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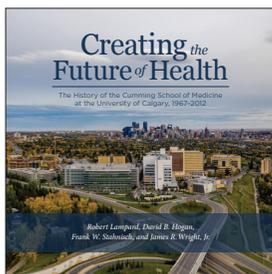
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CREATING THE FUTURE OF HEALTH: The History of the Cumming School of Medicine at the University of Calgary, 1967-2012

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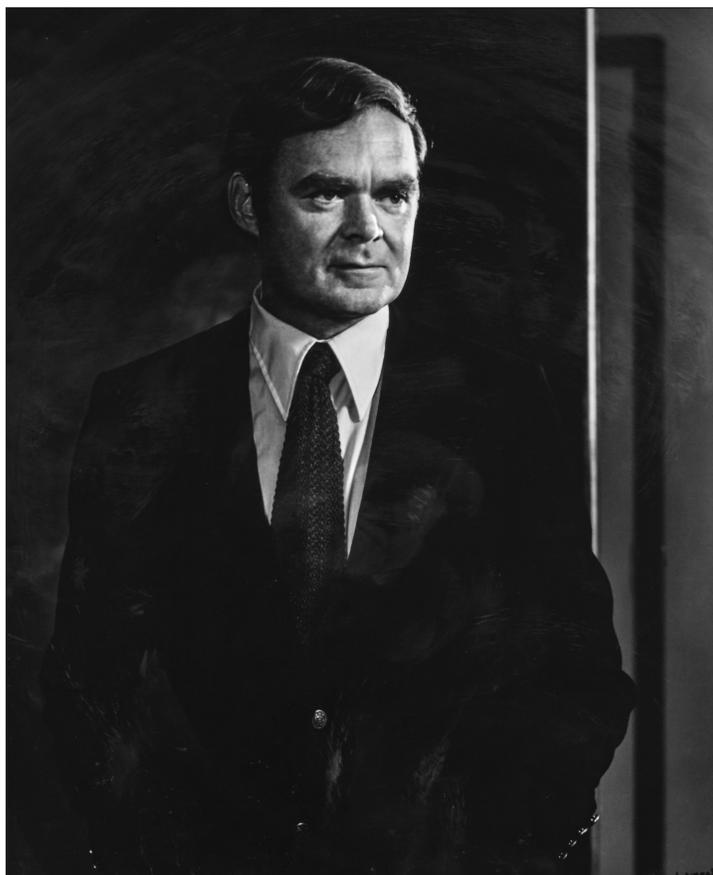
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William Arthur Cochrane
OC, MD, FRCPC, FACP, LL.D (Hon)

The Dean Cochrane Years, 1967–1973

Robert Lampard

Even excellent institutions, run by excellent human beings, are inherently sluggish, not hungry for innovation, not quick to respond to human need, and not eager to reshape themselves to meet the challenge of time.

—John W. Gardiner, *No Easy Victories*¹

In the Beginning—There Were Few Faculty

Dr. William A. Cochrane (1926–2017) accepted the offer to be the dean of the U of C Faculty of Medicine on 11 January 1967, just as Canada’s Centennial year began. In press releases at the time, Dr. Irial Gogan (1920–1983), the executive director of the HCH, referred to Dr. Cochrane’s dynamic personality, while Foothills administrator Reg Adshead noted that his appointment would “permit new progress on a long-term plan at Foothills Hospital.”²

Since Dr. Cochrane had already made a commitment to be the visiting professor at the University of Hawaii in Honolulu, he offered to begin his new role on a part-time basis on April 1, and then assume his full-time duties on July 1. Through correspondence with Adshead, Dr. Cochrane agreed to be the acting head of pediatrics at the Foothills Hospital and begin discussing an affiliation agreement between the university and hospital boards.³

During his visit to Calgary and Edmonton in March 1967, Dr. Cochrane held introductory meetings with Dr. Tim Tyler (1922–2017), the dean of social sciences at U of C, with medical staff at the Foothills

Hospital, and with U of A dean Dr. Walter Mackenzie (1909–1978).

On April 22, Dr. Cochrane requested assistance to initiate two selection committees—one for the head of surgery and the other for psychiatry.⁴ Mr. Adshead pointed out there was no agreement yet between the university, the hospital, and the government to fund them.

Instead, an agreement was reached that would allow Dr. Cochrane to appoint Dr. John Dawson, the director of the Department of Medicine at the Foothills Hospital, as associate dean (effective 1 July 1967). Dr. Dawson retained his hospital appointment as the director of medicine until a replacement could be found. Dr. Cochrane immediately delegated to him the responsibility for expanding the CME program, “with particular reference to family practice.”⁵

Dr. Dawson then secured the willingness of the U of A to take over the fifteen CME programs that were planned for Southern Alberta and organize three regional conferences and six on-campus programs.⁶

On 1 July 1967, a year after the Foothills Hospital opened its first beds, Dr. Cochrane took up his post full-time, promising to use the Foothills, HCH, and CGH hospitals for undergraduate and postgraduate medical training programs. Looking to the future, he concurred with Premier Manning’s decision that the medical school should be next to the Foothills Hospital—“locked right into it,” as he would put it.⁷ Initially, he predicted that the first class would have over forty students and would start on 1 September 1971.⁸ Dr. Cochrane

also predicted that 100 faculty would be on board by the time the school opened. His initial projections were for 10 clinical faculty in 1968–9, increasing to 25 in 1969–70, 33 in 1970–1, and 50 in 1971–2. The clinical instructors would be matched by an equal number of basic scientists.⁹

The Philosophy and Program of the School

The curriculum Dr. Cochrane had in mind when he arrived was a three-year, system-based, continuously taught one. The concept had evolved during Dr. Cochrane’s two years on the Committee on Medical Education at Dalhousie (1964–6).¹⁰ The committee, which included future U of C faculty member Dr. A. David Dickson (1925–2018), had concluded that changes were coming in the way medicine was taught. During the committee’s curriculum research, Dr. Cochrane also became intrigued with the value of an ongoing curriculum evaluation program, after Dr. George Miller released his book on medical education evaluation in 1962.¹¹

Before releasing its report, the committee had Drs. George Miller, J. Alan Gilbert (1918–2003) of the U of A, John Evans of McMaster (1929–2015), and Alice Stewart (1906–2002) of Oxford visit and critique it. It was not the first Canadian interest in a systems-based curriculum. Dr. Wendell Macleod had suggested it for the four-year program at the University of Saskatchewan in 1956.¹²

Dr. Cochrane realized that the Western Reserve approach in Cleveland¹³ would need to be adapted to fit what he wanted. As he would later explain, “I was aware of the three-year programs which had been initiated in certain centers in the United States and had also discussed [it] on a number of occasions with Dr. John Evans at McMaster [to understand] the type of program they were developing. As a consequence, certain objectives were utmost in my mind.”¹⁴ As there were no basic science departments, Dr. Cochrane needed to create them in anatomy, biochemistry, and physiology.

Dr. Cochrane’s desire was to expose students to patient care early, and to reverse some of the US-bound brain drain through faculty recruitment. “The focus” he said, “would be on family practice—the social and psychological, childhood and geriatric, chronic and conventional diseases problems it faced, and [to] give instruction on maintaining and improving health.”¹⁵ His desire was to elevate family practice (FP) to a specialty level by introducing a two-year post-MD training program. He acknowledged that “there may be flaws in the initial program,” but he sought to counter these by evaluating the undergraduate program and using the information to upgrade the curriculum and avoid it becoming rigid.¹⁶ “The faculty,” Cochrane said, “would seek to fix the weak points and capitalize on the strengths of the program. Graduates would be encouraged to return for refresher courses.” In the Oslerian tradition, Dr. Cochrane expected that students would

learn how to learn, and thus become students for the rest of their lives.

In press interviews, Dr. Cochrane repeatedly reiterated that the medical school would foster a team approach to health care. Students would be responsible for much of their own study time. Clinical practice would be introduced through problem-solving techniques. The location of research laboratories and scientists nearby would encourage students to learn what was happening on the frontiers of knowledge, as he termed it.¹⁷

Students would be taught a “core” of medical material, which Cochrane defined as the essential information needed to practise medicine not learned in pre-medical studies, or as a clerk, intern, or resident. This would be supplemented by the development of critical thinking and the application of problem-solving processes. “Sound habits of learning,” Cochrane said, “were paramount and must not be dominated by the memorization of ill-sorted facts.” The curriculum would not be copied from anyone else and would avoid inheriting the traditional approaches to medical education utilized in the past fifty years.¹⁸ Since medical knowledge was “doubling every ten years—some say seven years,” he knew it would be a challenge for the planners of the new U of C medical school to define what was to be taught as core medical knowledge.¹⁹

To entice a wider range of students, Dr. Cochrane planned to avoid mandating a list of pre-medical courses. Instead, there would be suggested courses with exceptions allowed for promising students with unusual or atypical backgrounds.

These changes, Cochrane hoped, would allow the faculty to “turn out a completely new type of physician.”²⁰

Realizing there was no published philosophical statement to support such a program and guide planners and architects as they designed a new medical school, Dr. Cochrane began drafting one.²¹ He presented his philosophy and plan at the annual APMC meeting in October 1967. In his plans, the new school would not only incorporate the basic structural elements of medical education (auditoriums, a library, seminar rooms, laboratories, etc.), but would also have research space, an office-type ambulatory care center, as well as a twenty to thirty-bed investigation unit.²²

Dr. Cochrane’s philosophical and program statement was published in the 9 March 1968 issue of the *Canadian Medical Association Journal*.²³ Its appearance increased awareness of the school and was helpful in recruiting and selecting faculty, as potential candidates gained a clearer idea of what joining the faculty meant.²⁴

The undergraduate medical program he outlined would run for three years, with one month of vacation per year. Instruction in the seven body systems would be completed in two years. A significant amount of elective time for investigating areas of future interest within medicine would be available to the students. The third year would be devoted to a departmentally organized clinical clerkship. The total academic time would match that of the traditional four-year medical school program and would follow the objectives Cochrane had already identified.²⁵

An emphasis would be placed on ambulatory programs, as opposed to strictly in-hospital programs, since 90 per cent of the patients seen in practice are “vertical” rather than “horizontal” (in a hospital bed). Dr. Cochrane elaborated on other needs in the program. They included giving FP a place of equal prominence *vis-à-vis* the traditional specialties; forging a close working relationship between the ambulatory clinical area, the laboratories, and medical research facilities; introducing students to patients early so they understood the reasons for learning about clinical care; graduating physicians who could critically analyze information and were trained in problem-solving and self-education; integrating basic and clinical information; identifying the “core” material to be taught and developing a curriculum marked by experimentation, flexibility, and dynamism.²⁶

Dr. Cochrane planned that U of C graduates would receive a conditional MD subject to a minimum of two years of further residency training. Although they signed an agreement to do so, the first graduates successfully challenged that requirement by confirming that the College of Physicians and Surgeons of Alberta (CPSA) would accept applications for licensure in Alberta after a one-year accredited internship in any province. (The CPSA approved the two-year requirement “in principle” in 1972 and implemented a two-year pre-registration training requirement starting in January 1976.²⁷)

By January 1968, Dr. Cochrane was receiving inquiries from as far away as Australia about the medical school’s proposed curriculum and

preliminary structural plans. In conversation, he expressed his confidence that several Canadian teachers might be willing to return to Calgary.²⁸

When asked about the future of medical teaching, Dr. Cochrane noted that computer diagnoses were coming; indeed, he imagined that they would eventually be available in shopping centres.²⁹ Photographic and optical imaging techniques were giving better insight into the inner workings of the body. New radiographic scanning technics would allow students to do “more than [just] play around with a couple of rabbits.”³⁰ Diagnoses could be made from hundreds of miles away using telemetry, as was already occurring with electrocardiograms (ECGs) and electroencephalograms (EEGs). Quicker in-patient investigation would reduce the length of hospital stays.³¹ Dr. Cochrane did not believe that the family doctor would pass the way of the “dodo bird”; he envisioned them instead as the director of the treatment team.

