

Alberta's Medical History:

"Young and Lusty, and Full of Life"

Part 1: Profiles

"What is the value of the West to medicine? Does not the answer lie in the words, energy and newness and opportunity. The West is young and lusty, and full of life. It has a love of action, and it has a love of newness. It is unhampered by traditions, whether of conduct or of science. It will do the things that it thinks right, whether in conduct or in science. I really do believe that, in medicine as in the rest of human endeavor, the West is going to supply that leaven of originality which, after all, is "the one thing needful." The West thinks boldly and acts boldly, by necessity first, then by conviction, and ultimately by habit."

H.G. Mackid, MD
CMA President
Edmonton, 1912

Mount Brett

By Robert Lampard M.D.

Alberta's Medical History: "Young and Lusty, and Full of Life"

Part 1: Profiles

TABLE OF CONTENTS

Preface	iv
Foreword	v
Voyage of Discovery	vi
Glossary and General References	ix
Introduction	1
<i>Profiles:</i> John Rae 1813-1893	17
James Hector 1834-1907	25
William Morrison MacKay 1836-1917	31
Neville James Lindsay 1845-1925	42
Leverett George deVeber 1849-1925	50
James Delamere Lafferty 1849-1920	59
Richard Barrington Nevitt 1850-1928	72
Robert George Brett 1851-1929	85
* Frank Hamilton Mewburn 1858-1929	100
George Allan Kennedy 1858-1913	114
* Harry Goodsir Mackid 1858-1916	132
Herbert Charles Wilson 1859-1909	143
* Ernest Ainslie Braithwaite 1862-1949	151
Henry George 1864-1932	162
George Henry Malcolmson 1868-1944	173
* John Sinclair McEachern 1873-1947	180
Edward George Mason 1874-1947	215
William Alfred Wilson 1874-1951	223
George Douglas Stanley 1876-1954	233
Allan Coats Rankin 1877-1959	243
* Albert Ernest Archer 1878-1948	256
Heber Carss Jamieson 1879-1962	277
* Albert Henry Baker 1883-1953	288
* Malcolm Ross Bow 1887-1982	297
* James Bertram Collip 1892-1967	311
* Earle Parkhill Scarlett 1896-1982	324
Randall Roberts MacLean 1900-1977	339
* Mary Percy Jackson 1904-2000	353
* Walter Campbell Mackenzie 1909-1978	366
Margaret MacSteven Hutton 1910-1983	383
* Donald Robert Wilson 1913-1991	388
* Charles Alexander Allard 1919-1991	401
* William A. Cochrane 1926-	415
* Lionel Everett McLeod 1927-1993	432
* David Lorne Tyrrell 1943-	446

* *Doctors of the Century, AMA, 2005*

Alberta's Medical History: "Young and Lusty, and Full of Life"

Part 2: Perspectives

TABLE OF CONTENTS

Perspectives from Alberta's Medical History:

The Hector Memorials of 1906 (1857-1860)	472
Military Medicine and Medical Care in the North West Rebellions of 1870/71 and 1885	482
Osler Goes West (1886) (D.B. Hogan)	494
The First CMA Convention in "Alberta" (1889, Banff)	498
The Medical Profession in the North-West Territories (1889-1906) (H. Neatby)	504
Climate, Calgary and Tuberculosis (c1900) (D.B. Hogan)	519
The Early Pathology/Laboratory Medicine at the UofA, its Teaching Hospitals and the Provincial Laboratory (H. Letts)	524
Radiology in Alberta (W.B. Parsons)	534
The Second CMA Convention (1912, Edmonton)	540
The University of Alberta and the Rockefeller Foundation (1920-1923) (M. Fedunkiwi)	545
Hons. George Hoadley, Irene Parlby, W.W. Cross and UFA Government Healthcare (1921-1935)	558
The Alberta Sexual Sterilization Act (1928)	571
The Mercy Flight and Dr. Harold Hamman (1929)	592
Snow Problem, No Problem (1920s-1930s)	598
The Roots of Medicare are in Alberta (1927-1946)	605
The Cardston Medical Contracts (1932)	631
Di Bozsha, May the Lord give you Health (1933) (M.A.R. Young)	637
The Third CMA Convention (1934, Calgary)	642
The 1937 AMA Gavel (1937)	647
Medicine, the WWII Years (1934-1945)(W.B. Parsons)	649
The Development of Alberta Hospitals since WWII (R.K. Thomson)	653
The Alberta Heritage Foundation for Medical Research, Its Formative Years 1975-2005	663
Tidbits and Teasers from Alberta's medical history	679
Milestones in NWT/Alberta Medicine (1668-2005)	684
Alberta/Saskatchewan Milestones. Alberta's Medical History Website	699
Photo and Insert Credits	700
Index	705

PREFACE

To the old Pioneers:

This Province, Alberta, has been blessed not only in the riches of its natural resources and spectacular natural beauty, but also in the high standards and energy of the men and women who, in many fields of venture, built the quality of life we now enjoy. High on this list of pioneers we can place the names of the medical practitioners described by Dr. Lampard in this document.

Even the fairly recent past is further away than we suppose, but these biographies will enable us to view it less dimly. A great desire is that younger doctors browsing in these pages will see men and women less mesmerized by materialism and come to realize what struggles took place to give the security, comforts and facilities they now enjoy.

The lives of these men and women reveal the sacred, mystical dimensions of doctoring which stem from the close association with life, death and suffering. These pioneers had none of our modern medical armamentarium, yet were revered by their patients for their diligence, hard work and compassion. Many were far from their own origins, culturally isolated, in inhospitable, even crude conditions but upheld by dedication to their great profession. Whether they were wiser or happier than our present generation of doctors is probably irrelevant, but what does become apparent is that many lived very different lives. Alberta's medical history is full of the clink of horse harnesses and the smell of chloroform, but amongst it all was the boundless energy and optimism of its doctors, so well illustrated in these all too few pages. We in Alberta stand on the shoulders of some great medical pioneers who set the tone and character of practice in the Province and whose stature we must surely try to emulate. This volume will give some idea of the standards to which we must aspire.

Our unbounded thanks must go to the historian author for this insight.

Brian Loosmore, M.D.
December, 2007

FORWARD

It is a great privilege to provide a forward for Dr. Robert (Bob) Lampard's book, "Alberta's Medical History: young, lusty and full of life."

There is a unique spirit in the West that has been captured by Dr. Lampard's work on Alberta's rich and fascinating medical history. Important roles have been played by many of Alberta's physicians in the broader Canadian medical history and in setting the stage for the unique public health system that we enjoy in Canada today. In many of these profiles, the stories are about physicians who practiced in Western Canada prior to and shortly after the birth of our province and reflect the pioneering roles some of the physicians played in caring for patients, providing leadership, and building their communities. Dr. Lampard's profiles also capture the contributions that medical leaders in Alberta have made to scientific discoveries that have elevated the standard of medical care worldwide.

Dr. Lampard is a historian by passion rather than by formal training. The passion comes through in his documentation of history. Much of this history would be lost if it were not for Dr. Lampard devoting most of his free time to documenting the contributions of many of Alberta's leaders in Medicine over the last 150 years. In 2005, the Alberta Medical Association recognized 100 physicians for their outstanding contributions to Medicine in Alberta on the province's 100th anniversary. Dr. Bob Lampard was one of the distinguished physicians recognized because he has acted upon his love for, and strong desire to preserve medical history. He is a credible witness to the past because of his exactness, sincerity, and patience. He has put in a tremendous effort to research and accurately document the accomplishments of some of Alberta's leading physicians – from the beginning of Alberta's medical history to the current time. He has interviewed colleagues, family members, and carefully verified the history. It is the personal touch that has enriched this book. It has also enriched the lives of the families by the recognition and respect that Dr. Lampard's work has brought to the physicians and their families.

The medical community in the province and indeed Albertans and Canadians alike owe a debt of gratitude to Dr. Lampard for his tenacity, attention to detail, and unwavering focus on completing these important historical vignettes of Alberta's medical past. I am sure his contributions will be enjoyed by many and will frequently be used by future historians. Without his effort, much of this history would have been lost forever.

Lorne Tyrrell, M.D.
October, 2007

A VOYAGE OF DISCOVERY

My latent interest in Alberta's medical history was uncovered during an evening of raconteurism with Dr. E.P. Scarlett in March 1978. While discussing Alberta's mountain history, Dr. Scarlett related how he met and befriended author Dorothy Pilley of Oxford, who wrote the classic *Climbing Days*. The friendship continued through their avocational interests in literature, hiking and climbing. As our conversation drifted toward vocational and avocational interests, Dr. Scarlett explained "vocations were a means to an end. The end is your avocation." Scarlett's avocation was medical history.⁽¹⁾ His story unearthed my long-buried enjoyment of history, which originated with my parents and matured under high school teacher, Wellington Dawe.

The first step was to build a western Canadian history library. As the collection expanded, the focus narrowed to medicine in Alberta, a topic left un-addressed since Dr. Heber Jamieson in 1947. The next step came when founding AMF Board Chairman Dr. Donald R. Wilson asked me to publish brief stories on pioneer physicians in the *Alberta Doctors Digest*. I selected Dr. Mary Percy Jackson for the first vignette. She offered to edit the column and returned it with every line changed. The next essays received the attention they deserved, or as Mark Twain (Samuel Clemens) reportedly said, I learned to write right and write tight. Seven sketches were published in the *Alberta Doctor's Digest* from 1991-1994.

The pause that followed arose through the paucity of information on early medicine in Alberta. The apparent loss of the pre-1936 AMA/CPSA minute books remained an obstacle. Reconstruction of the medical events and the lives of early physicians, was compounded by family departures from the province, no sons to continue the name and documents lost in fires. Early prairie medical information remained scarce, until the bimonthly *Western Canadian Medical Journal* began publishing from 1907-1915; the CMAJ became Canada's national medical journal in 1911; and Dr. Jamieson wrote his history on the first 75 years of medicine in Alberta in 1947.

As the journey continued, the profiles (Part 1) brought back recollections of Drs. Mackenzie, Wilson and Hutton as teachers. The chance to introduce Dr. Jackson to the UofC History of Medicine class, where she vividly recalled her medical career as she could until age ninety-six, became an historical opportunity not to be missed. The families reached were appreciative of the contacts and shared their photographs and memories, while learning more about their own medical heritage.

Interesting diversions required further exploration. They formed the essence of Part 2, as perspectives on healthcare events in Alberta. The most difficult essay to research and write was on health insurance and how, contrary to common belief, it began in Alberta. As the evidence mounted, the title changed to the more authoritative, *The Roots of Medicare in Canada are in Alberta*.

