinges on politicians' understanding of the issues. And that is why former official opposition leader Preston Manning is so eager to discuss the importance of communication between scientists and politicians.

Manning points out that, because so many public-policy issues today are science-based, it is important for political people to have an understanding of the science behind them. A great deal of research funding comes from the public purse, and public policy can have an impact on such matters as intellectual property law, so it is also in scientists' interests for politicians to understand their work. "There are mutual interests between these two communities that would be better served if they understood each other."

So, what is the best way to further that mutual understanding? "One of the great advantages medical scientists have is that health care happens to be sky-high in the polls and is the number one political issue," Manning stresses. "The quality of health care is so dependent on the quality of science. Scientists need to prove that what they are doing is relevant politically."

"The quality of health care is so dependent on the quality of science"

The timing of communication can also be very important. Manning emphasizes that significant events can create "waves" that

voices from the community

Hurricane Katrina suddenly made the science of hurricanes relevant

carry or amplify scientists' messages about their research. "During SARS, audiences were highly receptive to learning about epidemiology," he points out. In the same vein, the whole world wanted to know about the geophysics of tsunamis after the earthquake in Southeast Asia in December 2004, and Hurricane Katrina suddenly made the science of hurricanes relevant.

What are the "waves" scientists should watch for? Manning has three predictions. "Canada is headed for healthcare reform of some kind, probably a universal system with a mixed approach to payment, delivery of payment, and insurance. This means there will be more capital brought into the system, some of it devoted to research." He also predicts increased interest in, and support for, environmental issues (which have a strong connection to health care), and growing federal-provincial tensions due to high oil prices. Because of these tensions, it will be increasingly important that Alberta's investments be seen to benefit all Canadians, not just Albertans.

In addition to these predictions, Manning also warns scientists and politicians of a special challenge to come. Much has been written about the possibility of an influenza pandemic in the not-so-distant future. In Manning's opinion, the greatest damage will be done not by the pandemic itself, but by the transmission of fear and panic through mass communication systems.

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AHFMR RESEARCH NEWS

ABOVE: PRESTON MANNING

TABLE 1**AHFMR MEDICAL RESEARCH GRANTS**

YEAR	AHFMR GRANTS (\$ in millions)	YEAR	AHFMR GRANTS (\$ in millions)
1980-81	\$5.10	1993-94	\$24.10
1981-82	\$13.10	1994-95	\$24.10
1982-83	\$21.50	1995-96	\$24.80
1983-84	\$27.50	1996-97	\$27.50
1984-85	\$32.70	1997-98	\$27.70
1985-86	\$43.80	1998-99	\$32.40
1986-87	\$35.20	1999-00	\$38.30
1987-88	\$32.60	2000-01	\$53.00
1988-89	\$31.10	2001-02	\$45.00
1989-90	\$24.60	2002-03	\$34.67
1990-91	\$27.50	2003-04	\$31.36
1991-92	\$26.40	2004-05	\$28.90
1992-93	\$26.20	2005-06	\$48.00
		TOTAL	\$780.03
		Building Grants	\$55.00 (1986-88)
			\$45.00 (2004-07)
		TOTAL GRANTS	\$888.03

TABLE 2**AHFMR, Alberta Faculties of Medicine, MRC/CIHR GRANTS and the Alberta/Canadian GDP**

YEAR	AHFMR (Grants)	ALBERTA Faculties of Medicine (Grants Received)	ALBERTA GDP (in billions)	MRC/CIHR Federal Medical Research (Grants)	CANADIAN GDP (in billions)
1960/61				2 M	
1965				28 M	57 B
1969				42 M	88 B
1975		2.5 M		56 M	185 B
1980	5	8.0 M	43 B	85 M	342 B
1985	33	40 M	65 B	153 M	486 B
1990	25	68 M	71 B	197 M	680 B
1995	24	80 M	92 B	257 M	810 B
2000	38	192 M	145 B	370 M	1,076 B
2005	45	251 M (2003/4)	215 B	750 M	1,369 B

Reference: Statistics Canada, Catalogue no. 11-010-xPB, page 12, Table 11 (GDP)

MRC-CIHR Budget: a 10 year history from "A Legacy of Excellence: The Medical Research Council of Canada", page 77