In March, Dr. Cochrane went to Mexico City for three weeks, where he was a speaker and visiting professor. On being questioned about the Calgary curriculum, Dr. Cochrane stated that a committee would create it. The role of traditional departments and divisions would become blurred. Basic medical sciences would be taught as tools, which might make teaching more difficult for the faculty but would also make it more interdisciplinary.³²

Dean Cochrane was careful to call the medical sections within the faculty “divisions” and not “departments,” as they were called in the hospital. This allowed him to shift funds and faculty within or between divisions without having to first secure

vice-presidential approval, as was mandated for departments under the university’s act. “Divisional status,” he said, “would also lead to less of a silo mentality in the faculty as the curriculum and medical research would be body-system based, developed by an interdisciplinary committee.”³³

On 1 April 1968, a preliminary affiliation agreement between U of C and the Foothills Hospital was finally signed.³⁴ It replaced the three-party Liaison Development Committee with a bilateral Joint Liaison Committee. There were to be three representatives from each institution on it. The purpose of the committee was to address issues of mutual concern, like the joint appointment of the professors and heads of the clinical departments and the establishment of Clinical Teaching Units (CTUs), where learning under supervision in a controlled academic environment would be possible.³⁵

A similar hospital-university agreement was forwarded to the CGH for review, where it was cautiously supported by the medical staff. The HCH signed an affiliation agreement too, but it was not implemented until 1974 following further revisions. Dr. Cochrane felt it was premature to involve the two-hundred-bed Rockyview Hospital.

The First Professors and Heads Join the Faculty

Along with Associate Dean John Dawson, five division heads had been appointed by July 1968: Drs. David Dickson, morphological sciences or

anatomy; Stanley Rowlands (1918–2006), medical biophysics; Lionel McLeod (1927–1994), internal medicine; John Read (1926–2004), community medicine; and Tom Saunders (1921–2008), family practice.

In an interview conducted shortly after his arrival, Dr. McLeod expressed his support for Dr. Cochrane’s attempt “to foster a close relationship between highly specialized physicians in the academic world and family practitioners.” Conversely, McLeod felt that teaching specialists, and those who require a more generalized knowledge in family medicine at the same time, would present a challenge.³⁶

Dr. Cochrane predicted that solo FPs in rural parts of the country would be pulled back into nearby small-town groups. In practice, the family doctor would become the director of a treatment team.³⁷ To reinforce the important role of FP in the curriculum, the director of FP at the Foothills Hospital, Dr. Tom Saunders, was made an associate professor and head of the FP division in March 1968. Later that year, Dr. Awde was appointed the director of family medicine at the CGH, succeeding the program’s originator, Dr. John Corley.

Designing the Curriculum

The Committee on Medical Education, later named the Curriculum Committee, began its work in July 1968 under chair Dr. David Dickson, joined by Drs. Keith MacCannell (1934–2019) and Lionel McLeod.

The committee was charged with giving structure to Dr. Cochrane’s philosophical statement.³⁸ It took a pragmatic approach, which was to train a physician who could then be streamed on graduation according to the route he or she wished to follow. The core content of the curriculum was to be the minimum knowledge, ability, skill set, and learned techniques that were needed for FP. In practical terms, this meant passing the Medical Council of Canada national examination.

The committee began by drafting educational objectives for the undergraduate and pre-MD curriculum. They were approved by Faculty Council (FC) on 11 October 1968.³⁹ The planning process that followed was later published in 1989 by Drs. Fisher and Levene.⁴⁰

Body systems were to be taught during the first two years, taking from seven to fifteen weeks each. The third year was to be a forty-four-week clinical clerkship. The choice of up to three one-month electives gave the student the opportunity to pursue areas of interest in greater depth, and guide them toward their career choice. Many chose to take clinical experiences outside the city, province, or country.⁴¹

The committee expanded Dr. Cochrane’s program into a twelve-point, knowledge-based set of objectives for each body system.⁴² Students were to demonstrate their new knowledge in a structured (i.e., supervised) clinical setting or CTU.⁴³ An estimated ten CTU beds would be required for each medical student. There were sixteen skills to be taught and fifteen desirable attitudes each student was to demonstrate toward patients. The “core”

2

Training in Family Medicine at the Calgary General Hospital

In the mid-1960s the future of general practice in Canada was uncertain. The Royal Commission on Health Services encountered apprehension about the fate of the family doctor.¹ As more medical students opted for specialty training, there was fear that Canadians would soon have “no one to consult when he knew he needed help but had no idea if it was because of his heart, his gall bladder, or his excessive mortgage payments.”²

When two senior medical students asked Dr. John Corley of Calgary³ where they could obtain good training as a generalist, he “wanted to weep” as he did not know of a single place.⁴ He convinced colleagues on the executive of the Alberta chapter of the College of General Practice they were as “competent as any” to address this need and received their support to raise it at a forthcoming meeting of the national Board of the College,⁵ where a resolution authorizing the Alberta chapter to explore the possibility of creating a residency program in family medicine was passed.⁶

In February 1965, Corley outlined a two-year (subsequently increased to three-year) program that would be offered at the Calgary General Hospital (CGH).⁷ It was loosely based on a general practice training program developed in

Yugoslavia by Professor Ante Vuletić (1899–1977) at the Abdrija Stampar Institute of Public Health in Zagreb.⁸ Corley had visited Zagreb, where he saw that “top medical students can be attracted to the challenge of General (Family) Practice if quality training programs are available.”⁹ Support was subsequently obtained provincially and nationally for a three-year pilot to evaluate its feasibility.¹⁰ A local ad hoc committee consisting of Corley, H. H. (Bill) Black, D. L. G. Howard, H. McEwan, S. Thorson, and W. Walsh, J. (Cobb) Johnston was formed to guide the pilot.¹¹ Core funding was obtained from the Department of National Health and Welfare, while residents would receive hospital salaries.¹² If the pilot was successful, it was anticipated the Calgary Hospitals Board (formerly the CGH Board) would assume responsibility for the program.¹³

In a four-part series, Corley described the program and its implementation.¹⁴ The first of the three years fulfilled current provincial requirements for licensing while the additional two years would make trainees eligible for the proposed certification examination of the college under development. Later, when the undergraduate clinical clerkship year was upgraded, the requirement for a third year for FP Certification was

dropped.¹⁵ The pilot was overseen by the College of General Practice with guidance provided by the University of Alberta Faculty of Medicine.¹⁶ The hope was that it would create a new type of specialist—what Corley called a “medical generalist integrator.”¹⁷

There was less than a year and a half between the decision to establish the residency and the start of training in July of 1966. Volunteers and part-time staff were responsible for the complicated work of planning this new educational program. Corley wanted more preparatory time, but this advice was ignored.¹⁸ Dr. Donald Rice, national executive director of the college at the time, agreed they were possibly too impatient but felt “details of these programs can be constantly modified and improved as experience dictates,” while the alternative would be “further delay and rapid deterioration of the present position of the general practitioner-family physician.”¹⁹ Corley wrote that the gestation of the initial program was “stormy and difficult,” with confusion about the roles and responsibilities of the college and hospital.²⁰ There was no full-time program director during these critical early years. Corley received a half-time appointment for three years beginning in late 1965, but the CGH would only fund a full-time director if the pilot was successful. Corley felt the first year was successful but “the remaining two years of the program leave much to be desired.”²¹ Hospital staff believed a three-year residency wasn’t needed and that their responsibility was to provide a good one-year rotating internship.²² Residents voted with their feet. Of the seven starting in 1966, only one completed all

three years. Corley blamed this on the failure to clearly define the aims of the program.²³ Rice acknowledged uncertainty about the value of certification but also wrote that residents were being encouraged by local physicians to leave early and accept one of the job openings available to them.²⁴ They were reassured that deficiencies in their education could be “overcome through apprenticeship training . . . while earning relatively large sums of money.”²⁵ Rice complained of this “lack of support . . . from a large segment of the general practitioner population.”²⁶ Dr. Wayne Elford, a member of first group of residents, did not complete the full three years. He noted that at the time it was unclear if additional training in family medicine would become the norm, and even if it did, most felt a two-year program would be sufficient.²⁷

Notwithstanding these hurdles, the pilot was considered a success. In 1969 the college held its first national examination in family medicine, and twelve senior practitioners and resident graduates passed.²⁸ Corley chaired the evaluation committee while Black,²⁹ of the planning committee, and Dr. Myron Semkuley,³⁰ the lone Calgary graduate who completed all three years, were certifiants.

The University of Calgary had no role in these early developments of the CGH family medicine residency. Dean Cochrane, though, viewed family physicians as the key person in health-care teams.³¹ Graduates of the Calgary medicine program would be “undifferentiated” physicians who would then pursue either a minimum of two years of postgraduate clinical or research training.

Cochrane predicted at least 70 per cent of graduates would opt for family medicine.³² In 1968, the U of C was approached about accepting interns and residents then training in Calgary hospitals, including the CGH family medicine residents, as postgraduate students. For family medicine it was hoped that an integrated undergraduate-graduate program under the direction of the U of C would evolve.³³ A year later, interns and residents, including the family medicine residents, were formally incorporated as postgraduate students of the University of Calgary, though training programs remained essentially under the direction of the host hospitals rather than the university.³⁴ This occurred without Corley.³⁵ Dr. Charles Awde became director of the family medicine training program in 1969, while Corley returned to private practice.³⁶ The college hosted a testimonial banquet for him in Calgary on 15 May 1969. He subsequently became chief examiner for the college and professor and chief of the Division of Evaluation in the Department of Family Practice at the Medical University of South Carolina in Charleston.³⁷

knowledge to be taught was to be based on an understanding of each system in its normal state and under disordered conditions—which could be a named disease, symptom, sign, or complication.⁴⁴

The committee met weekly and became the first standing committee of the faculty.⁴⁵ It delegated the responsibility for developing the actual curriculum for each system to a system subcommittee. Seven faculty subcommittees were set up covering the cardiovascular-respiratory, endocrine-reproductive, gastrointestinal (GI), reticulo-endothelial, renal-metabolic, musculoskeletal, and neurosciences systems. Each system was broken down into units or “core components,” with a unit manager assigned to each one. Subcommittees were also appointed to cover the introductory, continuity, clerkship, and elective courses.⁴⁶

As the documents for each system were received by the senior committee they were assessed for duplication, omissions, material beyond core, or for transfer to another course/system. The order for teaching the units in the system was set. The neuroscience and musculoskeletal systems were merged, while behavioural changes were integrated into the other systems. Dermatology and psychiatry were included as “horizontal” components of the continuity course. The number of weeks for each unit and system was confirmed. The cardiovascular-respiratory system (CVS-R) was the longest, as it included material applicable to all systems.⁴⁷

Few texts to which the student could turn existed at the time, so study guides were prepared

and distributed.⁴⁸ They contained an overview of each system; the topics to be taught; the learning facilities that were available—including those in the multidisciplinary teaching laboratories (MDLs)—the teaching and learning schedule; the best journal and text references, often drug company monographs for the student to search; audio-visual aids; and where applicable, the learning that had to occur in other systems. Clinical problems or cases were selected to test whether the learning objectives had been met.