To complete the list of profiles, noteworthy physicians from each era in Alberta's first century were selected. Not surprisingly some were truants as Dr. Scarlett called them, who made significant contributions to Alberta's history, outside medicine. Others were involved in the same healthcare projects. By taking a profile approach, there has been a tendency to highlight the leader, and attribute the work of colleagues to the leader. Where a series of leaders were uncovered there has necessarily been a selective duplication in their recorded contributions, to permit each profile to stand alone.

The challenge to research and document Alberta's medical history, while working as the Medical Director at the Michener Centre, has compressed my free time as my family will attest. The willingness of Sharon, Bruce, Geoffrey and Allison to tolerate my preoccupation and provide encouragement is deeply appreciated. These two volumes are dedicated to them.

Others have assisted immeasurably with the project including my secretary, Shelley and the reference staff of the Glenbow Museum, Whyte Museum, Provincial Museum, University of Alberta Archives, Alberta Legislative Library, and CMA. The financial support of the Alberta Medical Association and the Alberta

Medical Foundation was pivotal. The inclusion of seminal articles by David Hogan, Harry Letts, Bill Parsons, Marianne Fedunki in Part 2, has been with their, or their family's permission, which is much appreciated.

Continued encouragement from AMF Board members Drs. Don Wilson, Bob Fraser, Peter Allen, Brian Loosemore, Harry Letts, Gerry McDougall, David Hogan, Gerald Higgins and Brian Sproule has underlined the importance of the project and brought it to an end point. The advice of Drs. Robert Macbeth, Stuart Houston and Heather MacDougall, always given graciously, has helped turn the quest for answers into a voyage of discovery.

My thanks to all: particularly to Dr. Brian Loosemore for his Preface; to Dr. Lorne Tyrrell for his Foreword; to the families of each physicians profiled; and to the physicians themselves for the imprints they have left on medicine in Alberta and Canada. In appreciation, the net proceeds have been donated to the Alberta Medical Foundation.

1) Profile of Dr. Earle Scarlett in Part 1.

R. Lampard, MD
November 2007

GLOSSARY OF ABBREVIATIONS

AB	Alberta	ddDAPR	2, 6 diamine purine 2',3'-dideoxyriboside
ADD	Alberta Doctor's Digest	ddG	dideoxyguanosine
ACMC	Association of Canadian Medical Colleges (Association of Faculties of Medicine of Canada)	DHBV	Duck Hepatitis B Virus
ACS	American College of Surgeons (American College of Clinical Surgeons)	DPH	Diploma in Public Health
AFMC	Association of Faculties of Medicine of Canada (Association of Canadian Medical Colleges)	DVM	Doctor of Veterinary Medicine
AHE	Alberta Hospital Edmonton	EENT	Eyes, Ears, Nose and Throat Specialist
AHFMR	Alberta Heritage Foundation for Medical Research	EGH	Edmonton General Hospital
AHP	Alberta Hospital Ponoka (Ponoka Mental Hospital, Ponoka Mental Institute)	FACP	Fellow of the American College of Physicians
Alta.	Alberta	FACS	Fellow of the American College of Surgeons
AMA	Alberta Medical Association; also American Medical Association	FRCPC	Fellow of the Royal College of Physicians (Canada)
AMA/CPSA	Alberta Medical Association/College of Physicians and Surgeons of Alberta	FTE	Full Time Equivalent
AMB	Alberta Medical Bulletin	Ft.	Fort
AMF	Alberta Medical Foundation	HBC	Hudson's Bay Company
AMS	Associated Medical Services (formerly the Hannah Institute)	HBV	Hepatitis B Virus
AOA	Alpha Omega Alpha Society	HCH	Holy Cross Hospital, Calgary
BC	British Columbia	HCV	Hepatitis C Virus
BECL	British Empire Cancer League	HIV	Human Immunodeficiency Virus
BMA	British Medical Association	HSC	Health Science Center
BMJ	British Medical Journal	IODE	Imperial Order Daughters of the Empire
BNA Act	British North America Act	IWK	Children's Hospital, Isaac Walton Killam Children's Hospital
CACHB	Calgary Associate Clinic Historical Bulletin	JAMA	Journal of the American Medical Association
Calif.	California	MB	Bachelor of Medical degree Manitoba
CAMC	Canadian Army Medical Corps	MCC	Dominion Medical Council of Canada
CAS	Central Alberta Tuberculosis Sanitarium	MHC	Military Hospitals Commission
CBE	Commander of the British Empire	MLA	Member of the Legislative Assembly
CGH	Calgary General Hospital	MMA	Manitoba Medical Association
CHA	Capital Health Authority	MMC	Manitoba Medical College
CIHR	Canadian Institutes of Health Research	MOH	Medical Officer of Health
CJS	Canadian Journal of Surgery	MRC	Medical Research Council of Canada
CMA	Canadian Medical Association	MS(of A)I	Medical Services (Of Alberta) Incorporated.
CMAJ	Canadian Medical Association Journal	MSI	Medical Services Incorporated
CMS	Calgary Medical Society	NB	New Brunswick
CNCMH	Canadian National Committee on Mental Hygiene	NBC	National Broadcasting Co.
CNR	Canadian National Railway	NCIC	National Cancer Institute of Canada
CPR	Canadian Pacific Railway	NEJM	New England Journal of Medicine
CPSA	College of Physicians and Surgeons of Alberta	NFB	National Film Board
CRC	Canadian Research Chairs program	NHL	National Hockey League
		NIH	National Institute of Health
		NRC	National Research Council
		NWMP	North West Mounted Police
		NWT	North West Territories
		NWTMA	North West Territories Medical Association

NWTMC	North West Territories Medical Council	SK	Saskatchewan
NZ	New Zealand	SMA	Saskatchewan Medical Association
O&G	Obstetrics & Gynecology	SMRI	Surgical Medical Research Institute (UofA)
OBE	Officer of the British Empire	St.	Saint
OMA	Ontario Medical Association	TB	Tuberculosis
Ont.	Ontario	U of A	University of Alberta
OR	Operating Room	U of C	University of Calgary
PAS	Para-aminosalicylic acid	U of T	University of Toronto
PMH	Ponoka Mental Hospital (see AHP)	UAH	University of Alberta Hospital
PMI	Ponoka Mental Institute (see AHP)	UBC	University of British Columbia
PTS	Provincial Training School, Red Deer	UFA	United Farmers of Alberta
RAH	Royal Alexandria Hospital, Edmonton	UWO	University of Western Ontario
RCAF	Royal Canadian Air Force	VD	Venereal Disease
RCMP	Royal Canadian Mounted Police	VP	Vice President
RCPSC	Royal College of Physicians and Surgeons of Canada	Wash.	Washington State
Ref.	References	WCB	Workmen's Compensation Board
Rev.	Reverend	WCMF	Western Canadian Medical Federation
RNWMP	Royal North West Mounted Police	WHG	Winnipeg General Hospital
SCID	Systemic Combined Immune Deficiency mice	WHO	World Health Organization
SCR	Soldier's Civil Re-establishment Commission	WIC	Western International Communications
SCTV	Second City Television	WMC	Women's Medical College
		WWI	World War I
		WWII	World War II

GENERAL REFERENCES

1. AMA Minutes Alberta Medical Association and College of Physicians and Surgeons of Alberta Minutes 1936-present, particularly 1936-1945. The AMA Minutes from 1906-1935 are missing. AMA.
2. Alberta Medical Bulletin Published quarterly from 1935-1976, by the AMA. Succeeded by the Alberta Doctors Digest, published six times per year since 1976.
3. Alberta Public Health Annual Reports 1897-1972. Website www.ourfutureourpast.ca/medhist/.
4. Beahen, William,
Horrall, Stan *Red Coats on the Prairies*, pages 185-194, Centax Books, 1998.
5. Betke, Carl, ed. *Medicine in Alberta: Historical Reflections*. Edited by Carl Betke. Articles on twenty-five medical topics, written by Alberta physicians for the 75th Anniversary of the College of Physicians and Surgeons, 295 pages, Alberta Medical Foundation, 1993.
6. Blue, John *Alberta Past and Present*. Three Volumes 451, 497, 546 pages, Pioneer Historical Publishing Co. 1924.
7. Carr, Ian,
Beamish, Robert *Manitoba Medicine: A Brief History*. 256 pages, University of Manitoba Press, 1999.
8. Cashman, Tony *Heritage of Service: The History of Nursing in Alberta*, 342 pages, AARN, 1966.
9. Chatenay, Henri *The Country Doctors*, 28 Medical biographies on 22 Alberta physicians, 5 Saskatchewan physicians, and 1 Manitoba physician. 272 pages Matrix Press, 1980.
10. Corbet, Elizabeth A. *Frontiers of Medicine: A History of Medical Education and Research at the University of Alberta*, 250 pages, UofA, 1990.
11. CPSA Minutes Minutes, Volume 1 (October 1906 to December 1932, 561 pages) and Volume 2 (January 1933 to December 1945, 365 pages), AMF.
12. Hardwick, E.,
Jamieson, E.,
Tregillus, E. *The Science, the Art and the Spirit: Hospitals, Medicine and Nursing in Calgary*, 160 pages. Volume 4, Century Calgary, 1975. Bibliography published separately, 2 pages, 1975.
13. Jamieson, Heber C. *Early Medicine in Alberta: The First 75 Years*, 214 pages, AMA, 1947.
14. Jamieson, Heber C. Jamieson Papers deposited in the University of Alberta Archives, Accession Number 81-104 (3 boxes). Annotated abstract by E. McCrum, 46 pages, 1981. Contains sixteen articles and a list of 311 photographs, 79 slides and 7 pages of textual records.
15. Johnston, Alex et al *Lethbridge, Its Medical Doctors, Dentists, Drug Stores*, Occasional Paper #24. 80 pages, Lethbridge Historical Society 1991.
16. Lampard, Robert *Five Celebrated Early Surgeons of Southern Alberta 1874-1913*, 48 pages, Lethbridge Historical Society, 2006.
17. Letts, Harry *The Edmonton Academy of Medicine: A History*, 30 pages, Edmonton Academy, 1986.
18. MacRae, Archibald O. *The History of the Province of Alberta*. Two volumes. 1042 pages. The Western Canada History Co., 1912.
19. McCrum, Elizabeth M. A Guide to Sources of Medical History in the University of Alberta Archives, 25 page manuscript, UofA, Spring 1984.

20. McDougall, Gerald M.,
Harris, Fiona C. *Medical Clinics and Physicians of Southern Alberta*, UofC, 253 pages, 1991.
21. McGugan, Angus C. "The Drama of Medicine in Alberta," *Alberta Medical Bulletin* 20: 23-45, August 1955.
22. Ross-Kerr, Janet *Prepared to Care. Nurses and Nursing in Alberta 1859-1966*, 359 pages, 1998.
23. Scarlett, Earle P., ed. *Calgary Associate Clinic Historical Bulletin*. Published quarterly, 1936-1958, 88 issues.
24. Stanley, George D. "Medical Pioneering," *Alberta Historical Review* Volume 1(1): 6-16, 1953. Reprinted in the *Pioneer West* Volume 1: 1-6, *Alberta Historical Review*, 1969.
25. Scott, John W. *The History of the Faculty of Medicine of the University of Alberta: 1913-1963*, 43 pages, UofA 1963.
26. Vant, J. Ross,
Cashman, Tony *More Than A Hospital: University of Alberta Hospitals: 1906-1986*, 392 pages, UofA, 1986.
27. AMF/UofC *Alberta Medical Historical Website* www.ourfutureourpast.ca/medhist/.

INTRODUCTION TO MEDICINE IN ALBERTA

*“A man may not with propriety speak
[of others] except it be to relate facts” (Samuel Johnson)*

A century ago, Alberta was a nearly empty. It had only 73,000 citizens (1901), including the First Nations. Together with Saskatchewan, it was one of the last regions in the world to be settled by immigration.

When the first immigrants arrived in the 1880s and 1890s the NWMP surgeons were already there to greet them. Two NWMP surgeons (Kittson, Nevitt) came to the prairies in 1874 with the famous March. They began the rudiments of a medical care system, based on the largest forts. Dr. Mackid referred to them and their successors as “young and lusty and full of life”. Without fear, they faced communicable diseases with little medication, long house calls on horseback, whiteouts in winter, typhoid and trauma. The nearest medical help was over one hundred miles away. By treating everyone who needed care, they established a reputation, like their NWMP colleagues, for going beyond the call of duty. They were physicians who could “think and act boldly, by necessity first, then by conviction and ultimately by habit”.⁽¹⁾ (Mackid, 1912)

The early NWMP surgeons brought with them a local perspective to medicine. It very quickly broadened into a national one, as they faced the unresolved medical issues of the time. Patient and persevering, the NWT physicians turned to the CMA as their avenue of influence. Their influence began as early as 1889 at the annual meeting in Banff. Two decades later western physicians succeeded in pressuring the CMA to create a Dominion Medical Council⁽²⁾ (Kennedy, Braithwaite). At the same time they recognized the need for the CMA to be affiliated with the autonomous provincial associations, and CMA membership to be increased (Mackid, 1912). One physician (McEachern, 1921) stepped into the breach, when the CMA needed to be rescued from near bankruptcy. McEachern, Archer and the AMA/CPSA, led the movement to unify the provincial and national associations (1934-1938), so the CMA could act for all Canadian physicians in WWII, and develop the principles to use in negotiations with governments on health insurance (1932-1943).

It was not all smooth sailing. Securing the only conditional Rockefeller Grant (\$500,000, 1921), led UofA President Tory to create the only new medical school (1921) in western Canada for sixty-six years (1883-1949). The 1921/22 mini Depression in Alberta nearly demised the initiative. The school was isolated. It endeavored to keep current by creating journal or reading clubs for students, faculty and local physicians.

Less expensive public health programs were introduced through the 1920s, 1930s, and 1940s. They were needed to face the severe polio epidemics (1927, 1937) and control TB in the province. Over one-third of all Alberta's physicians enlisted in WWI and WWII, leaving the remaining faculty and physicians short-handed and severely challenged to increase the number of medical graduates in WWII. The Hall Royal Commission (1962-1964) led to the introduction of Medicare (1967/68), and the approval of a second provincial medical school (Calgary, 1966). It was followed by the formation of first provincial, fully funded, medical research program in Canada, the AHFMR (1980).

Documentation of Alberta's medical history was limited to Dr. Heber Jamieson's *Early Medicine in Alberta* (1947), until the history focused Alberta Medical Foundation (AMF, 1989), commissioned brief vignettes on early doctors in the *Alberta Doctors' Digest* in 1991. Biographical sources were scarce. A.O. MacRae wrote one-page resumes in the *History of Alberta* (1911), as did John Blue in *Alberta Past and Present* (1923), covering about fifty physicians. The *Calgary Associate Clinic Historical Bulletin (CACHB)* (1936-1958), contained a number of first person stories on the most prominent early colorful medical pioneers. The McDougall/Harris book on *Medical Clinics and Physicians in Southern Alberta* (1991) and Henri Chatenay's twenty-eight (eighteen from Alberta) early prairie physician profiles (1980) were helpful. McDougall was the first to suggest that some of Calgary's physicians influenced medicine beyond their communities and the province, through participation in the CMA and other national medical organizations.

Thirty-five medical pioneers (Part I) were selected as leaders in Alberta's medical march. Most were as medical practitioners. A few were medical truants as Dr. Scarlett would term them – contributors outside medicine as explorers/geographers, naturalists, soldiers, or businessmen. By linking their efforts, twenty-two seminal events or activities were uncovered (Part 2).

Choosing Dr. Mary Jackson for the first vignette was fortuitous. She offered to edit her essay and returned it with every line changed. Eight vignettes later, a glimmer of light began to shine on Alberta's medical history. Then the initial columns came to a halt because of the absence of the AMA minutes, and the informative annual AMA/CPSA Proceedings before 1935. The void was partially filled by twenty-five memoirs compiled as *Medicine in Alberta: Historical Reflections*, and published by the AMF in 1993.

Here is the story of medicine in Alberta as it unfolded. It is one of unexpected accomplishment, a trend that is likely to continue well into the 21st century.

The Aboriginal and Hudson's Bay Company Era (pre1872)

Geographically, the three prairie provinces (Alberta, Saskatchewan, Manitoba) are a region within Canada. The region is bound by the Rocky Mountains to the west, the Precambrian shield to the north and east, the 49th parallel or American border to the south and the North West Territories or 60th parallel to the north. The area is rectangular: sixteen hundred kilometers (1000 miles) across, and a thousand kilometers (700 miles) north to south. The prairie provinces were originally part of the North West Territories, until they became separate provinces: Manitoba in 1870 and Alberta and Saskatchewan in 1905.

For two hundred years, the Hudson's Bay Company (HBC) controlled and managed the territory under its 1670 charter. Antedating the HBC era was the First Nations' period, with native tribes (Blackfoot, Sarcee, Cree, Assiniboine) migrating or later riding over the prairies. Their spiritual and health care needs were addressed by the Medicine Man or Shaman. After the arrival of the HBC, the native travel patterns changed, to permit fur trading for European goods at Hudson's Bay forts. This lasted until the Montreal/Fort William based Northwest Company penetrated the region from eastern Canada and began to navigate its rivers and build inland forts in the mid-1700s. Trading in furs became very competitive until permanently altered by the Selkirk (Red River or Fort Garry) Settlement in 1812, the mapping of the prairies by David Thompson (to 1812) and the NWC/HBC merger in 1821, an event which brought permanent peace and tranquility to the prairies.

To maintain their supply of furs, the England based HBC needed healthy aboriginals. Mindful of the waves of infectious diseases (smallpox, measles, influenza) that periodically decimated the aboriginal population on both sides of the 49th parallel, the HBC began sending supplies of smallpox vaccine to their forts. As early as 1807, a decade after he discovered the first vaccine for smallpox, the Iroquois nation asked Dr. Jenner for his manual describing how to produce it. Smallpox vaccinations, if given at all, were usually administered only in the face of a spreading epidemic.

Medical practitioners first came in 1668 on the supply ships destined for York Factory and Fort Churchill on Hudson's Bay. From the HBC charter date onward there were physicians, usually on four year contracts, stationed at York Factory at the mouth of the Nelson River on Hudson's Bay.

After 1821, a few physicians were sent inland. They served primarily as senior fur traders. Several fur trade physicians came to Manitoba after the Red River Settlement began. Dr. Todd achieved considerable fame when he treated aboriginals in the epidemic of 1837 and taught them how to administer their own smallpox vaccine using fresh serum from someone vaccinated eight days earlier. Two physicians (Tolmie, McLaughlin) were assigned by Governor Simpson to Old Oregon, before the Oregon Treaty was signed in 1836. Dr. John Bunn became the first prairie-born, Fort Garry, Manitoba physician, from 1830-1860. He worked for the Hudson's Bay Company and acted as the senior recorder (Magistrate) for the settlement in the late 1850s.

Another group of medical men arrived as explorers. They provided little medical care in the country but were major contributors to the mapping, surveying, navigating, and recording of the geography, geological, and cultural characteristics of the indigenous peoples of western Canada. Their sponsors were the British Navy seeking the Northwest Passage and, after 1847 the British government and HBC, searching for remnants of the Franklin Expedition (Richardson, Rae). In 1857, the Royal Geographical Society sponsored the Palliser Expedition (Hector) to explore the Blackfoot country and Rocky Mountain passes for navigation and a future railway.

The first fur trade physician to accept a HBC posting to the interior of western Canada and stay was Dr. William Morrison Mackay in 1867. He provided care and treatment during the rounds of his Forts, as he rose

from a Trader to become the Chief Factor in charge of Northern Alberta's Chipewyan District, based at Fort Chipewyan on Lake Athabasca. He continued to discharge both medical and factor duties until he retired in 1898 and moved to Edmonton. There he started a private practice.

Interest in the Canadian prairies by the Canadian government was quickly piqued, after Confederation in 1867. Not three years old, the first North West Rebellion (1869/1870) revealed how large and challenging it was to govern this new frontier. The Rebellion brought 1,667 troops including seven doctors to Fort Garry (near Winnipeg) in mid-winter from Ontario, via the Great Lakes and Lake of the Woods. No skirmishes or battles occurred and so there were no casualties. One physician (Dr. Alfred Codd) remained in Manitoba.

In 1870, the Hudson's Bay Company relinquished the last of its charter rights. They were purchased by the Canadian government. Manitoba became a small separate province that year, the first one west of Ontario. Faced with periodic epidemics caused by what is now known to be typhoid fever, the citizens of Winnipeg rented a house in 1873 and converted it into a cottage hospital. They enlarged it twice and it became the seventy-two bed Winnipeg General Hospital (WGH) in 1884.

The Northwest Mounted Police Era (1873-1892)

The next evidence of eastern interest in the prairies came secondarily, after American whiskey/fur traders, ostensibly for horse stealing, killed upwards of twenty-three aboriginals in the Cypress Hills in August 1873. The federal government had already passed an Act (NWMP, May 1873) to create a short-term constabulary. It was to secure and protect the inhabitants from the whiskey trade. The government was spurred into action.