Teaching the teachers how to teach became a priority. As the faculty numbers were increasing, a five-day retreat was held in February 1970. Its purpose was to examine the plan for the first two years of systems teaching. Even then, only the GI course subcommittee had developed a detailed guide using peptic ulcers as the example. That became the template for each system coordinator to follow. Designing the curriculum would take a hundred meetings and would not be completed until October 1970.

In developing the curriculum there was some contact with McMaster, but it was informal. That institution's three-year program, begun in 1969, relied almost entirely on a combination of problem-based, self-directed learning. Both curriculums sought to decrease the didactic presentations and the requirement to memorize facts while encouraging the application of new knowledge and self-learning.⁴⁹

The teaching of basic or elementary clinical skills required seeing patients in a teaching environment, whether in a family physician's or

specialist's office. That concept coalesced into the need for a clinical office-type ambulatory care setting. Initially, patients were to be seen in faculty family practitioner offices, until the Ambulatory Care Centre (ACC) opened in 1971. Each student was assigned a patient and their family, whom they followed for six months. Since the patient's clinical problem(s) could be in a different body system, the student was encouraged to holistically study the body system involved, as well as the patient and the community setting.⁵⁰

Funding Pressures Were Never Far Away

In the fall of 1967, the provincial government asked for an update on the long-term capital funding requirements for the three Alberta universities. The schools requested a combined \$300 million in capital projects over the next five years. The government had set aside only \$165 million. After prioritizing the replies, the chairman of the Universities Commission, Dr. William. H. Swift (1904–1996), suggested that Calgary could abandon its medical school altogether.⁵¹

Fortunately, members of the Calgary press had already compared the costs of the four medical schools being built using federal HRF money and described the Calgary school as a bargain.⁵² Sherbrooke was predicted to cost \$40 million, McMaster \$68 million, and Memorial \$46 million. While the other schools included a 300–400 bed hospital in their calculations, the Calgary site, at

\$59 million, included the 766-bed hospital Foot-hills Hospital, two residences, a medical school, and would be twice as large as any of the others.

Although Minister Ross had previously suggested a cost of \$25 million for the medical school, early predictions were that it would cost \$30 million.⁵³ Dr. Cochrane made his own estimate of the all-in cost, which he placed at \$20 million, to cover the \$1 to \$2 million ACC building, to open in the fall of 1969, and \$18 to \$20 million for a medical science/clinical research building to open by late 1971. Additional funds would be required to cover equipment and inflation.⁵⁴ An allied health professions building was to follow. To ensure there was support for his “flexible” approach, Dr. Cochrane booked a meeting with Premier Manning. He later reported that “the premier was very helpful and reassuring. That’s why I stayed on and fought the battle and we got the money.”⁵⁵

In January 1968, Frank Swanson, the publisher of the *Calgary Herald*, noted that the Alberta government’s 1968 budget contained \$26.5 million for U of A and only \$16.4 million for all of the U of C.⁵⁶ A month later, on 20 February 1968, a special allotment of \$15 million was confirmed for the U of C medical school, along with \$20 million for a basic medical science building in Edmonton. The Calgary grant was to cover construction costs until 1972. Notwithstanding Dr. Cochrane’s attempts to educate university and government authorities to the contrary, some officials in Edmonton thought that the \$15 million was for a basic medical science building.⁵⁷

Publicly, however, Dr. Cochrane was “just thrilled to death to hear the news,” as he told the *Calgary Herald*. “We are very grateful for this money. It will act as a wonderful incentive, allowing us to proceed with our plans. It’s going to be full steam ahead.”⁵⁸ He also praised the U of C Board of Governors (BOG) for their support.

Architectural Challenges

Immediately following the \$15 million funding announcement, the university contracted with the local architect J. H. Cook (1924–2000) to prepare a preliminary architectural assessment. Cook visited various HRF projects already underway. Five proposals from interested architect/engineering groups were received. Cook and Associates, which included three engineering firms (Rule Wynn, Klassen, and Reid Crowther), were selected as the building consortium on 16 March 1968.⁵⁹

Concerned that Cook and Associates did not have the requisite experience, in May 1968 the government’s architect for Southern Alberta and project director Vic Bathory (1922–2007), asked the university to retain an architectural firm with experience in medical school construction. To this end, U of C selected the Stone, Marraccini, and Patterson firm from San Francisco, which had recently built two American medical schools. Cook and Associates were confirmed as the executive architects on June 4, with the Stone firm to advise them on planning and implementing Dr. Cochrane’s philosophy and program.⁶⁰

In July the faculty appointed a building committee chaired by Dr. John Read to incorporate all the requests for space in the school.⁶¹ To assist the architects, Dr. Cochrane wrote a detailed program for the ACC, as part of his final academic plan and gave it to the architects in October 1968. By this time the plan was for a single structure that incorporated “flexibility and the potential for future expansion to enable changes to take place in the physical layout over the next 10 to 15 years.”⁶²

That fall, Cook visited the new medical schools in the United States and concluded that “no models at present in operation exactly fit our proposed school.”⁶³ To confirm this conclusion, Dr. Dickson spent a month in Europe studying medical schools designs, including a new one at Uppsala, Sweden.⁶⁴ At this point it was realized that a traditional medical school would not be built.⁶⁵ The Stone firm’s Calgary office was closed in the summer of 1969, though for legal reasons their name remained on all the architectural drawings. Incidentally, a similar change in architectural firms had been required at McMaster.⁶⁶

The building committee and architects agreed that the most flexible approach was to build a modular structure. All the utilities would be contained in the equally spaced vertical towers and would be “guttered out,” or extended horizontally, to service each floor. Much of the research space was to be left open for refurbishing later, when the occupant and their specifications were known.⁶⁷

Funding and Locating the Medical School

Frustrated at the funding delays, two days after the new U of C president, Dr. A. W. R. “Fred” Carrothers (1924–1998), was sworn in on 1 February 1969, Dr. Cochrane sent him a summary of the history of the government’s offer to provide capital and operating funds for the Faculty of Medicine, along with an outline of the urgent need for more of both.⁶⁸ He outlined how his 1968–9 budget request had been almost halved to \$256,000 and the 1969–70 budget reduced to \$560,000. Both were further reduced by a medical library grant charged to the same budget. Dr. Cochrane said he could not compete with other medical schools also looking for faculty, nor offer new department heads more GFT help to design the curriculum, let alone to teach it.⁶⁹

The shortage of joint appointment funding through the Foothills Hospital came to a head in December 1968 when Dr. Cochrane wrote directly to the Department of Health to determine its policies and the budget for his appointments. The answer was that funding was only to be “for direct services to the hospital.” The government then capped the amount available to the faculty at \$50,000 (1969) and \$100,000 (1970),⁷⁰ leaving U of C’s funding level substantially below the \$469,000 received by U of A for the same purpose. The faculty responded by reducing enrollment for the first-year class from forty-eight to thirty-two students.⁷¹

Provincial capital funding, already under serious pressure, was further complicated by the federal government's decision to cap the annual release of HRF funds at \$37.7 million for a minimum of two years.

The architectural consultants agreed that the school should be located as close to the hospital as possible, as adaptation for medical teaching at the Foothills Hospital was minimal. The initial proposal was for an east-wing extension of the hospital into the main parking lot; then a high-rise attachment to the west wing of the hospital; and finally a three- to five-story building north of the hospital. This was then offered as the best option and one that would fit the Foothills Hospital Board guidelines.⁷² The "grey area," as it became known, between the hospital and medical school, was to be left for future expansion of the hospital's emergency, ambulatory, or outpatient programs.⁷³ This is where the McCaig Tower now stands.

The Design of the Medical School Is Finally Approved

The final design consisted of a basement along with main, first, and second floors (for a total of four levels). The horizontal orientation of the building brought labs and groups (students, teachers, researchers, and patients) closer together. The library was to be in the middle, near the three-story atrium or mall in the middle of the U-shaped design that opened to the west. The north and south arms of the "U" were connected at the east end by the ACC.

The mall was to bring students and faculty together for TGIF ("Thank God It's Friday!") mixers, important ceremonies, breaks, and get-togethers. There were two MDL labs, a three-hundred-seat auditorium, and two smaller ones holding ninety-six seats each, with an administrative area and a small cafeteria that opened on to the atrium on the main floor. Offices and research space filled in the north arm of the first floor, while the rest of the first and second floors were walled in as future research space. The vivarium and electron microscopy units occupied the basement. To increase the interaction between the students, small carrels or cubicles were built near the MDL. First and second-year students enjoyed the close quarters and the camaraderie this encouraged.⁷⁴

The hardest unit to design was the ACC. Architect Cook and Dr. Read based it on the Mayo and other clinics they had seen, which had reception areas and examining offices but no private offices. One-way glass windows with an observation area were added for selected rooms. The consultant area for seeing and examining patients was designed the same as the FP area and located directly above it. Two walkways at the southeast corner connected the medical school building to the hospital. An eight-foot utility floor above the second floor limited higher connections because the floor spacing in the two buildings did not match.

To compare the building plans, Dr. MacCannell visited the newly constructed \$25 million Case Western Reserve medical school in Cleveland, as well as the Mount Sinai New York City, and Temple and Hahnemann schools in Philadelphia.⁷⁵

They were all favourably impressed with the Calgary plans.

The programs, plans, and architectural drawings for the final academic and educational facilities were approved by the BOG on 26 February 1969 and sent to the University's Commission for approval. The commission requested cost comparisons with similar structures.⁷⁶

Realizing the school building would not be ready for the first class in September 1970, the Foothills Hospital administrator Reg Adshead confirmed that the weight of three more floors could be added to the west (clinical) wing of the hospital. Approved,⁷⁷ the addition was finished in June 1970 and 22,000 square feet of space were leased to the faculty for an MDL, seminar room, research area, laboratories, twenty-one administrative offices, and a medical library/study area. The faculty used the space for its first two classes.

Further progress came in November 1969, when the 132-suite House Staff Residence (South Tower) was opened. The fifth floor was modified for use as offices for FPs and consultants in the faculty.⁷⁸ The practices of faculty family physicians Drs. Tom Saunders, George McQuitty (1916–1979), and Grant Mills were relocated to the building and were initially used for one-month electives for the Foothills Hospital interns.

On 23 April 1969, Health Minister Ross unexpectedly resigned over Alberta's decision to enter the federally mandated Medicare program, a program he viewed as an intrusion into provincial jurisdiction.⁷⁹ The Honourable Jim Henderson, an engineer, replaced Ross.⁸⁰ His unfamiliarity with

the portfolio showed when he said the medical school should only train family practitioners. This drew Dr. Cochrane's ire; he quickly responded that such a narrow focus would be "unfair to the students" and "would make it difficult to attract high caliber staff."⁸¹

More Key Faculty Appointments Are Made

Keith Pearce (1929–2013), the director of psychiatry at the Foothills Hospital, was appointed the professor and head of psychiatry in 1969, just as the government was addressing the Blair report to decentralize mental health services in the province.⁸² On 1 July 1969, Dr. Cochrane resigned as professor and head of pediatrics; he was succeeded in that position by Dr. Gerald Holman (1929–2012), a Manitoba graduate then serving as the chairman of the Department of Pediatrics at the Medical College of Georgia.⁸³ The director of the Foothills Hospital, Dr. Harry Brody, was appointed the professor and head of obstetrics and gynecology in September.⁸⁴

Dr. Cochrane had been searching for someone to provide educational leadership, which would also include teaching the teachers how to teach. To this end, he enticed Lethbridge-born Dr. Lawrence Fisher, a colleague of Dr. George Miller, to move to Calgary to direct the evaluation of the educational program and its participants. Fisher arrived in Calgary to take up his post in February 1970.

Dr. Keith Cooper (1922–2011), whom Dr. Cochrane had met at Eaton College in England, arrived as the head of physiology. Dr. N. Tait McPhedran (1924–2012), an orthopedic surgeon and the team physician for the Toronto Maple Leafs, came from that city in August 1969 to take up his appointment as the professor and head of surgery. Dr. E. J. K. (John) Penikett (1915–2000), an innovative bacteriologist, came as the head of the Foothills Hospital medical laboratory and was appointed to the faculty as well.

The last of this initial group of professors and heads were appointed to the faculty on 4 March 1970. They included Drs. Fred Parney (anesthesia), Hector Duggan (radiology), and Robert Lannigan (pathology/histopathology).⁸⁵

Large Enough to Become Organized

The growing size of the U of C medical faculty, the burgeoning construction program, the designing of the curriculum, and the heavy reliance on part-time and voluntary physician contributions led the faculty to undertake the first examination of its administrative structure in November 1968.⁸⁶ Dr. Cochrane wanted it to be flexible enough to accommodate the changes expected over the next five to fifteen years. The projected number of clinical department heads was nine, all of whom would be based at the Foothills Hospital. The non-clinical department heads, not surprisingly, wished to be close to their research laboratories.

The organizational discussions were not settled until a year later. Dr. Cochrane chose to keep the structure simple by appointing two associate deans (Dr. John Dawson for clinical affairs and Dr. Stanley Rowlands for instructional resources), along with an Executive Faculty Council (EFC). Standing committees were to be responsible through the EFC to the FC and the dean, as was the case for the Division Heads Advisory Committee. To the extent possible, academic policy was to be framed by the FC with the dean and division heads responsible for implementing it.⁸⁷

Other faculty committees had by this point proliferated. There were now twenty, plus the Committee on Medical Education and its subcommittees. Staffing these committees was a huge commitment for the thirty-two full-time faculty members. It required them to rely heavily on the contributions of part-timers and the medical staff who gratuitously volunteered their time. Dr. Cochrane acknowledged this when, as a token of appreciation, he made twenty-four adjunct faculty appointments.⁸⁸ The contributions of the local medical community, he noted, had been invaluable in drafting the curriculum, setting its objectives, and developing the programs to teach each body system.

Funding Is Approved, but not Construction!

After the Academic Planning Committee, GFC, and U of C Board of Governors (BOG) approved the academic program in February 1969, President Carrothers asked board chair L. A. (Chick) Thorssen (1916–1996), an experienced construction engineer, for help. He rigorously went over the rationale, justification, and space required for each area in the school, Thorssen was able to reduce the cost estimate to \$25.7 million. The revised plan was submitted to the University's Commission chairman and former U of A president Andrew Stewart (1904–1990), who replied that an additional \$5 million, to the \$15 million already approved, would be available after March 1972, and that the project-management approach was acceptable.⁸⁹

Not satisfied, Thorssen wrote Health Minister James Henderson (1927–2016) in June requesting the additional \$5 million immediately and for the authority to proceed. Correspondence between Dr. Cochrane, Chairman Thorssen, and Health Minister Henderson became increasingly testy. To resolve these differences, Minister Henderson came to Calgary to visit Dr. Cochrane in early August 1969, where they addressed their “budget difficulties over a case of beer on the Bow River.”⁹⁰ Henderson agreed to the additional \$5 million and accepted the \$25 million figure as a cap on the total cost. The government also approved the faculty's academic plan, unaltered.⁹¹ In the announcement on 19 August 1969, the *Calgary*

Herald acknowledged the agreement by noting that the “medical school gets nod” for a four-story building.⁹² Relieved, Dr. Cochrane noted that his faculty and its programs were “gambling on the future trends in medicine in a school devoid of tradition, with reasonable experimentation.”

However, approval to proceed with construction was not forthcoming. Questions thought already answered—like cost comparisons with a three and five-story construction—were raised. A cabinet committee was struck to review the proposal.⁹³ Even though there was no approval to proceed with construction, the Cana Construction project-management bid was accepted in November 1969.⁹⁴ As progress stalled, the FC recommended that the first-year class size be further reduced from thirty-two to sixteen if construction was not started by 4 February 1970.⁹⁵

Approval—Finally—to Proceed with Construction

Finally the go-ahead for construction was given, and on 2 March 1970, Dr. Cochrane and government officials spent a happy hour turning the sod for the new medical school.⁹⁶ Construction was expected to take thirty months, or one-half the time under the standard all-in tender approach.⁹⁷ In his comments during the ceremony, Dr. Cochrane noted how invaluable Chick Thorssen, chair of the BOG, had been in securing the government's commitment to proceed.

Mid-winter construction started with the digging of the large hole for the basement. The skeleton went up so quickly that it resulted in considerable pressure to finalize the detailed floor plans, as there was little time between the final design of an area, signing off on that plan, and the start of construction. The use of an integrated structural-mechanical-electrical system, with a continuous design-construct plan became well known in North America as the “jet-speed” approach.⁹⁸

Cana Construction turned over the first third of the building, or 180,000 (gross) square feet of space, to the faculty on 13 July 1971. It included both floors of the ACC and some space adjacent to it. Student workspaces and the MDL were opened on 1 June 1972. All construction was finished by September 1972, except for the unfinished research space. The final cost of the building per se was under \$30 per square foot at \$17.1 million.⁹⁹ With site preparations, utility connections, a distilled water system, furnishings, and equipment, the final cost came to \$20.7 million.

Then came the tussle over the surplus capital funds. The university wanted this money. So did Dr. Cochrane—for future renovations. In response to a letter from Dr. Cochrane, Minister Henderson indicated that if the university acquired the remaining funds, he would order them returned to the government.¹⁰⁰ Ultimately, the entirety of the \$25 million grant would be received by the faculty and spent on renovations by May 1977.¹⁰¹

Most of the basement and the entire main, or ground, floor was finished. The library on the

first floor was completed in 1974. The rest of the first, second, and basement floors were assigned to and developed over the next three years by the cardiovascular, endocrinology and pharmacology, infectious disease, hematology, growth and development, neuroscience, immunology (including bone and joint), cell regulation, and radioisotope research units.

Medical Student Selection

At its 30 July 1969 meeting the FC appointed an Admissions Committee to select the first class of thirty-two students to start September 1970. Chaired by Dr. Keith MacCannell, it consisted of ten members, including an intern and one member from the community. Less than half were faculty members.

The Admissions Committee had the power to waive any of the pre-medical requirements, order students to take summer courses, or waive the requirement of the current-year pre-medical course results if the marks would not be received by the application deadline. Applications were encouraged from students with different or unconventional backgrounds. Suggested pre-medical courses were listed in the U of C calendar as chemistry, biochemistry, zoology/physiology, biology, psychology, physics, and statistics.¹⁰²

Selection criteria were based on academic and non-academic qualifications, including grades, letters of reference, interviews conducted to assess maturity, perceived ability to take personal responsibility, motivation, personality,

likely effort, and Medical College Admission Test (MCAT) results, but not race or religion. One or more members of the committee interviewed all applicants from Western Canada. The committee accepted that it had an obligation to prefer Western Canadian applicants, particularly Alberta residents.¹⁰³

Applications closed 31 December 1969, while interviews were completed by February 15. Offers were extended by 15 March 1970, two weeks after the school's sod-turning ceremony. Of the 461 applicants, 32 were selected: 24 were Albertans; 7 were from other provinces and 1 was an American. There were 3 women. Ages ranged from 18 to 36. Seven were selected after two years of pre-medical studies.

When the members of the selection committee rated each applicant on a one-to-five scale, they found a correlation coefficient among each other to be about 0.7, and on a group basis 0.98. On the downside, an annual two-thousand-hour time commitment was required of the committee. Although time-consuming, the faculty felt this careful approach was justified.

In the review of the process, the family practice representative noted that selecting future FPs from the applicant group was not possible. The community member, and future U of C chancellor Muriel Kovitz, thought that the committee was well balanced, sensitive, showed empathy, and dispelled the suggestion that the Faculty of Medicine was a "closed shop."¹⁰⁴

The first class was pampered by having more faculty than students. By then, the word was out:

the U of C medical program was worth serious consideration. For the second class of 48, there were 1,172 applications.¹⁰⁵

The "Rusting" Problem—Medical Research Receives Some Attention

A research program was not an early priority, as actual research space was limited. There was some campus research space, and some on the twelfth floor of the Foothills Hospital after it was leased in the summer of 1970. Significant research bench space was not available until the medical school fully opened in the fall of 1972. Even then, much of the available space was unfinished.