Men were recruited in Ontario and Quebec in two enlistments. Three hundred and eighteen troopers and officers assembled at Dufferin/Pembina (Manitoba) on the Canadian/US border to begin their March to Fort Macleod (Alberta) in July 1874. They were accompanied by a senior surgeon (Dr. John Kittson) and an assistant surgeon (Dr. Barrie Nevitt). Both were American born, Canadian trained physicians. Kittson traveled with the March to the Cypress Hills before returning to Swan River in northern Manitoba for the first winter. Nevitt remained with Assistant Commissioner James F. Macleod's troop on the Oldman River where they built Fort Macleod in October/November 1874. The trek was marred by two typhoid deaths and the development of typhoid fever by Dr. Kittson in the winter of 1874/75, a disease that recurred three years later. Typhoid became the most common cause of death in the NWMP. One hundred men, died from typhoid and other causes from 1886 to 1900.

The NWMP surgeons were provided medicine kits for the 1874 March. Thereafter, they requisitioned medical supplies via Fort Benton in Montana every six months, until the CPR reached Regina in 1882 and Calgary in 1883. Descriptions of the diagnoses they made appeared in each surgeon's annual report. A list of aboriginal diagnoses appeared once, in Dr. George Kennedy's report for 1879. In 1882, Kennedy stopped the spread of smallpox at the USA border by vaccinating hundreds of aboriginal children camped along it. The diseases amongst the settlers near the forts were not recorded in Kennedy's or any other surgeon's report. From anecdotal accounts, the lack of hygiene measures led to an equal or likely much higher rate of communicable diseases and deaths in the adjacent camps and settlements, than in the NWMP forts.

Medical care to the settlers who lived near the NWMP Forts was provided on an as-available basis. NWMP surgeons were free to charge fees for their services and augment their \$1000 per year salary. Healthcare for the 2900 Sioux that Sitting Bull brought across the Medicine Line into the eastern Cypress Hills in 1877, after the Custer massacre, was unrecorded. One NWMP hospital sergeant was assigned to the nearest fort. The Sioux were offered amnesty to return to the USA. They drifted back until the last remnants returned in 1881.

The first NWMP surgeons were assigned to Fort Macleod (Nevitt, 1874), Fort Walsh (Kittson, 1875), and Battleford (Miller, 1875). Outlying detachments (Calgary, Fort Saskatchewan, Prince Albert) were assigned hospital sergeants.

As soon as they arrived, the NWMP built the first single room hospitals in Fort Macleod (1874), Fort Walsh (1875), and Calgary (1877). Renovated and enlarged hospitals were built in Calgary (1883) and Fort Macleod (1884). A new and enlarged hospital of twenty-five beds was constructed in Regina (1887), after the detachment was moved there from Fort Walsh in 1882.

As soon as the opportunity arose, the NWMP reduced their medical costs by signing joint contracts with the Indian Department/Ministry of the Interior or by contracting with local physicians in the new communities that were established. In 1882, Dr. Augustus Jukes replaced Kittson as the senior NWMP surgeon. When he retired in 1892, Jukes was not replaced. The total number of full-time or contracted NWMP physicians in Saskatchewan exceeded 33 (to 1917). An equal number were likely contracted in Alberta. The NWMP continued its contracting approach until 1911, when the last two special physician appointments (Braithwaite, Mewburn) were made. They continued until 1931. The NWMP hospitals were open to the public on an emergency only basis. A Catholic hospital was built in St. Albert in 1881. The first Community hospitals were opened in Medicine Hat (1890), Calgary (1890), Fort Macleod (1893) and Regina (after 1899).

Medical Care During the Northwest Rebellion (1885)

All NWMP and prairie physicians participated, directly or indirectly, in the medical service during the second NW Rebellion in 1885. Drs. Orton, Brett, Ayles, Jukes, Seymour, Mewburn, and Kerr joined the hospital service. Dr. deVeber joined the Rocky Mountain Rangers. Dr. Braithwaite was assigned to Colonel Irving's column to protect Prince Albert and to provide care to the wounded after the battle at Duck Lake. Dr. Kennedy joined a militia group to scour the area around Fort Macleod for suspected bands of Metis and Aborigines. NWMP surgeons in Battleford (Miller) and Prince Albert (Porter) provided hospital and surgical care to the injured militiamen, civilians, and rebels brought to their towns.

A total of forty-three eastern and prairie physicians and surgeons came with or joined General Middleton's loyalist forces. About twenty militia and NWMP physicians had regimental appointments. Eighteen came west with their regiments. Another twenty-three joined the separate hospital service organized by Surgeon General Dr. Darby Bergin. Dr. Thomas Roddick of Montreal was appointed the senior field surgeon under Bergin. He organized three field ambulance units. Two units traveled with the Middleton and Irving columns and one went to Calgary to join the Alberta Field Force. They used tents for hospitals and ORs, and moved with the troops. Their medical equipment, medicines, and supplies were transported on specially outfitted Red River carts. Most operations in the field hospitals were to remove shell fragments or perform amputations.

Roddick created two field hospitals in Moose Jaw and Saskatoon. The long stay casualties were triaged to the base hospital in Winnipeg for rehabilitation. The hospital service physicians treated casualties from both sides, loyalist and rebel. NWMP hospitals (Battleford, Prince Albert, Regina) received and treated many of the estimated 446 casualties, including 114 deaths (both sides). After the Battle of Batoche and the surrender of Rebellion leader Louis Riel, Surgeon Jukes was appointed to a panel of physicians to assess Riel's competence to stand trial. Jukes and two other doctors deemed him competent. Roddick and Braithwaite met Riel and were impressed by him.

Dr. Roddick closed the field hospitals and transferred the remaining patients by buckboard and barge back to Winnipeg, in June of 1885. There were ten patients still left in Winnipeg in the spring of 1886. No North West Rebellion physicians remained in the west or joined the seven physicians who were already in the NWT at the time of the Rebellion.

Roddick found it difficult to select non-military physicians for the hospital service. Some MDs graduated from Canadian medical schools, while others trained at leading schools in Britain. There were no specialists in 1885. The problem was compounded by moving physicians, from one province where they were provincially registered, to the NWT where they were not. To begin to address the issue, the NWT Assembly passed the first medical registration ordinance in late 1885, and revised it in 1888 to create a credential assessment and registration body, the College of Physicians and Surgeons of the NWT.

The CPR, post CPR and Private Practice Era (1881-1905)

The second attempt by the Canadian Pacific Railway (CPR) to build a transcontinental Canadian railway was successful (1881-1885). Railway construction had an immediate impact on prairie medical care. As soon as construction contracts were awarded, subcontractors signed physicians to medical contracts. One worker noted that five to six physicians went up and down the line under the Langdon and Sheppard contract that brought the rails into Calgary. Drs. Brett and Orton from Winnipeg, signed the mountain medical care contract circa 1883. It covered the 1884/85 construction of the railway through the Rocky and Selkirk moun-

tains. Bringing the militia west, in 1885 over the incomplete Lake Superior section of the railway, accelerated the delivery of over 5000 troops, medical men, and supplies to Winnipeg, Regina, Moose Jaw, Swift Current, and Calgary and accelerated its completion. The existence of rail transportation shortened the Rebellion.

By far the greatest medical concern during railway construction was typhoid fever. The likelihood of it increased as the speed of rail construction slowed down in the Kicking Horse and Rogers Passes, and each construction camp lasted longer. Inadequate hygiene and undiagnosed typhoid carriers spread the disease. In the winter of 1884/85 there were over eight thousand men in Roger's Pass. Hospitals based in Alberta (Silver City, Laggan or Lake Louise) were moved to BC (Golden, Donald). They were cabooses converted into makeshift hospitals.

Almost immediately spur lines were built to link the CPR with coalmines in Bankhead/Canmore (1884), Lethbridge (1885) the Crowsnest Pass (1899), and later Drumheller. The completion of the north-south railway from Fort Macleod to Strathcona by 1892 opened up central and southern Alberta to homesteaders, ranchers, farmers, and immigrants. A parallel north-south branch was built by 1890 in Saskatchewan to Prince Albert. It had the same effect. Rail extensions led to medical construction, followed by medical employee contracts for the CPR. Later, the north-south Alberta branch rail line was extended to Athabasca (1909), Grande Prairie (1915), and Peace River (1919), with the same homesteading effect.

With typhoid being the major disease problem during rail construction, hospitals were opened in Medicine Hat (1889/90), Calgary (CGH and HCH in 1890/91), and Edmonton (EGH, 1896). The last two were Grey Nuns' hospitals. They extended the nursing services the order had started, following their arrival in St. Albert in 1863. The Grey Nuns had built the first non-NWMP hospital in Alberta for \$10,000 (1881) in St. Albert. Saskatchewan relied on the NWMP and Medicine Hat hospitals until public hospitals were built, starting in 1899.

Railway executives like N.J. Niblock led early fundraising and construction efforts to build the first non-secular hospital in Alberta in Medicine Hat. The Galt family underwrote the second one, the Lethbridge Galt Hospital (1891). Public subscriptions converted the Calgary Cottage into the Calgary General (1895) and built the Fort McLeod Hospital (1893). The first patients admitted to the new hospitals were invariably typhoid patients. In Medicine Hat, it was even more serious when the medical superintendent, Dr. Olver, acquired it and died. He was not the only physician to succumb to typhoid. After 1896, typhoid could be diagnosed. That prompted the commissioning of the first provincial laboratory in Manitoba, in 1897. Another one followed in the NWT in 1904, after the NWT Medical Executive Council and legislators agreed to build and operate a laboratory in Regina.

The first critical mass of physicians (Mewburn, Kennedy) who could work as an anesthetic/surgical team, introduced major surgery to Southern Alberta in 1886/87. They used NWMP hospitals and their own instruments; or sometimes pool tables and co-opted citizens, depending on the circumstances.

In the 1870s and 1880s, Lister antisepsis led the medical world to conduct large series of operations involving abdominal surgery. The earliest abdominal operations were performed in the NWT (1887), to drain perforated appendiceal abscesses. They were followed by operations for intussusceptions and exploratory laparotomies. After 1892, ectopic pregnancies, acute appendectomies (1893) and cesarean sections (1903) were performed by Dr. Mewburn in Lethbridge. By the end of the 1890s, amputations and hernia repairs had become commonplace operations in Lethbridge.

The discovery of the Upper Hot Springs on Sulphur Mountain near Banff, with its high sulphur content, caught the attention of Drs. Brett and Orton, by 1884. The two physician entrepreneurs built the first Banff Hotel, the Grandview Villa (now the Rimrock) followed by the Banff Sanatorium, on the site of the Parks Administration building. Both were completed before the Banff Springs Hotel opened in 1888 at Siding 29, now Banff. From the outset, the sanatorium had an OR, and abdominal surgery was performed. Brett bought out Orton who returned to Winnipeg, and expanded the complex at least four times, from 1887 to 1902.