Although an MSc program in medical sciences was approved in April 1969 under the Faculty of Graduate Studies, it was outside the medical school and had to be overseen by an internal interdisciplinary medical sciences committee. The program quickly proved popular.¹⁰⁶

Dr. Cochrane had repeatedly warned that the faculty was rusting, as he called it, with faculty members earning few grants on a campus growing far more rapidly than anyone anticipated. The first faculty had been recruited for their ability to work as a team and organize an undergraduate teaching program. Involvement in research only occurred if they brought projects with them. To bridge the gap until research space became available, Dr. Cochrane identified the "Special Problems facing New Medical Schools" and the need

3

Early Student Reflections

Four hundred students applied for admission to the U of C medical school after learning about Dr. Cochrane's plans for it in 1968.¹ They were excited that, like McMaster, the U of C medical program was brand new, notwithstanding the shortage of basic science courses for pre-medical students. One member of the original class recalled her first interview with Dr. Cochrane:

I was greeted by a grinning, handsome, fit young man with tussled sandy hair, who rose to his height of six feet to offer his hand. He was casually yet elegantly dressed in blue slacks, sleeves rolled up on his light blue shirt. . . . He told me, very proudly, about the new school-to-be. Not only were they going to revolutionize how medicine was taught, they were going to accept a different breed of students. They were looking for whole people who could bring a lot more to medicine than just good marks.²

A year later, on 1 September 1970, Dr. Cochrane introduced the first class of thirty-two students to clinical learning. He presented three patients to them, one of whom had cystic fibrosis.³ They had a profound effect on a number of students.⁴ Dr. Cochrane also emphasized the importance of the new class to the faculty and the medical world writ large; they would be a “guinea pigs in a sense,” as their progress would be watched by many to see if the new teaching methods being used at the U of C were effective.⁵ This presaged the school's tradition of initiating each new class with the moniker of a bird or animal, which would henceforth serve as their symbol.

Just as important for the new crop of students was Dr. McPhedran's presentation of the ABCs of first aid, during which he unveiled a dissected cadaver to demonstrate his points, with memorable effect.

The introductory course focused on bringing everyone to a common knowledge base. The body-system courses that followed all began with a set of learning objectives and a study guide. The parallel continuity course taught related clinical skills and topics not covered under the system-based courses.⁶

The teaching of body systems started with the normal person and how each system was structured, functioned, and could be examined and monitored. Patient presentations of the most common presenting complaints followed. Taking a medical history and performing a physical examination was practised, using skills honed on voluntary “patient actors.” These new clinical skills were then practised in small groups, followed by real patients in clinics and on hospital wards. Problem-solving was taught through the presentation of common symptoms like chest pain, to demonstrate what should be looked for during the interview, physical examination, and laboratory testing.⁷

The continuity course emphasized the school’s mission—to train family physicians. In the Family in Health and Illness unit, each student was assigned to a family or later to a family physician’s office for six months. They were to

learn, first-hand, some of the ways that family interaction and various social, economic and psychological factors influence a family’s “state of health” . . . [and] the ways in which illness affects family interaction. Discussion with fellow students should provide an opportunity to learn about a variety of family experiences with illness. By assuming an increasingly active role in providing care over an extended time, the student will be able to evaluate how effective he can be in modifying the incidence,

perception and understanding of health and disease in families.⁸

Bill Hughson, one of three nineteen-year-olds accepted into the class and later a Rhodes Scholar, found the body-system curriculum to be very dynamic: “You could apply what you had just learned so quickly. It was the most fun I ever had in my life. Teachers would come to the library to find a student and show them an ‘on topic’ patient!”⁹ Lane Robson felt the class “had the best faculty in the country. They taught us to think as a clinician. They wanted us to succeed.”¹⁰ Ruth Simkin added that the school wanted its graduates to be “respectful, caring and loving,” in their practise of medicine.¹¹ George Wyse, a member of the second class, recalled that “There were two elements that particularly appealed to me and that suited my purposes: lifelong learning and self-learning. It also appealed to me that the faculty was committed to continuous evaluation and quality improvement of their novel and experimental medical education program.”¹²

For everyone, the hardest part of the original curriculum was defining the “core” knowledge each student must learn. This was eventually boiled down to the knowledge needed to pass the LMCC exams and to practise as a family physician. As one former student recalled,

You could not know everything about a subject but you were expected to know 100 per cent of the core material. In the first month or two, exams were anonymous and no marks were given. You picked an ID number rather

than use your name. That was a short-lived experiment. Too cutting edge! . . . And some students and even doctors smoked cigarettes in class.¹³

Initially there were two faculty for every student. This led to a very close-knit relationship, with an almost family-like feeling. Dr. Cochrane, whose office was on the main campus, would come to the cafeteria with his bag lunch once a month, just to chat with class members. The students came to admire him and the role model he represented.¹⁴

On graduation, the first class commissioned a portrait of Dr. Cochrane by the famed photographer Yousuf Karsh, which hangs in the dean's conference room.¹⁵ The students evidently enjoyed their time at the U of C medical school. Years later, a survey of U of A and U of C students revealed that Calgary graduates were much more likely than their U of A colleagues to encourage any of their children who chose to study medicine, to do so at their alma mater.¹⁶

for special “start-up” grants to fund new investigators. He shared his opinion with the appropriate agencies.¹⁰⁷

In January 1970, the newly appointed Committee on Research under Dr. MacCannell proceeded to draft its terms of reference.¹⁰⁸ The committee became responsible for coordinating, encouraging, and assessing grant applications; overseeing ethical assessments of grant requests; adjudicating research space requests; assessing potential liability concerns; allotting research assistantships; and granting inter-sessional bursaries. The committee also offered to help upgrade the quality of the grant submissions through peer reviews by committee members.

Although overcommitted, the Committee on Research released a helpful paper for faculty making research grant applications. It encouraged the formation of small multidisciplinary teams, particularly for preparing Medical Research Council (MRC) applications.¹⁰⁹ Although encouraged to do so, no faculty member was obliged to join a research group or team.¹¹⁰

To improve the faculty's relationship with the MRC, Dr. Cochrane invited MRC president Dr. Malcolm Brown (1916–1977) to visit the Faculty of Medicine on 1 June 1970. Dr. Brown found the research plans for the school quite exciting and agreed to add Dr. MacCannell to the MRC Board to improve communication between the two organizations.¹¹¹

National grant success rates at the time were approximately 50 per cent, with the U of C grant-approval rate much lower. Although the

MRC set aside \$1.2 million for new medical schools, to that point none of it had been released. Nor had U of C applied for any funding to support visiting professors.¹¹²

On campus, selected faculty began giving courses through joint appointments with the Faculties of Arts and Science and Education. Twenty-four graduate-level basic science courses were offered by the faculty and included in the 1970–1 university calendar. The fact that the courses were not offered every year created a problem for prospective students.

The First LCME/RCPSC Accreditation Visit

The faculty requested an undergraduate program assessment by the international Liaison Committee on Medical Education (LCME), and a post-graduate one by the RCPSC, to review the U of C programs before the first undergraduate class began in September 1970. The visit occurred over three days in April 1970.¹¹³

The LCME surveyors were complimentary of the building program and the curriculum design and were impressed by the obvious drive of the faculty members. They recommended better communication with the teaching hospitals, clarification of the responsibilities to be assumed by the divisional/department heads, and regular meetings with the Foothills Hospital Board. CTU responsibilities, they said, needed to be clarified and the organizational structure of the faculty

better defined. The surveyors reaffirmed that the Foothills Hospital should be the major teaching hospital, with centres of excellence at the other hospitals.

The survey team called Dr. L. A. Fisher a “fortunate acquisition.” They supported his proposals to perform pre and post-course testing of all students to provide students with rapid feedback, and to evaluate their test results to improve curricular design on a continuing basis. They were also appreciative of the concerted and organized effort made to include FP in the medical education program.¹¹⁴

Specific LCME recommendations were as follows: to hire a well-qualified business officer; increase salaries and pay ceilings for clinical staff; recognize patient care, training, and research as a unified trinity; hold regular biweekly hospital/faculty meetings; and add the Foothills Hospital administrator and medical director to the FC. They also concluded that whatever minor gains that might result from opening a few years earlier than planned should be weighed against the potentially greater long-term gains that would arise from allowing the institution to mature at a reasonable rate.

In terms of finances, the surveyors noted that the 1967–8 faculty staff budget was \$116,500 (excluding the library grant), which increased to \$415,000 in 1968–9. For 1970–1 the budget was eventually settled at \$1.35 million. MRC grants totalled \$403,899 in 1969. The medical school was committed to paying the hospital \$140,000 a year

for space on the twelfth floor and in the House Staff Residence.¹¹⁵

The Royal College surveyors agreed that as of 1 July 1970, the Foothills Hospital could accept 26 interns and 26 residents, which could be increased to 72 in 1971–2, before being frozen at that level pending the report of the provincial government’s Pew Commission on the cost of medical education. In part, it was to determine the number of house staff Alberta should train.¹¹⁶

The First Class (of 1973)

The undergraduate program began on 1 September 1970. In his address to the class, Dr. Cochrane described how the students, as the first cohort, were “guinea pigs.”¹¹⁷ He encouraged them to therefore question, challenge, criticize, and provide feedback to the faculty, as they would be watched by many, both locally and abroad, to see what aspects of the new training program were successful. FP would be a priority for everyone. The art and the science of medicine would be merged. The medical divisions would be integrated with the social, biological, and behavioural sciences. Dr. Cochrane then examined three patients with the class, including a mother and her young daughter, who had cystic fibrosis. The presentation so impressed student Gordon Ford that he specialized in pulmonary medicine.¹¹⁸

Dr. McPhedran spoke to the class in the MDL during the orientation, where he described the ABCs of first aid. While talking, he opened a drawer containing pre-dissected anatomical specimens,

4

Class Names

Though Dean Cochrane had referred to the first class as “guinea pigs,” the tradition of naming classes after an animal or bird began with the third class, in the fall of 1972. The class grew up in the 1960s and had the characteristics of that generation: some members had longer hair, beards, and wore casual attire; they planned to be different and to foster change. And in class, accordingly, they were questioning, boisterous, variably attentive, occasionally disruptive, and at times irreverent—this in contradistinction to their teachers, who had grown up in the 1940s, a time when respect for authority and discipline were more notable hallmarks.¹

Although he had trimmed his long hair, that didn’t stop Rick Holmberg from getting into a prolonged post-presentation Q and A with guest lecturer Dr. R. Bruce Logue (1912–2007), a leading authority on cardiology, who was visiting from Emory University. The debate ended with Holmberg saying, “I guess we’ll have to agree to disagree.”²

The class monitor, Dr. Cyril Levene, asked the students to remain after Dr. Logue left. Levene said that he was disappointed with their behaviour. Singling out Holmberg,

Levene said, “You may have cut your hair, but all of you are still a bunch of turkeys.”³ That moved one student to post an image of a field of turkeys on the class bulletin board the next day, which was signed “The Class of ’75.”⁴

In September 1973, the class of 1976 named themselves the “beavers.” The next year they inducted the class of 1977 as the “toads.”⁵ The tradition of the second-year class selecting the class animal or bird for the incoming one has continued ever since. See Appendix 11.

5

Medical Graduates of the First Class in 1973

Thirty-two students (twenty-eight men and four women) made up the first medical class at the University of Calgary. Studies commenced on 1 September 1970 in temporary quarters on the twelfth floor of the west wing of Foothills Hospital. In his welcoming address, Dean Cochrane referred to the students as “guinea pigs”¹ and urged them to “question, challenge, and criticize” their educational experience, which possibly contributed to the at times testy relationship between students and faculty.² A priority dating back to the provincial government’s decision to establish the medical school,³ was preparing graduates for a career in family medicine.⁴

Early patient contact, an expectation that the student would be an “active learner rather than a perpetual recipient of sonic vibration,”⁵ and an integrated basic and clinical sciences curriculum, were distinguishing features of their training.⁶ It was decided early on that the undergraduate program would consist of three eleven-month academic years. The MD degree granted after these three years was conditional on completing a minimum of two years of postgraduate training in the student’s chosen specialty.⁷ An anatomist originally from Northern Ireland, Dr. Arthur David Dickson (1925–2018), was the first chair of the Curriculum Committee. He was the

“leader, cajoler, wheedler, and autocrat” credited with pulling together the initial educational offering.⁸ A striking organizational innovation was the de-emphasis of the role played by departments.⁹

Of the inaugural class, 27 students (24 men and 3 women, or 84.4 per cent of those who commenced) received their MD degrees on 1 June 1973.¹⁰ Drs. Bruce Chown (University of Manitoba) for his work on Rhesus (Rh) disease and Morley A. R. Young (Lamont, Alberta) in recognition of his contributions to the development of medical services in Alberta and beyond, received honorary degrees at convocation.¹¹ In his address, Dr. Young urged graduates to consider the needs of older Albertans. The official opening of the Health Sciences Centre (HSC), with Premier Peter Lougheed in attendance,¹² a series of three international symposia (on hypothalamic functioning, medical education, and health-care research),¹³ and an HSC open house also took place that week. Though completed ahead of schedule and under budget, the HSC received mixed reviews as an architectural structure. It was described in the 1973 university yearbook as a “squat, dark, and drab” building with interiors marked by “newness and emptiness.”¹⁴

Approximately one-quarter of the first graduating class eventually practised as family physicians (see table 1), though only three settled in Alberta. A surprisingly high number (nine, or 33 per cent of the graduates) spent substantial portions of their professional lives in the United States.

Table 1: Primary Field of Practice for First Graduating Class of the University of Calgary

- Internal medicine (including subspecialties) 8 (29.6%)
- Family medicine 7 (25.9%)
3 (11.1%) in Alberta
- Pediatrics (including subspecialties) 5 (18.5%)
- Orthopedic surgery 2 (7.4%)
- Pathology 2 (7.4%)
- Anesthesiology 1 (3.7%)
- Diagnostic radiology 1 (3.7%)
- Occupational medicine 1 (3.7%)

Figure 1: Timetable for the first curriculum

FIRST YEAR SCHEDULE

		WEEK NUMBER																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
H O U R S	4	INTRODUCTORY														ELECTIVE		ELECTIVE									
	8	INTRODUCTORY														CVR		CARDIOVASCULAR-RESPIRATORY									
	12	INTRODUCTORY														CVR		CARDIOVASCULAR-RESPIRATORY									
	16	INTRODUCTORY														CVR		CARDIOVASCULAR-RESPIRATORY									
	20	CONTINUITY																CONTINUITY									
	24	CONTINUITY																CONTINUITY									
	28	CONTINUITY																CONTINUITY									
	32	TUTORIAL																TUTORIAL									
36	TUTORIAL																TUTORIAL										
40	TUTORIAL																TUTORIAL										
44	TUTORIAL																TUTORIAL										

SECOND AND THIRD YEAR SCHEDULE

		WEEK NUMBER																											
		53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78		
H O U R S	4	ELECTIVE														ELECTIVE													
	8	ELECTIVE														ELECTIVE													
	12	ELECTIVE														ELECTIVE													
	16	ELECTIVE														ELECTIVE													
	20	ELECTIVE														ELECTIVE													
	24	ELECTIVE														ELECTIVE													
	28	ELECTIVE														ELECTIVE													
	32	ELECTIVE														ELECTIVE													
36	ELECTIVE														ELECTIVE														
40	ELECTIVE														ELECTIVE														
44	ELECTIVE														ELECTIVE														

FIRST YEAR SCHEDULE

		WEEK NUMBER																													
		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52				
H O U R S	4	ELECT.		ELECTIVE																								V A C A T I O N			
	8	ELECT.		ELECTIVE																								V A C A T I O N			
	12	ELECT.		RETICULOENDOTHELIAL												RENALMETABOLIC										E & R		V A C A T I O N			
	16	CVR		RETICULOENDOTHELIAL												RENALMETABOLIC										E & R		V A C A T I O N			
	20	CVR		RETICULOENDOTHELIAL												RENALMETABOLIC										E & R		V A C A T I O N			
	24	CONT.		CONTINUITY																								V A C A T I O N			
	28	CONT.		CONTINUITY																								V A C A T I O N			
	32	TUT.		TUTORIAL																								V A C A T I O N			
36	TUT.		TUTORIAL																								V A C A T I O N				
40	TUT.		TUTORIAL																								V A C A T I O N				
44	TUT.		TUTORIAL																								V A C A T I O N				

SECOND AND THIRD YEAR SCHEDULE

		WEEK NUMBER																									
		79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97							
H O U R S	4	ELECTIVE		ELECTIVE																				V A C A T I O N			
	8	ELECTIVE		ELECTIVE																				V A C A T I O N			
	12	NEURO-MUSCULO-SKELETAL		NEURO-MUSCULO-SKELETAL										ELECTIVE										V A C A T I O N			
	16	NEURO-MUSCULO-SKELETAL		NEURO-MUSCULO-SKELETAL										ELECTIVE										V A C A T I O N			
	20	NEURO-MUSCULO-SKELETAL		NEURO-MUSCULO-SKELETAL										ELECTIVE										V A C A T I O N			
	24	CONT.		CONTINUITY																				V A C A T I O N			
	28	CONT.		CONTINUITY																				V A C A T I O N			
	32	TUTORIAL		TUTORIAL																				V A C A T I O N			
36	TUTORIAL		TUTORIAL																				V A C A T I O N				
40	TUTORIAL		TUTORIAL																				V A C A T I O N				
44	TUTORIAL		TUTORIAL																				V A C A T I O N				

which the students would later examine. Several members of the class fainted on the spot.¹¹⁹

After a one-week orientation, the formal teaching began¹²⁰ (see Figure 1) The first (introductory or equalization) course prepared the student for the systems courses. It lasted ten weeks (sixteen hours per week) and focused on cell biology, anatomy, histology, physiology, biochemistry, use of a microscope and stethoscope, health statistics, how to interview adult and pediatric patients, and how to use the library to search the medical literature.

The teaching program was based in the MDL, where students could self-learn by experimenting, reviewing recorded demonstrations, and observing audiovisual material. The lab gave the student the opportunity to integrate body structure-function-dysfunction and management. Gross anatomical and microscopic specimens (including radiological and pre-dissected cadavers) were available. Students were aided by a syllabus outlining the learning objectives for each system.¹²¹ This introductory course was the great equalizer and was designed to bring the class to a minimum common knowledge base before they examined their first patient.¹²²

The second (set of) courses lasted sixty-nine weeks (approximately fifteen hours per week) and covered each of the seven body systems starting with the CVS-R system. The course began with unit presentations on the system's structure, function, pathophysiology, and symptomatology. Then students were presented with both healthy and diseased cases. A retinue of basic scientists, surgeons, cardiologists, a pathologist, bacteriologists,

and family practitioners taught the students on topics ranging from hemodynamics, how to auscultate the heart, to the pathology of lung tumors. The unit on congenital heart disease was covered under embryology. The autonomic nervous system was included here and incorporated anxiety reactions and supportive psychotherapy. Required unit times were estimated with varying degrees of accuracy and adjusted where necessary.¹²³

The third (continuity) course lasted seventy-eight weeks (eight hours a week) and continued for almost two years. It was given in parallel with the system courses. During the CVS-R system course, the continuity course included instruction in how to do a more detailed CVS-R examination (e.g., listen for murmurs and other cardiac sounds, acquire auscultation and percussion skills for a chest examination) and read an ECG. During the teaching of the neuroscience system, psychiatry was taught in the continuity course. Dermatology was taught as another continuity course. Also covered were the nature of disease and its natural history; normal growth and development; demands of illness and the adaptive capacities and resources of the patient and family; the effect of community health problems on productivity and community welfare; and interventions and management plans necessary for prevention, management, or successful treatment. The student also studied development and aging from the unborn to the eighth decade. The course picked up other topics common to all systems, and ones not taught in any system. They included health-care organization and delivery, patient problems (including

interviewing and examining skills), attitudes necessary to approach a patient, lifelong learning skills, and observing faculty as role models. Each student was assigned a family, which they visited for a half-day every two weeks.¹²⁴

The fourth (tutorial) program provided independent study time. It lasted eighty-seven weeks (at sixteen hours a week), and encouraged the student to read, reflect, study audiovisuals, practise self-learning, and work in the MDL on his or her own.

The remaining four hours per week were assigned as elective time. The intention was to gain practical experience or problem solve. One-month electives, aimed at an in-depth study of an area of interest with an eye toward a possible career choice, required prior approval of the student adviser and the education committee. Students became adept at organizing their own electives.¹²⁵

To give the student physicians an introductory patient experience, in late October the students were divided into groups and assigned, during their free time, to one of several specialty areas (emergency room, intensive care unit, cardiac unit, operating room, deliveries, pediatrics/newborn) for one month. They were to accompany an intern or staff member and observe them in action. One student assigned to the ER was driving to the hospital when he was passed by an ambulance with its lights flashing. He decided to follow it for the experience it might give him. Unfortunately, a police officer spotted him, tailed him to the hospital, and gave him a speeding ticket. His “I’m learning”

rationale didn’t deter the officer. Classmates offered to contribute to the payment.¹²⁶

In succeeding years, the students developed their own system for reducing their attendance and reliance on didactic lectures. They formed small groups and rotated the one designated to attend, take and edit notes, and circulate copies back to each student in the group. In one case the students’ attendance after a late-night party resulted in an empty classroom the next morning.

The first class soon found ways to relieve the stress and tension of student life. This included touch football in the mall—that is, until Dr. Cochran termed the conduct unprofessional. Undiminished, students played pick-up floor hockey in the open research space in the south wing and ice hockey in a nearby arena once a week. For those less athletically inclined, there was a TGIF social mixer on Friday afternoons. Another tension reliever was the med show, which started in 1972 with an on-campus presentation in MacEwan Hall, and has continued ever since.

The affability and charismatic personality of Dr. J. S. “Smitty” Gardner (1906–1989), the former head of surgery at the Colonel Belcher Veterans’ Hospital, led to his appointment as the student faculty adviser.¹²⁷ He assigned a faculty adviser/mentor/counsellor to each student for the first year. Advisers were to meet and review the student’s performance, give guidance, and help them choose an elective.

With the teachers located so close to the students, there was continual interaction, leading to many close-knit student-teacher relationships, as

Dr. Cochrane had hoped. Once a month he would come from his office on the main campus and join them for a bag lunch.¹²⁸ Indeed, in time Dr. Cochrane himself came to be revered by the students, not only as an articulate teacher but also as a role model. He would give the class presentations on pediatrics and community health topics.