As early as 1889 at the CMA convention in Banff, the climate of Calgary was advertised as therapeutic for respiratory diseases. It led to a CPR offer to bring tuberculosis (TB) patients to Calgary. That initiative eventually resulted in the first western TB hospital, not in Alberta but at Tranquille near Kamloops, BC, in 1906. The

new railway was both an asset and a liability as it imported people and communicable diseases. In 1892, the first smallpox epidemic arrived in Calgary via the CPR from Vancouver.

The first private practitioner who did not rely on NWMP/Indian/CPR contracts was Dr. L.G. deVeber. He left the NWMP to start a private practice in Fort Macleod, in 1885. As the population of Alberta, always slightly behind that of Saskatchewan, rose from 16,000 (1886) to less than 25,000 (1891), 73,000 (1901), 186,000 (1906), and 375,000 (1911), physicians followed in a rough ratio of one per one thousand new residents. They preferred to start their practices in the railroad divisional towns located every one hundred miles or so, or the rural communities sited every ten miles.

Doctors Lafferty and Mackid held the Fort Macleod to Strathcona (CPR) medical construction contract. Before it ended (1892), Dr. Mackid assumed Lafferty's CPR employee medical contract. It gave Lafferty time to run and become Mayor of Calgary in 1890. The CPR divided the Lafferty contract, Mackid acquired the CPR prairie division (Calgary to Regina) and Brett acquired the mountain division medical contract (Calgary to Golden). After 1892, regular trains allowed Drs. Brett (Banff) and Kennedy (Fort Macleod) to travel to Calgary to assist Dr. Mackid with surgery. As the CPR extended its rail lines throughout Alberta, it signed employee medical contracts in local and divisional towns.

Immediately after the first CMA meeting west of Toronto in Banff in 1889, prairie physicians met to form the NWTMA. They also appointed a Medical Executive Council under the revised 1888 Medical Ordinance. Dr. Brett was appointed the first chairman of the Council and the NWT VP on the CMA Executive. Brett had been elected to the NWT Legislative Assembly (1888) and became the Assembly leader (1889) and then the Leader of the Opposition, (1890-1898). It gave him a platform to advocate for the two province division of the NWT, well before Alberta and Saskatchewan were created in 1905. Dr. deVeber followed in his footsteps as an MLA, and represented Lethbridge after 1898. Re-elected in 1905, deVeber was appointed by Premier Rutherford to the first Alberta Cabinet. Before the premiere 1906 sitting, he was appointed to the Senate by Prime Minister Laurier, where he remained for the last twenty years of his life.

Encouraged by free lands, immigrants came from around the world to settle in Alberta and Saskatchewan. One group was particularly significant. The first 6,000 Ukrainians arrived and settled 100 kilometers north-east of Edmonton, from 1892-1896. The Methodist Home missions initiated a medical mission to nearby Star (Lamont), in 1901. That brought Dr. A.E. Archer west to Alberta, in 1903.

The Birth of Alberta and Saskatchewan as Provinces (1905)

1905 was a watershed year. The physician population in Alberta was over one hundred. Dr. Kennedy resigned as the President of the NWT College of Physicians and Surgeons after a four year term. Dr. Lafferty drafted the Medical Profession Act for both Alberta and Saskatchewan. Alberta's physicians turned once more to Dr. R.G. Brett for leadership. They appointed him the first president of both the AMA and the College. The new Medical Profession Act was passed in May 1906 and almost immediately faced a test case. Dr. Lincoln sued Dr. Lafferty and the College over the proposal in the new Act to require all physicians to re-register. Lincoln won the first round in the provincial court but lost in the Supreme Court. His point was still made. The Act was revised and the NWT physicians were grandfathered as registrants in the College of Physicians and Surgeons of Alberta (CPSA). All new physicians were required to sit the provincial licensing exam and apply for registration.

The Saskatchewan physicians watched the Alberta events unfold, before forming their own college in 1908. It contained the grandfather clause. The first four Saskatchewan registrants were Drs. Brett, Kennedy, Mewburn, and Lafferty. Except for NWT registered physicians, reciprocity between Alberta and Saskatchewan, was not permitted after 1906. Dr. Brett's solution to the reciprocity problem was to create a medical federation with a common licensing exam for all four western provinces. He proposed the formation of the Western Canadian Medical Federation in 1907, to do just that. Initially supported, the proposal met with objections, particularly from BC and Saskatchewan.

The need for portability of medical registration had been discussed at CMA meetings since before 1878. Dr. Roddick faced it in 1885, during the Northwest (Riel) Rebellion. One interim decision was to give all NWMP physicians NWT registration. Individual or annual examination of new applicants was a challenge. Only

Manitoba had medical school with professors to provide examiners. Eastern medical associations were not interested in the problem or its resolution.

Perceiving an opportunity to re-raise the issue, in 1908 Dr. Kennedy sent a letter to the 1907 initiated Western Canadian Medical Journal, six months before the 1909 CMA meeting in Winnipeg. He requested a revisit to the concept of a portable license for all western Canadian physicians. In early 1909, Dr. Brett met with Winnipeg's leading doctors and was assured of their support for the Western Canadian Medical Federation. Although the concept had been gathering dust for a decade, at their 1909 annual meeting the CMA appointed a committee, primarily of eastern physicians, to revisit Roddick's original concept for a national registration exam. Manitoba (1903), Saskatchewan (1906), and Alberta (1906), had already given medical association and provincial legislative approval for an enabling Act, that would recognize a national exam as acceptable for provincial registration purposes.

The western Canadian revisit to the concept of a portable licensing exam was successful in restarting the consensus process. The national Dominion Medical Council was born in 1912. Lacking a medical school, the College of Physicians and Surgeons of Alberta (CPSA) approached the University of Alberta (UofA) and asked their Senate in 1912 to organize medical exams for registration purposes. When the Dominion Medical Council was formed and set its first examinations in 1913, the CPSA remained wary of the quality of the voluntary MCC examination. It continued to conduct its own examinations for registration because many applicants graduated from medical schools outside Canada. More importantly, it discouraged graduates who could not establish successful practices elsewhere, from coming to Alberta, because they had to write another examination. These were sensitive issues in the era that preceded specialization, which only began with the formation of the American College of Surgeons in 1913 and the arrival of graduates from Royal Colleges in Great Britain.

Immediately following the creation of the two prairie provinces, the Calgary Medical Society (CMS) was formed in 1906. The first topic of discussion was inevitably the fee schedule, but it was not long before the NWT and subsequent CPSA Registrar Dr. J.D. Lafferty, began to leave his imprint on the CMS. He became its president and in 1907 called for the tendering of all medical contracts, whether they be NWMP, Indian Affairs, CPR, coalmine, or lumber company in origin. The CMS viewed contracts as a restriction on medical practice and thus to be abolished. Only the CPR refused to tender its contract. The college proceeded to promulgate guidelines for medical contract practice.

Growth in Medical Practice from 1905-1914

Group practice had already begun in Calgary with the Mackid Group (1890), McEachern Group (1905), and later the Associate Clinic (1922) demonstrated. Even before 1905, civic interest in community hospitals led to Calgary and Edmonton establishing or acquiring their own municipal or city owned hospitals. Radiology and laboratory services began quickly. The first radiology unit arrived in 1906 (Malcolmson at Frank). Hospitals acquired x-ray units, using whatever means they could. The provincial laboratory was established in 1907 in Edmonton under Dr. Revell.

Membership in the AMA was voluntary, but not popular. In 1910, there were ten doctors registered with the AMA from Calgary, although over three times that number were in practice. In 1913, with Calgary booming to 43,000, Dr. Mewburn moved his practice from Lethbridge to the Calgary General Hospital and limited it to surgery. In Edmonton, talented leaders came with the boom, like President H.M. Tory, Ph.D. (1908) to the UofA as its first President; Dr. Malcolmson in 1912 who became Alberta's first full time radiologist (1915); surgeons W.A. Wilson (1904) and Dr. E.W. Allin (1910). Eardly Allin his son, started the Allin clinic in 1946. In 1913, a Faculty of Medicine was established at the UofA as a three-year program. There was no dean. It was administered by President Tory and consisted of one pre-medical year and two basic medical training years. The last two years of training were spent at McGill or UofT. Professor J.B. Collip came (1915) as a lecturer and became the isolator of insulin six years later (1921/22).

As the boom times continued, physicians made trips to Ontario or the eastern United States to continue their medical education. The new groups or clinics tended to limit their membership to specialists or physicians who wished to polarize their practice to a specialty. One group formed an EENT clinic in Calgary (Shore,

Gunn, Hackney). Specialist recognition, based on experience and training, became possible, when surgeons could apply to become members of the new (1913) American College of Surgeons (F.H. Mewburn, H.G. Mackid). They were joined by R.G. Brett (1914) and J.S. McEachern (1919) and Royal College specialists (J.W. Richardson, R.B. Deane, H.W. Gibson). In Edmonton, there were more Royal College trained specialists: W.A. Wilson, A.R. Munroe, and E.W. Allin.

Provincial interest in public health began with the passing of the first Public Health Act in Alberta, in 1907. Dr. Lafferty became the provincial Director of Public Health, without relinquishing any of his other duties or interests. Cities started public health programs as Edmonton did in 1892 when it appointed Dr. Braithwaite as a part-time (MOH), followed by Dr. Whitelaw as a full-time one (1905). Dr. Mahood became the MOH in Calgary, circa 1911. Dr. deVeber became the Lethbridge non-paid MOH, in 1898. In smaller communities, public health responsibilities were awarded to interested physicians by communities who could afford to pay little for their work.

The mental health program started with the construction of the 160 bed asylum/hospital at Ponoka. It opened in 1911 and was immediately overfilled with patients. The bed problem continued until 1966 when mental health beds peaked at 5,400.

As the populations of Alberta and Saskatchewan grew at an exponential rate, the electoral power of the rural farmers and ranchers quickly became apparent. Farmers coalesced their concerns into agricultural or farmer based movements. In Alberta, farmers incorporated in 1909 as the United Farmers of Alberta (UFA). The UFA would significantly impact healthcare in Alberta.

The Great War and its Aftermath (1914-1921)

There is a dearth of information about Alberta physicians and their contribution to the WWI British Empire war effort. Histories exist of the youthful CAMC (Nicholson), and the controversial Bruce report over integrating or separating the Canadian field and general hospitals from the much larger British system. Scattered histories exist for some of the Canadian general hospitals and field ambulance units. Two field ambulance units were raised in Alberta: the 8th Field Ambulance in Calgary in December 1915 and the 11th Field Ambulance in 1916, formed by the UofA Faculty of Medicine and the Manitoba Medical College. Each ambulance unit consisted of five to ten physicians and 180-250 men. They operated immediately behind the regimental first aid stations. Their roles were to receive, stabilize, and sort the wounded soldiers. The wounded soldiers were referred to dressing stations, then casualty clearing stations, and if necessary, the nearest general hospital.