The clerkship did not receive serious attention until the first class approached it in May 1972. Initially it was to feature infectious diseases, pediatrics, and pharmacology, but that approach failed to gain approval. The second proposal was for a “do-it-yourself curriculum.”¹²⁹ It identified the knowledge and skills that were to be learned from four lists covering (1) clinical presentations; (2) important diagnoses; (3) non-pharmacologic therapeutic interventions; and (4) pharmacologic therapies. Faced with any clinical presentation, the clerk would be able to design a plan of investigation that led to the correct diagnosis and appropriate therapeutic interventions for that diagnosis. Faculty supervisors were directed to ensure that all examples on the list were covered. Clinical rotations varied from four to sixteen weeks. Advice on which rotations and electives to select were provided by the faculty adviser.¹³⁰

At the end of the clerkship year (April 1973) the whole class wrote the US National Board exams. The results were graded on a pass/fail basis and released within twenty-four hours. They identified some deficiencies, which correlated closely with the marks subsequently awarded by the Medical Council of Canada (MCC).

Two years later, the clerkship was modified to allow greater freedom of choice. One rotation of twelve weeks duration had to be in internal medicine, FP, or pediatrics. The rest, including an elective, had to meet provincial licensing requirements.

A later assessment of the teaching methods revealed that 20 per cent of the curriculum followed a PBL format, 35 per cent involved traditional small-group tutorials, and the remaining 45 per cent followed a lecture format. The percentages varied considerably from course to course.¹³¹ Despite widespread interest in the program, publications on it were limited, as staff concentrated on creating the curriculum and implementing it.¹³²

Evaluation of the Program

The evaluation program focused on three processes: student learning, how material was presented, and evaluation of the educational program itself—its organization, content, and impact. The student learning goal was to provide frequent testing with rapid feedback to the student. The evaluation questions were based on the predetermined objectives for the system and focused on the students’ acquisition of knowledge, how this knowledge was applied, their attitude toward patients, and the clinical skills they were to learn. In keeping with the school’s policy, each student had the opportunity, and indeed the responsibility, to evaluate their own performance through a bank of self-administered questions.¹³³

Testing procedures placed students in artificial but realistic settings. For example, instructors

were to watch the student interview a “trained” patient, or actor, with a medical problem before the student saw a real patient. This gave the student on-the-spot feedback. In addition to the learning evaluations or practice exams at the end of each unit, which were marked but not scored, there was a year-end certifying evaluation to assess the individual’s performance, compared with the objectives for each system. No more than one-sixteenth of the course time was to be for evaluation. The three non-system courses—introductory, elective, and continuity courses—were evaluated too. Evaluation of the student’s performance was on a pass/fail basis with the minimum pass level determined by faculty.¹³⁴

A separate Committee on Evaluation was appointed in April of 1971 and it recommended that the number of already-in-process evaluations during and at the end of each unit be diminished, and that learning evaluations be held at the end of each body system, with these evaluations to include any related material in the continuity course. The certifying or comprehensive evaluations at the end of each year remained in place and continued to receive close scrutiny.¹³⁵

Promotion to the next year was not automatic. Students who failed were reviewed by the Promotions Committee, which considered a range of options: tutoring, receiving remedial instruction, repeating the year, or being dropped. Both the student and their adviser attended the Promotions Committee review. In the case of the first-year class, everyone passed.¹³⁶

Remedial instruction could create a problem. If the evaluation was unsatisfactory, a remedial program followed by a re-evaluation was required within six weeks. Where necessary, students were assigned a mentor. If the re-evaluation was failed, the next block elective was used for further remedial study and re-examination. If there was a failure on this examination of a system, or unit within it, the student was offered tutorial instruction and another program of remedial studies.

The Division of Evaluation, Performance, and Assessment (DEPA) under Dr. Fisher collected information on the following: attainment of program objectives; congruence of the evaluation and educational processes; adequacy of sampling techniques; objectives that could not be reached, along with the reasons; and the technical quality of the evaluation procedures. Student perceptions were ascertained through questionnaires, interviews conducted by the Committee on Evaluation, and class discussions conducted by the chairman of the Committee on Medical Education.¹³⁷ Teachers were offered a five-weekend course on how to present their material.

More Progress during the First Year, 1970–1

By September 1970 the number of faculty had reached 50 GFTs plus 22 part-timers. MSc candidates could choose from 25 courses on offer, but the PhD program had to await the opening of more laboratories and the medical library. In December,

the faculty agreed to accept 48 students into the second class starting September 1971.¹³⁸

Always willing to share his ideas, plans, and experiences that fall, Dr. Cochrane organized and chaired a meeting of Western Canadian deans to exchange information and to discuss many issues of common concern.¹³⁹

For several months in 1971, the faculty grappled with the challenge of identifying its priorities. In time, they were recognized (in order) as undergraduate education; clinical postgraduate education; the development of FP; health-care research; medical (clinical) research; MSc and PhD education; educating undergraduate and graduate students in other faculties; providing clinical services to the local population; and teaching beyond the university and city. The next step—setting goals for each—was not undertaken.¹⁴⁰

In the summer of 1971 many of the campus, twelfth-floor, and South Tower FP offices began to move into the newly opened east wing (ACC) of the Health Sciences Centre. The first and second class continued to use the space on the twelfth floor of the Foothills Hospital. FP faculty member Dr. George McQuitty took the opportunity to move his practice to the nearby town of Cochrane. It created an opportunity to introduce clinical clerks to a comprehensive community and public health-orientated practice.

The Stoney Health Centre at Morley

In early 1970, the faculty had received an offer from the federal government to provide health services

to the two thousand members of the Stoney Nation, on the Morley Indian Reserve, about thirty-five miles west of the city.¹⁴¹ It was to be led by a family physician, with two nurse practitioners and support staff. FP residents were to be rotated.

Before it opened in 20 July 1972, Dr. Cochrane was made chief *Japathunga* (or “medicine chief”), at a gathering attended by four hundred members of various First Nations from as far away as Nordegg and High Level. Chief John Snow (1933–2006) acknowledged that “this is the highest honour our tribe can bestow.”¹⁴² Dr. Cochrane promised the program would train band staff to work in the centre and encourage them to consider health-care careers.

Six thousand patient visits were made in the first full year. The major health issues were arthritis, maternal antenatal care, substance abuse, and tuberculosis. Although the clinic was successful, over time one-half of the band members began choosing community family physicians for their medical care.¹⁴³ In the eyes of a few band members, having care provided by residents in FP left them feeling they were receiving second-class medicine.

Operating Funding Difficulties

Arguing there was no money in the kitty for 1972, the new Progressive Conservative government headed by the Honourable Peter Lougheed (1928–2012) slashed expenditures for all Alberta universities. President Carrothers described how dire the 1972–3 budget was going to be for Calgary.¹⁴⁴ The BOG cut faculty budgets by 10.8 per cent but

refused to make further reductions, which would have required terminating existing contracts. The Faculty of Medicine, still in the growth stage, was so impacted that on 23 March 1972, Dr. Cochrane wrote the President Carrothers indicating he could do one of three things: (1) cancel the class of 1975; (2) change the academic program back to the traditional, didactic, discipline-based one; or (3) have the faculty placed under a separate administrative structure or college with its own budget (a risky choice) and an affiliation agreement with the U of C to avoid direct competition with other faculties that were not in a growth phase.¹⁴⁵

In desperation, Dr. Cochrane suggested the university BOG make a special one-time request for money for the Faculty of Medicine. That request was declined by the University's Commission, which suggested that \$300,000 be transferred from the faculty's capital budget to its operating budget, a decision not finalized until October.¹⁴⁶ Still upset, in July Dr. Cochrane and Dr. Carrothers met with cabinet members over joint appointment funding through the Foothills Hospital.¹⁴⁷ Health Minister Neil S. Crawford (1931–1992) was surprised at the funding disparity between the Calgary and Edmonton hospitals, and he promised to address it.

More Growth, Another Reorganization

With the size of the faculty continuing to expand, the dean approved a major organizational

review, undertaken by Professors L. A. Fisher, S. Rowlands, and J. W. Dawson, and released in June 1972.¹⁴⁸ The underlying theme of the review was accountability. Authority for policy formulation was vested in the FC, while the dean was charged with implementation. In the plan, Associate Deans Dawson and Rowlands recommended their own replacement by one of the recommended three new associate deans.

After several months of discussion over the problem of clearly separating policy formulation and policy execution, an issue never entirely clarified or resolved, Dr. Cochrane accepted the committee's recommendations and divided the faculty into three functional components and realigned the committees accordingly. He then appointed Drs. David Dickson (education), Lionel McLeod (professional services), and Keith MacCannell (research) as associate deans in November 1972 and notified the affiliated hospitals of this change.¹⁴⁹ A follow-up review was to be undertaken in five years.

Research Units Develop for Each Body System

By 1972 there were eight research units, each focused on a body system. Within each unit were research groups or teams.¹⁵⁰ The Committee on Research had set the minimum number of group/team members at three, with the requirement that both basic and clinical sciences be represented and one of the members be a well-established

investigator with a national profile.¹⁵¹ Any new groups were to be sanctioned by the committee.

An MRC allocation of \$40,000 to the dean provided some funding for faculty-sponsored research. The committee was given the authority to prioritize it. The committee also agreed to adjudicate the medical trust fund, created from the share of excess clinical earnings from faculty members in the ACC practice plan.¹⁵²

Forty-one research grant applications were made in 1972, mostly to the MRC. Research projects were inventoried. Funds were found for the first graduate assistants. Enthusiasm for these endeavours was such that a working conference was convened for researchers from the five Western medical schools. From it, a list of potential visiting speakers was shared among the schools, and from this list a roster of potential speakers was identified for Calgary. Although the faculty had been successful in a couple of MRC grant competitions, including the first three-year development grant, it remained near the bottom in the approval of grants.¹⁵³

Numerous problems were highlighted at a subsequent research retreat. It was noted that only 20 per cent of faculty time was spent doing research; for a mature faculty, it was felt that this rate should be 40 per cent.¹⁵⁴ More proposals were needed. Grant reviews were needed too. So was recruitment of new faculty to meet research priorities. Chairs were needed for research groups. To help, a handbook of research policies was released.¹⁵⁵ While the number of faculty was increasing, the number of researchers and funded research

projects was not rising as quickly. Not until the Alberta Heritage Savings Trust Fund (AHSTF; not to be confused with the AHFMR, or Alberta Heritage Foundation for Medical Research) was approved in 1976, and the mechanisms for applying to it clarified, would more capital equipment funding be secured in the pre-AHFMR era.¹⁵⁶

The faculty made its first direct request for community donations in 1972. These funds were to go toward finishing the research space on the first floor. Drug companies and instrument manufacturers were targeted. Concurrently, members began soliciting personal research funding from the community. The university reiterated that it had created a development office and required that all faculties make their fundraising requests through it.¹⁵⁷