The 8th Field Ambulance was attached to the Third Canadian Division. It rotated on one month assignments to the front, with the 9th and 10th Field Ambulances. In its three years in Europe, the 8th was involved in fourteen battles. The ambulance unit faced its first attack of mustard gas in August 1916. It handled over 2000 casualties in one day at Vimy Ridge (April 1917) and 3300 at Passchendaele (October 1917). On one occasion there were twelve fractured femurs awaiting one doctor's attention. The unit also suffered one direct hit. It lost twenty-three men in total. Another eighty were wounded. The first commanding officer (CO) died of an infectious disease, and the second CO, Lt. Col. J.N. Gunn, suffered Trench Fever twice and left his command on February 27, 1917.

Major W.T. Washburn, who had been a senior medical officer with the 11th Field Ambulance, returned to Canada in 1919 as superintendent of the Strathcona (military) Hospital, in a delayed exchange with Major H.H. Moshier. Dr. Moshier had left that post when the 11th was sent overseas in 1916. Lt. Col. Moshier was given command of the 11th shortly before he was killed in action in 1918. At the end of the war, the sixty to eighty beds in most field ambulance rest stations were occupied by soldiers suffering from the Spanish Flu.

The German use of chlorine gas (Ypres, 1915) markedly increased the anticipated number and type of disabled veterans who were sent back to Canada. In July 1915 the federal government established the Military Hospitals' Commission (MHC), under Senator (Sir) James Lougheed, to prepare for the casualties. By 1917 the MHC had acquired or controlled almost 13,000 beds in Canada. The general hospital total at the time was no more than 30,000. In Calgary, the MHC leased the Ogden Hotel in 1916. Shortly afterward, it became the Colonel Belcher Hospital. The Strathcona (after 1922 the University) Hospital in Edmonton was acquired in 1916. The MHC also leased the CPR hotel in Frank as Alberta's first TB sanatorium (1917). In

1920, it moved the TB patients to the newly built 180 bed Central Alberta sanatorium at Keith (Bowness) near Calgary. The MHC leased the Women's Ladies' College in Red Deer from 1916-1923, for shell-shocked veterans, and paid per diem rates for more patients in the Ponoka mental hospital.

Other Alberta physicians made significant WWI contributions. Lieutenant Colonel E.G. Mason raised and commanded the 50th Battalion from Calgary. Later, Dr. Mason became the commanding officer of the Shorncliffe, England, CAMC medical supply depot, which he reorganized. Five months after he was gassed in November 1916, his battalion captured the two highest peaks on Vimy Ridge. Dr. Mewburn became the second in command and chief surgeon at the Taplow General Hospital. He had several future heads of surgery under his command. President Tory started the Kharki University in 1916 to teach university courses to veterans stationed in England. Dr. Rankin found the vector (flea) and Dr. Orr the method (high temperature) to decontaminate soldiers clothing and stop the transmission of the prevalent and disabling Trench Fever. In 1916, soldiers with Trench Fever occupied one-quarter of all Canadian hospital beds. It caused the same widespread disability rates amongst Allied troops, until the Canadian solution was introduced.

Physicians at home had another problem. In addition to the marked influx of casualties and disabled veterans, there was an extraordinarily high enlistment of physicians, particularly from the prairies. It was estimated that over thirty percent did so, well above the ten percent of all Canadians who joined the armed services. The fact that the medical school was able to continue with only three professors (Revell, Collip, Jamieson) and seven part-time lecturers, instructors and demonstrators was a credit to the selection of bright students as much as it was to the teachers and the curriculum.

In 1915, women were given the right to vote in Alberta. Women members of the UFA formed an association and then a separate organization in 1916, the UFWA. Irene Parlby, later of Five Persons fame, led the UFWA to focus on women and health issues during her 1916-1920 presidency. Parlby was appointed by the governing Liberal party to the Municipal Hospitals' Advisory Committee. It produced a blueprint and funding structure (1917, 1918) for the construction of hospitals throughout rural Alberta. The first municipal hospital was organized in Mannville in 1917. It was opened in 1918, a year after an inter-provincial municipal hospital was opened in Lloydminster, Saskatchewan. The Lloydminster Hospital Act (1919) was passed to permit Alberta rate payers to fund the municipal hospital in Saskatchewan. The concept of a civic funded hospital was not new. One had already been opened in Edmonton in 1906, as the Strathcona Municipal Hospital. In 1919, the Hospital Association of Alberta began as the second one in Canada. In 1920, a separate Municipal Hospitals' Association was formed, the only one of its kind in Canada. They merged in 1943.

In September/October 1918, the Spanish flu epidemic spread across Canada with the returning troops. The severity of it and high death rates that accompanied it, exceeded those of WWI itself. There were an estimated 40,000 or 10% of all Albertans who suffered from the flu. Three thousand eight hundred died from it. The epidemic severely hit healthcare staff, as well. Dr. Bow noted in Regina that thirty-five doctors were reduced by the flu to nine functioning physicians. The UofA was closed for a short time. Pembina Hall was converted into an influenza hospital. Dr. Braithwaite wrote of one patient who died because of the flu, only five minutes into a tonsillectomy.

The loss of CMA members was another fallout from the war. The CMA's lack of military members and post-war indebtedness led to a motion to disband it in 1921. Tabled for a night, Calgarian Dr. J.S. McEachern presented a recovery plan the next morning. It saved the CMA from bankruptcy and led to the hiring of its long term general secretary, Dr. T.C. Routley.

The Liberal government of Alberta had begun to improve nursing services in the province, even before WWI ended. A separate public health department was created in 1918, the second in Canada after New Brunswick. It began hiring returned wartime nurses as part of Canada's second public health nurse program (1918). The first program had started in Manitoba. A separate district nurse program to serve remote rural areas was started by the government (1919). A traveling dental clinic (1921) was extended to include physicians and nurses (1923/24). The first social hygiene (VD) clinic in Canada was organized in 1919, in response to the high rate amongst returning soldiers. Dr. Harold Orr was appointed the director. By 1919, Irene Parlby was articulating the UFWA's philosophy, that access to healthcare was a right for all citizens.

War has always been a stimulus to change. WWI was no exception. Vaccination programs during the war had proven that typhoid, along with diphtheria and smallpox could be prevented. The public clamoured for the same access to effective vaccines. Other diseases had to wait for the advent of antibiotics like sulfonamide (1936), penicillin (1943), streptomycin (1944); mobile x-ray trucks to search for undiagnosed TB patients (1944); the Salk vaccine (1953); and the antipsychotic Chlorpromazine (1953).

Returning veterans wanted a better Canada because of their war effort. W.L. Mackenzie King articulated the tenor of the time in his book *Humanity and Society*, in 1919. Hearing of a potential Rockefeller family donation of a second fifty million dollars to the Rockefeller Foundation, King secured a promise by John D. Rockefeller to earmark some of those funds for Canada. Five million dollars were allocated to Canadian medical schools. Newly returned UofA President H.M. Tory actively persuaded and successfully secured a conditional grant of \$500,000 from the Rockefeller Foundation, to create a full degree granting MD program at the UofA.

President Tory appointed Dr. Rankin as the first UofA Dean of Medicine (1920), completed the medical school (1921/22), and approved Professor Collip's sabbatical (1921) to Toronto, New York, and London, to upgrade his knowledge and experience. The 1911 built Strathcona hospital was returned to the University of Alberta (1922). The UofA became the only university in Canada to own a hospital. In October 1923, Tory was appointed and then elected the president of the National Research Council (NRC), a position he held for the next thirteen years. Tory took with him the Alberta Scientific and Research Council concept he had pioneered in 1920. It was to have the government provide the funds for selected or targeted research projects to be undertaken on the university campus. The first two targeted fields were coal and heavy oil research. Two months after Tory's NRC appointment, the Rockefeller grant was released.

As the medical profession in Canada prepared to face major issues in the post WWI era, they turned internationally to the United States and Britain for precedents. Canadian physicians had already turned to the British example (a single national exam) to solve the national registration problem (1908-1912). For accreditation, it was the American approach of the American College of Surgeons (1921) that was followed; for specialty recognition, it was the British Royal College model (1929); for federating the CMA, the American precedent was followed (1934-1938); for the approach to cancer services, there was a switch from the British (medical) to the American (medical/lay) board organization (1931-1938); and for health insurance, it was the British (government as a contributor) concept that served as the model (1930-1935). Alberta physicians contributed materially to the choices that were made, and how they were implemented.

The UFA Government Era (1921-1935)

In 1921 Alberta voters installed a philosophically different government, when they elected the two year old United Farmers of Alberta party as their new government. Even the UFA was surprised at its electoral success. One of the UFA government's priorities was healthcare. Future premier R.G. Reid was named the Minister of Health. Two years later, in October 1923, healthcare in Alberta and Canada changed irrevocably with the transfer of the health portfolio to the Minister of Agriculture, the Honorable George Hoadley. His twelve year ministerial appointment under three successive premiers provided unusual stability. Progress was ensured when there were only two Deputy Ministers of Health from 1912 to 1952. Healthcare initiatives were introduced at an unprecedented rate, limited only by money and later, the Depression. Even then, healthcare programs were protected. Irene Parlby was appointed the Minister without Portfolio (1921). Her focus was on women's issues. She remained Hoadley's strongest advocate and supporter.

Fortuitously, the AMA and CPSA had united into a single organization, in 1922. That meant that all the physicians registered by the College were automatically AMA members. The College retained the financial power to set membership fees. Annually, it voted a sum of money to the AMA to fund their activities. In most provinces the association and college remained separate entities, with association membership voluntary and sharply reduced.

Hoadley went to work, quickly. He expanded the rural traveling dental program to include physicians, nurses (1924) and later, surgeons and psychiatrists. The contract to run the travelling clinic program was signed with the University Hospital. Some physicians viewed it as an extension of the medical contract concept. Where the population was too small or spread out, and insufficient to remunerate a physician particularly in northern Alberta, Hoadley assigned a district health nurse.

One year after his appointment, Hoadley noticed that Alberta had the highest post-operative death rate in Canada (1924). He introduced regulations, to ensure examination by a pathologist of all tissues secured during surgery, and to require mandatory second preoperative surgical opinions. Not seeing the improvement he expected, Hoadley amended the Medical Profession Act to require the University of Alberta Senate to assess the credentials of postgraduate trained physicians and grant a specialist diploma (1926), only to physicians with at least two and one-half years training after an internship. This precedent, antedated by three years, the formation of the Royal College of Physicians and Surgeons of Canada. The Royal College was formed in 1929 but did not replace the Alberta regulations until 1944.