In 1966 the university had secured a 34-hectare site for animal research 20 kilometres northwest of the U of C main campus, on Spy Hill. By 1967 four departments had research animals housed there, but space limited their numbers to a menagerie of mice and rabbits. By 1968–9, buildings for sheep and dog research were available for cardiovascular studies. On campus, a small animal facility was created on the sixth floor of the science building and five trailers leased. Dr. Kurt Weissenborn, MSc, DVM, joined the faculty in 1969 to oversee animal care and to design the vivarium, as required by the federal Department of Agriculture.¹⁵⁸ When the medical school opened in the fall of 1972, the 45,000-square-foot basement vivarium was fully functional and could house animals as large as sheep.¹⁵⁹

On a positive note, after three years of deliberations, a health science PhD program was approved in principle. It was multidisciplinary in scope and centred on the four strongest body system research units. The program did not duplicate the one already available at the U of A.¹⁶⁰

The Alberta Children's Hospital, 1966–73

Dr. Cochrane's background as a pediatrician, researcher, chief of pediatrics at Dalhousie, and initiator of the Izaak Walton Killam Children's Hospital in Halifax made him an authority on the development of and siting of pediatric care facilities.¹⁶¹ On his arrival in Calgary he critiqued the proposal from the Alberta Children's Hospital (ACH) for a 345-bed hospital on their 17th Avenue site, about five miles from the university and Foothills Hospital.¹⁶² He recommended that acute pediatric care be centred at the Foothills Hospital while multiply handicapped care should be located on the ACH's 17th Avenue site.¹⁶³

Further action was withheld pending the arrival of Dr. Gerald Holman as the director of pediatrics in July 1969. Immediately following his arrival, Dr. Holman was tasked with preparing a report on the future development of pediatric services in Calgary. His committee recommended an integrated child health-care centre with outpatient facilities, be built between the hospital and medical school.¹⁶⁴ No action was taken. A more positive response was received for another Holman-directed

study, in 1971, which recommended the creation of a regional Alberta perinatal program for Intensive Care Newborns (ICN), to be based at the Foothills Hospital. Approved, the ICN opened in 1973.¹⁶⁵

After the Government of Alberta changed hands in late 1971, the new minister of health, Neil Crawford, asked the Multiply Handicapped Advisory Committee under Dr. Ian Burgess to reassess the topic. The Burgess report was submitted in July 1972. It recommended, as Dr. Cochrane had, that the multiply handicapped facility be built on the 17th Avenue site under its own board. The Committee also recommended that the 128-bed acute care facility remain on the 17th Avenue site, and be upgraded.¹⁶⁶

The FC formally expressed its support for the dean's recommendation, but requested that acute pediatric care be concentrated on the Foothills Hospital site, albeit it under its own board.¹⁶⁷ The government then proceeded to buy the ACH site in December of that year but did not commit to a specific location for an acute pediatric care facility.¹⁶⁸

6

Alberta Children's Hospital

The changing nature of this institution was reflected by the evolution of its name from the Junior Red Cross Children's Hospital (1922-49), Red Cross Crippled Children's Hospital (1949-51), Alberta Red Cross Crippled Children's Hospital (1951-8), Alberta Crippled Children's Hospital (1958-9), Alberta Children's Hospital (1959-81), Alberta Children's Provincial General Hospital (1972-81), Alberta Children's Hospital Child Health Centre (1981-2006), and finally, the Alberta Children's Hospital (2006 onwards) as it moved from the Brickburn House at 522-18th Avenue SW (1922-9), the Ruby Apartments at 1009 Royal Avenue SW (1929-52), to 1820 Richmond Road SW (1952-2006), and, finally, to the West Campus at 28 Oki Drive NW (2006 on).¹ In its early years, the most common reasons for admission were for a tonsillectomy, polio, or orthopedic surgery. Children would often stay for one to two months, if not longer. Acute pediatric care was provided by the city's general hospitals. In the early 1980s, the ACH became a comprehensive child health-care centre. Fully free-standing children's hospitals (defined as being geographically separate and largely clinically and administratively independent) have become rare in Canada.² Though the ACH is geographically separate from the other Calgary hospitals, it has been merged

administratively with them since 1994. Salient episodes in the history of the ACH are described in a number of the chapters in this book. Here, we will focus on its role as a teaching hospital.

Two of the first six deans of the U of C medical school were pediatricians who took particular interest in pediatric teaching, research, and services. Through the creation of a critical mass of patients, the ACH played important roles in attracting specialists and training physicians. Post-graduate clinical education at the ACH began in 1961—prior to the founding of the U of C medical school—when orthopedic residents from the Universities of Alberta and Saskatchewan came for training under Dr. Glen Edwards. The pediatric residency program at the U of C was launched in 1970, with training taking place primarily at the Foothills Hospital, though an in-patient rotation was also offered at the Calgary General Hospital.³ Most pediatric training remained at the Foothills for the next twelve years. The only involvement of the ACH at this time was an opportunity for residents to spend time in its diagnostic assessment and treatment (DAT) centre. Acute pediatric services (other than the neonatal intensive care), clinical training, and the department moved from the Foothills to the ACH in the early 1980s. This

transition was not easy for the Faculty of Medicine and the boards of both the Foothills and the ACH. The dispute about the location of pediatric services contributed to a provisional approval for the training program in 1975. A former head of the department, Robert H. A. Haslam, who worked in both the Foothills and the ACH, wrote that he believed children fared better in the ACH.⁴ In 1980, after an agreement had been reached about the location of pediatric services, full approval was obtained from the RCPSC. Specialty residents in other disciplines have spent time at the ACH and over the years a number of pediatric subspecialty training programs were added.

The Alberta Children's Hospital Society (ACHS) was incorporated as a non-profit organization responsible for the hospital in 1958, when the Red Cross discontinued its sponsorship. In 1972 the provincial government purchased the hospital from the ACHS for \$2 million. The revenue from the sale was invested to create an endowment fund. The ACHS became the Alberta

Children's Hospital Foundation, which has been very successful in raising funds for research, education, and clinical services through activities such as participation in the Children's Miracle Network.⁵ The Kinsmen Clubs of Calgary were important early donors. In 1975, 1976, and 1978, the three Calgary clubs hosted telethons that raised over \$1 million, which was used to fund the Kinsmen Research Centre at the ACH site. The Kinsmen and many others have continued to provide financial support to the ACH over the years. In 2004, several children's-health-related research groups merged to establish the Institute of Maternal and Child Health within the Faculty of Medicine. Five years later it was renamed the Alberta Children's Hospital Research Institute (ACHRI). The ACHRI is a partnership of the University of Calgary, Alberta Health Services, and the Alberta Children's Hospital Foundation that supports excellence in child health research, innovation, and knowledge translation.⁶

Convocation Comes, Cochrane Goes

The 1973 academic year began with the submission of accreditation progress reports to the LCME and RCPSC.¹⁶⁹ At their visit in April, representatives from the LCME noted the alarming shortage of GFTs in some divisions and the non-competitiveness of the salaries offered. Although no site visit was made by the RCPSC, full approval was granted in June for five programs (medicine, surgery, radiology, pathology, and anesthesia), while the psychiatric, pediatric, and obstetrical and gynecological programs remained “provisionally approved.” The request to extend the psychiatric program to the HCH and ACC, and the pediatric program to the CGH and ACH, was granted.¹⁷⁰

The Health Sciences Centre (HSC), home of the Faculty of Medicine, was now fully open. The first class convocated there on 1 June 1973. The class had been carefully selected. Dr. William Hughson would receive the first Rhodes Scholarship to Oxford in October 1974.

On an unexpected note, Dr. Cochrane submitted his resignation as dean, three months prior to the opening ceremonies for the HSC. He left in June of 1973, after accepting Premier Lougheed’s offer of an opportunity to see “medicine on the other side of a gurney”—that is, as the deputy minister of the Alberta government’s health division, under Minister Neil Crawford and senior Deputy Minister Bruce Rawson. As Dr. Cochrane would later say, “It was an insightful and busy time to learn how two mandarins made decisions.”¹⁷¹

Just as unexpectedly, President Carrothers gave his own retirement notice on 24 June 1973. It was to be effective a year later, on 30 June 1974.

The Official Opening, 28 May–1 June 1973

After two years of planning by Dr. Cochrane and his committee, the opening ceremonies for the faculty were held in the Faculty of Medicine Atrium beginning 28 May 1973.¹⁷² They were followed by a two-day program that brought together dignitaries, delegates, and presenters who attended one or more of the three concurrent plenary sessions. Twenty-seven students convocated in the first class of U of C MDs.

Premier Lougheed helicoptered in to cut the ribbon and join the opening ceremonies. The theme that afternoon was “The Role of the Medical School in Modern Society.” Dr. J. Douglas Wallace (1915–1975), the executive secretary of the CMA, spoke on the role of the medical profession and its responsibility to society, while President Carrothers spoke on the university as an incubator of the health sciences.¹⁷³

A scientific program was held on the 29 and 30 of May 1973. The plenary sessions focused on the hypothalamus and its influence on hormonal control as part of a “search for new knowledge.” The thirty-three scientific papers were edited by Drs. Keith Cooper (1922–2011) and Karl Lederis (1920–2007) and published as *Recent Studies of Hypothalamic Function* in 1975.¹⁷⁴

The second plenary program focused on medical education and innovation, particularly on the “consequences of innovation” resulting from the U of C and McMaster “experimental” three-year medical programs. Faculty presentations covered the Stoney Health Centre at Morley, new teaching equipment, audiovisual and anatomical models in the MDLs, current faculty research on the causes and effects of disease, the role of the ACC, the organization and evaluation of the U of C program, storage and retrieval of medical data, maternal labour under hypnosis, the Canadian National Institute for the Blind (CNIB) and blindness, the epidemiology of tuberculosis, slides using electron microscopy, embryo implants, home dialysis, and planning and building the HSC, to name the major ones. Speakers at the third plenary session addressed topics of contemporary concern in health-care research.

Presenters came from across the Western world—from England, Switzerland, Sweden, Germany, Denmark, and nine US states (including one presenter who gave a presentation on the Case Western Reserve program). Canadian presenters,

including student presenters, came from every Canadian medical school.

Convocation for the first class was held June 1, during which the university awarded two honorary degrees. The first recipient, Dr. Morley Young (1894–1981) of Lamont, Alberta, was a medical pioneer, a past president of the CMA whose clinic initiated the first municipally based, prepaid public medical insurance program in Canada in 1933. The second was Dr. Bruce Chown (1893–1992) of Winnipeg, who discovered the Rh (rhesus monkey) blood group system, which caused fetal stillbirths.

Over a thousand Calgarians attended the open house on June 1 and toured the medical school to see the ACC, medical movies in the lecture theatres, course exhibits in the MDL, and exhibits on how to use the library and access medical books and artifacts.

From a research, educational, and community-relations perspective, the opening ceremonies were a great success.¹⁷⁵ Dr. Cochrane acknowledged that “it was a very good day for all of us.”¹⁷⁶