After the UFA government was re-elected in 1926, the pace of healthcare decisions quickened. In the drought stricken Palliser Triangle, the provincial government began to bonus or subsidize doctors to stay in the area. When Deputy Minister Laidlaw died in 1926, Hoadley replaced him with Regina's Medical Officer of Health Dr. M.R. Bow. Bow stayed for twenty-five years. The Hoadley/Bow and later Cross/Bow teams faced two of Canada's early polio epidemics in 1927/28 and 1937. A sixty bed frame cottage hospital to treat the victims, on the UAH grounds was quickly built. In 1928, Hoadley steered the Sexual Sterilization Act through the legislature and added a Professions Complaints Act (1928) to give him access to medical care concerns, particularly involving physicians. At the same sitting of the legislature he approved the White/Pattinson motion supported by all parties to inquire into the feasibility of a state medicine program in Alberta.

The White/Pattinson report was tabled in 1929. It concluded that a state medicine program was feasible as a health insurance program. The authors did not design a plan to implement it, nor did Minister Hoadley. After the February 1929 legislative sitting, Hoadley appointed half the UAH board members, giving the government control of the hospital. The government then passed a Municipal District Act amendment to allow municipalities to use tax monies to pay a physician through a medical contract. Laidlaw started a TB follow-up program for the Drumheller miners in 1925. In 1929 Bow began TB follow-up clinics in Calgary and Edmonton. The first and second pilot public health services including a Medical Officer of Health, were started in Red Deer and in Hoadley's own constituency of Okotoks/High River. That step was followed by the opening of two mental health clinics in Calgary and Edmonton in 1929. Following the death by kicking of veterinarian Dr. A. Hobbs by a UofA summer student, and a review by Judge Emily Murphy, Hoadley, with Premier Brownlee's support, dramatically increased the beds at the over crowded Ponoka and Oliver mental hospitals. Another change was the appointment of Commissioner Dr. C.A. Baragar to oversee all mental health services in the province. Then Hoadley advertised as far away as Britain for doctors to come to the province. Four female physicians came and were assigned to northern districts in Alberta, as provincial doctors.

The AMA/CPSA had been watching each Hoadley move but did not become anxious until rumors circulated, in 1927, over the scope and intentions of the (1928/29) White/Pattinson Inquiry. They were relieved when it did not lead to the implementation of a salaried or contract physician program like the 1916 municipal doctors' program in Saskatchewan. In response to the government's action, the CPSA appointed Drs. A.E. Archer and W.A. Wilson as presidents for most of the next ten years, and Dr. G.R. Johnson as the full-time Registrar.

The Depression (1930-1939)

As the Depression plunged Canada deep into debt, moreso in Alberta and Saskatchewan, the UFA government introduced severe cost cutting measures. Initially, public health expenditures were spared. The budget at the University of Alberta Hospital actually increased significantly throughout the Depression. Annually Hoadley declined the White/Pattinson motion to design a state medicine program. Then came the trigger. The Cardston debate on state medicine on January 3, 1932 was won by the "for" side. Widespread community interest in the Cardston medical contracts led to their initiation on March 1, 1932. It was a voluntary medical insurance program designed to keep Cardston doctors from leaving. The concept spread on an individual family/doctor basis throughout southern Alberta, before reaching Dr. Archer and the Lamont clinic northeast of Edmonton. One year later (1934), the municipality of Wostok offered to sign a contract with the clinic to provide prepaid medical care for all of its citizens. By having the clinic sign the contract, the ethical problem of every doctor participating in the program and receiving monies from it was avoided. Under the clinic contract, any one of five physicians could provide medical services.

At the same time, action on a health insurance program was also being considered in BC. In February 1932 the BC Royal Commission released its three-year report. It contemplated a two-ninths government contribution, to be equally shared between the provincial and federal governments. The program, however, was designed for only citizens who had an employee/employer relationship and an annual income over \$1,800 per year.

Days before the Cardston program began, Health Minister Hoadley accepted the annual White/Pattinson motion to design a state medicine program for Albertans. He appointed the Hoadley Commission on March 4, 1932. That fall the Commission called for briefs. They were presented in November/December 1932. The AMA/CPSA recommended a state health insurance program that would provide physician and hospital services for all Albertans. The Alberta Hospital Association made the same recommendation.

The Commission accepted the AMA/CPSA recommendations in their preliminary report, but expanded the health services to be insured to include hospital, medical, dental, drug, and public health services. The Commission recommended the provincial government contribute two-ninths of the cost to cover those who could not pay the premiums. Municipalities were required to cluster themselves in groups of six to eight around a municipal hospital, and hold a vote to join or not join the program. In January 1933, the UFA as a society joined the six month old Commonwealth Cooperative movement (CCF), now the NDP, which had been formed in August 1932, in Calgary. The principle of access to healthcare was enshrined in the 1933 Regina CCF Manifesto. It stated that healthcare should be as available as education.

The Hoadley Commission's proposal represented the first agreement in Canada between a government and the medical profession, on a plan for state involvement in medical practice. The AMA/CPSA found that physicians favored the concept of an insurance program twenty to one.

Seeing two provincial medical associations suddenly challenged to take a position on state medicine, the CMA, who had been researching health insurance (1929-1932), delegated their Economics Committee (1932-1934) to develop a plan for health insurance for Canada.

In the critical year (1933) the federal government made its position unequivocal. Prime Minister Bennett refused to allow any monies, even those being paid to individuals on relief, to be paid to a physician for services provided by him. In June 1934 Dr. J.S. McEachern became president of the CMA. He saw the CMA facing a unity problem. The CMA had a membership of less than 30% of all Canadian physicians. It did not represent or act as the voice of Canadian doctors. The medical insurance issue was one that affected all doctors. McEachern took the initiative. He received AMA/CPSA support in principle, for the federation idea on October 4, 1934. In September 1935 the AMA/CPSA formally agreed to legally merge with the CMA. They began to pay CMA membership fees on behalf of all of Alberta's doctors in December 1936. All other provincial medical associations followed the Alberta lead in 1938.

The Hoadley Commission report(s) spawned other decisions. In the spring of 1934, Drs. W.T. Washburn and A.F. Anderson (RAH) obtained the support of their boards, to start the four hospital voluntary prepaid Edmonton hospital insurance program. It was limited to employer/employees on a group basis, and was the first Blue Cross type plan in Canada. The only community to introduce it was Edmonton. The plan could be extended to all Edmontonians, if the government agreed to contribute for those who could not pay for it. It did, beginning in 1948.

Undaunted by the federal government's refusal to contribute to the health insurance program, Hoadley had the UFA government pass the Alberta Health Insurance Act and given assent in April 1935. It was to be implemented after the election of August 1935. Turfted to a man, the UFA became a government lost to posterity. Undaunted, Hoadley secured a post-political job in 1936 to study the distribution of medical care and public health services in Canada. He specifically addressed the issue of care for citizens who could not afford it, and concluded that reduced access increased illness and mortality rates. His report, co-authored with Dr. Grant Fleming, was released in early 1939 in time to be studied by the Rowell-Sirois Royal Commission.

After his 1934/35 term as CMA president ended, Dr. McEachern returned to implement his original 1931 proposal, to federate the provincial cancer branches or medical association committees into the Canadian

Society for the Control of Cancer. He was successful (1938) in creating the soon to be renamed (1944) Canadian Cancer Society.

After the August 1935 Social Credit election, Hoadley's successor Dr. W.W. Cross and deputy minister Dr. M.R. Bow reverted to a public health orientated agenda. They passed the second free TB Act (1936), the first free Cancer Act (1940), and the first two week free Maternity Act (1943). The government also re-passed, unaltered, the 1935 UFA State Health Insurance Act in 1942. It anticipated the federal government would pass enabling legislation, to allow both governments to fund a national health insurance program.

Beginning in 1939 the federal government showed its first sustained interest in a national health insurance program. It appointed the Haegerty Commission to study the topic in 1942. The CMA appointed the Committee of Seven to work with Haegerty. At the first special meeting in its history on January 19, 1943, the CMA under President Dr. A.E. Archer, passed a motion to support a national health insurance plan. Every one of the 78 delegates voted for it. The federal government became so excited with the proposal that it recommended (1945) one hundred percent funding by government; sixty percent by the federal government and forty percent by the provincial governments. Following the Dominion-Provincial Re-construction Conference in 1945 the proposal died (1946), wrecked on the shoals of the first federal/provincial argument over health-care funding and taxation rights.

Medicine in Alberta During and After WWII (1939-1969)

Over 200 practicing and newly graduated physicians, from a 1940 registration of 567, enlisted in one of the three armed services. Learning from the WWI experience, the AMA established a Military Advisory Committee in 1939. Its role was to monitor medical care in Alberta towns and cities, the number of physicians who enlisted to try to redistribute there were sufficient physicians left to care for the 95% of Albertans who did not enlist. Their recommendations were usually followed, even if it meant returning an enlisted physician to his home town, or sending one back because they had chosen to move to a larger centre to build a practice before the war was over. In Red Deer, five of seven physicians enlisted, leaving two to provide medical care for a town and district that had a large army camp and nearby airbase. It was a challenging time for everyone.

Returning veterans quite skewed the immediate post-war medical class intake pattern. Veterans were given first choice. They flooded the first year classes to the exclusion of students coming out of high school. Many graduates wanted to specialize or to make up for the internship they had not received. In 1946 Dean Dr. J.J. Ower and his colleagues decided to follow the UofT and McGill lead and begin post-graduate residency training programs.

There had been a 1926 initiated, depression maintained, wartime extended, curtailment of hospital bed construction, except for the veterans' hospitals that were built. Post WWII, there was a substantial expansion of the urban hospitals (Calgary General, Royal Alexandra). Additions to the UAH in 1952 and 1956 were precipitated in part by the polio epidemics of the early 1950s. Although oil was discovered at Leduc in 1947, it took a number of years for oil royalties to flow to the government in significant and sustained amounts, or enough to convince the government there would be a permanent increase in revenues from the oil sector.

Following the failure of the 1945/46 federal-provincial talks, the issue of provincial insurance of healthcare services became a dominant issue. A 1946 review by the AMA's Committee on Economics, under Dr. Archer, suggested separate hospital and medical insurance programs be started. The government responded by extending the Edmonton group hospitalization plan across the province in 1948. The same year the government passed an Enabling Act to permit Medical Services of Alberta (or MS(ofA)I) to be incorporated by the AMA. It would grow into one of the most successful provincial hospital insurance programs in Canada. By 1966, with government premium subsidies, it was providing medical insured services to almost one hundred percent of Albertans.

The post-war advent of new TB drugs (Streptomycin, PAS, Isoniazid, Rifampin), created the opportunity to aggressively treating contacts and new cases. TB cases peaked in Alberta in 1950, two years earlier than in the rest of Canada. As the number of new cases declined, the Baker Sanatorium patients were moved to the 1952 built Aberhart Sanatorium, the year (1970) the responsibility for the Aberhart facility was transferred to the UAH.

The next major class of drugs that became available were the antipsychotic tranquilizers, starting with Chlorpromazine in 1953. By 1954 their use was widespread in Alberta. Chlorpromazine and its derivatives accelerated the decline in mental health beds in Canada. Mental health beds were roughly equal to the number of general hospital beds in 1930. In 1966 psychiatric beds in Alberta peaked at 5,400, two years before the rest of Canada, and declined to about 1,500 including those in general hospitals, or less than 0.5/1000, at the millennium (2000).

In Alberta there was strong support for the Canadian Cancer Society and its annual fundraising efforts by Albertans, a legacy of Dr. and Mrs. McEachern. In 1951, the Faculty of Medicine and the Alberta Cancer Society agreed to allocate their 1951 donations to the construction of a cancer research laboratory on the UofA campus. It was opened in 1952 as the McEachern Laboratory, the first medical research facility in Alberta. The Contiguous Surgical Medical Research Institute followed in 1953. Excitement came with the 1956 opening of the open heart surgical unit, following the arrival of Dr. J.C. Callaghan and a supporting group of cardiologists to the UAH.

1957 saw another significant national event with the passage by the federal government of the Hospital Insurance and Diagnostic Services Act. Under the Act, the federal government offered to jointly (50/50) fund a national hospital insurance program. Although at the twilight of his political career, Dr. W.W. Cross, who had been Health Minister since 1935, was critical of the federal intervention into a provincial jurisdiction. He retired, and was succeeded by one of the strongest provincial opponents to "Fedicare", Dr. J. Donovan Ross. He, too, resigned his portfolio over the second federal intrusion into a provincial (health) jurisdiction, with the passage by the Pearson government of the Canada Medical Care Act in 1968. Medical services were to be insured and funded (50/50) the same as hospital services, so long as the program was portable, operated by the government, and covered all citizens in each province. Alberta joined the program, under protest, in 1969. The government hired many of the MS(ofA)I staff. It became a foundation to fund medical research.

Although hospital beds had been expanded to cope with the returning veterans, the major cities in Alberta continued to grow rapidly as urbanization in the province accelerated. The waiting list for admissions to the Calgary hospitals exceeded 5,000 by the early 1960s. The government responded by building the largest hospital ever constructed at one time in North America, the 766 bed Foothills Hospital. The pressure for beds was so high the government built the Rockyview Hospital, while the Foothills was being designed and constructed. No sooner was it opened, the Foothills Hospital built one of the first outpatient ambulatory surgery units in Canada in 1969. In Edmonton the government funded the reconstruction (1975-1983) of the UAH renamed Walter C. Mackenzie Health Science Centre, with fewer beds than the UAH had contained. In a move to limit the downtown concentration of hospital beds and locate them closer to the suburbs they served, two hospitals, the Edmonton General and the Calgary General, were relocated to the southeast and northeast quadrants of Edmonton and Calgary, respectively.

In 1962 Prime Minister Diefenbaker appointed Saskatchewan's Justice Emmett Hall to study future Canadian healthcare needs. The appointment of the Hall Royal Commission stemmed from the postwar baby boom, and the successful Hospital Insurance and Diagnostic Services plan (1957). The Hall Royal Commission (1964) recommended the Saskatchewan (1962) universal health insurance program be extended across Canada and include coverage of all medical and hospital services. The Hall report also recommended, and the federal government agreed, to provide construction grants to establish medical schools in Hamilton (McMaster), Calgary (UofC), Sherbrooke and St. Johns (Memorial) to graduate more physicians. In 1966 the Alberta cabinet approved a new medical school at the UofC. Dr. Ross approved the funding of a three floor addition to the Foothills Hospital to house the first two classes, before the government approved construction of the new medical school. It was built from 1970-1973.

Lougheed and After (1971-)

In 1971 Peter Lougheed was elected the Premier of Alberta, ending the thirty-seven year reign of the Social Credit party. Lougheed realized that the price of oil was rising to an unexpected but permanently higher price. The Alberta Treasury was one of the major benefactors. To limit over-spending by the province the cabinet established the Alberta Heritage Trust Fund. It was to receive thirty percent of the provincial oil revenues. At the same time, Premier Lougheed was requested by the two Deans of Medicine, Drs. L.E. McLeod and

D.R. Cameron, to create a Heritage Fund for medical research. After deliberating from 1975 to 1980, the Alberta cabinet established the Alberta Heritage Foundation for Medical Research (AHFMR) and the Alberta Heritage Scholarship Foundation to fund high school scholarships. The establishment of these funds coincided with the peak price of oil. High interest rates followed. Although the price of oil collapsed, interest income was retained by the AHFMR, but not by the 1975 formed Alberta Heritage Trust Fund. Interest retention allowed the AHFMR to continue to fund medical research and initiate the construction of the first two dedicated medical research buildings on the UofA and UofC (Foothills) campuses, from 1986 to 1988. Two more research buildings were constructed from 2004 to 2007.

As the price of oil dropped after 1980, the Getty government began curtailing expenditures in health and education. When Premier Klein was elected in 1993, it was on the promise of balancing the provincial budget. He introduced five, six, and a planned eleven percent cut of provincial expenditures over a three year period. Many physicians began leaving the province. Physician training positions were reduced by ten percent. Regionalization (1994) followed, on the heels of cut-backs in provincial funding. It led to a reduction of over twenty-five percent of the hospital beds in the province. Other provinces followed the Alberta lead. The drop in acute hospital beds accelerated, from 7.0 (1980s) to under 3.0/1000 by 2005.

In 1999 the Canadian Medical Forum's Taskforce report, written by Dr. L. Tyrrell while President of the Association of the Canadian Medical Colleges, flagged and forewarned Canadians of the impending acute shortage of physicians. It stemmed from the 10% (1994) cutbacks in medical school enrollments, a process accelerated by the federal reduction in transfer payments three years later.

Although the price of oil recovered in the 1990s, it would be 2000 before the government debt of twenty billion dollars was paid off and there were re-allocatable funds available for one time Heritage type expenditures. They began with the formation of the AHFMR's sister fund, the Alberta Heritage Foundation for Science and Engineering Research, better known as the Ingenuity Fund, or Bill 1 in 2000.

In 2000 the AHFMR announced its Challenge Fund for the construction of two more medical research buildings. Additional provincial, federal and private grants provided the capital for them. They were constructed on the UofC (Foothills) and UofA medical school sites from 2004-2007. As a 2005 birthday gift to Albertans, Premier Klein and his cabinet augmented the AHFMR and AHFSER with \$500 million each, at the rate of \$100 million per year.

As of 2005, there are eight thousand (5,600 FTE's) physicians registered in Alberta and over 10,000 acute care beds for 3.3 million Albertans. A tripartite agreement between the government, the AMA, and the healthcare regions (2003) has been initiated. It lasts until 2011 and seeks to provide long-term provincial funding guarantees to implement new or needed programs, including forming physician networks and upgrading office computer systems to permit transfer of medical lab, x-ray, drug and eventually an electronic healthcare record. Since 1998 the negotiated agreement with the government has contained medical funding increases for population growth, aging and inflation, but not for the increased acuity of illnesses seen in the emergency departments, from the dramatically shortened hospital lengths of stay. Provincial healthcare expenditures have reached eleven billion dollars per year (2006) in Alberta, including expenditures for physician services of four billion dollars. The shortage of physicians created by decisions in the 1990s will take until 2010 to begin to correct, unless there is a large immigration of foreign medical graduates. It will leave Canadians and Albertans under doctored for a decade, particularly in the rural sections of the country.

Alberta's Centenary – 2005

A glance back at the origin and evolution of medicine in Alberta, particularly in the last one hundred years, is revealing. There have been no strikes. The collaboration or partnering of the government and the profession has led to major changes in medicine, not only in Alberta, but in Canada. They include the formation of the Dominion Medical Council (1909-1912), the turnaround of the bankrupt CMA (1921), the first political/professional agreement for a health insurance program (1932), the trial of prepaid health insurance programs in Cardston and Lamont (1932-1934), the federation of the CMA (1938), and the formation of the Canadian Cancer Society (1938). All were initiated by or led by physicians or politicians from Alberta, before oil was discovered at Leduc in 1947.

Medical education began audaciously, nearly a century ago (1913) in Edmonton, population 15,000. Spurred by the challenges and opportunities following WWI, the UofA created a degree granting Faculty of Medicine that graduated its first MDs in 1925. It was the only degree granting medical school in western Canada created from 1883-1949. After WWII, the Faculty of Medicine began its post-graduate medical education (residency training) programs. Following the golden years of growth at the UofA Faculty of Medicine in the 1950s and 1960s, the Hall Royal Commission recommended and the federal government introduced regulated medical care (Medicare). It also expanded medical education in the province, through the creation of the second Faculty of Medicine in Alberta at the UofC in 1966.

Stimulated by Premier Lougheed's willingness to establish a provincial fully funded medical research foundation, the third pillar of medicine, the Alberta Heritage Foundation for Medical Research, began in 1980. It has now passed its quarter century milestone and is no longer one of Alberta's best kept secrets, but a thriving, growing adjunct to medical care, that has reversed the loss of talented physicians to the United States. It has infused over \$1.0 billion into medical research in Alberta.

Precedents have not been limited to organized and academic medicine. The first Siamese twin separation operation in Canada was performed in Edmonton (1950), as was the first open heart surgery (1956), chronic renal dialysis (1962), and large volume outpatient cataract extractions and lens implants (1977). The discovery of a new generation of antivirals for the treatment of Hepatitis B (1989), and the islet cell transplants for diabetics (2000) are the result of world-class research. The hallmark of these successes is that they reflect a longstanding dynamic, aggressive, forward thinking, government/profession relationship, that has evolved and prospered since at least 1921.

Unselfish examples of the capability and commitment of individual members of the medical profession are abundant in the selected profiles. The physician response to the Frank Slide (1903), the Southesk train wreck (1948), the Lamont bus accident (1959) and the Edmonton tornado (1987) are but four. Unfortunately some of the more recent examples have been in the form of keeping health services operative in the face of strikes in the healthcare sector.

Achievement has been the hallmark of medicine in Alberta and will continue to be so. More biographies will be required to capture the contributions of those that were missed or have yet to leave their mark. The horizon looks ever brighter with the Alberta story continuing to unfold at an accelerated pace, as medical research grants grow exponentially. It is an exciting story with a proud history in a province that is determined to be successful and contribute to the Canadian fabric.

It is hoped that the contents, uncovered stories and incompletely told ones, will stimulate future readers, researchers, and authors to delve further into the contributions of Alberta physicians to medicine in Alberta and Canada.

1. Profile of Dr. Harry Goodsir Mackid, in Part 1.
2. Profiles of Brett, Kennedy, Lafferty, Braithwaite, in Part 1.