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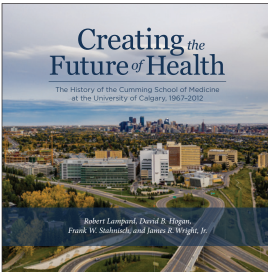

CREATING THE FUTURE OF HEALTH: The History of the Cumming School of Medicine at the University of Calgary, 1967–2012

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Geoffrey Cumming visiting a
Cumming School of Medicine research laboratory

Credit: Ewan Nicholson

Chapter 7

Final Thoughts

In this chapter we highlight some of the important influences that have shaped the U of C's Cumming School of Medicine since its beginnings, examine the school's unique features, and assess its impact both locally and more broadly.

Time and Place

The 1964 report of the Royal Commission on Health Services (the Hall Commission) drove the timing of the Cumming School of Medicine's founding. The commissioners believed that the Canadian medical schools then in existence did not have the capacity to "graduate a sufficient supply of well-qualified physicians to meet the expanding demands resulting from an increasing population and a doubling of the number of persons who will have their health services pre-paid through extension of pre-payment to the entire population, as well as to meet Canada's increasing international obligations to train professional health personnel for the developing nations."[1] To deal with this deficit, the commission recommended that existing faculties be expanded and new ones established. Seven new schools dispersed across Canada (Sherbrooke, McMaster, a new faculty in the Toronto area, Calgary, Victoria, Moncton, and Memorial) were mentioned, though only four were eventually founded (Sherbrooke, McMaster, Calgary, and Memorial).[2]

Calgary was an obvious location for a medical school, as it was then the largest Canadian city, and the third-largest in North America, without a medical school.[3] A feasibility assessment was conducted in 1965 by an expert committee chaired by Dr. J. A. MacFarlane (the former dean of U of T and member of the Hall Commission who chaired a similar committee that was struck to explore the founding of the Memorial medical faculty) at the request of the Board of Governors and president of the U of A at Calgary

(as it was then known). It concluded that there was a need for a new medical school in Alberta, and that Calgary was the most suitable site.[4]

Over the years, Alberta has gone through a series of boom-and-bust economic cycles driven by fluctuations in world prices for the commodities (oil and natural gas) that it sells. During boom times both government revenue and expenditures rise, while bust periods are marked by belt-tightening.[5] The creation of the AHFMR, which, as we have seen, allowed Calgary to recruit and retain talented scientists, occurred during a boom period when the Lougheed government used surpluses to invest in building provincial research capacity. When oil prices fell, and the Klein government made drastic cuts in public expenditures, the U of C medical school faced a lean period, with three consecutive years of budget cuts. This financial rollercoaster played an important role in determining whether the school was expanding or retrenching during the respective deans' tenures.

Calgary itself had a role in shaping the school. A dynamic city whose citizens have a long history of volunteerism and risk-taking was growing rapidly in size (see table 1) and wealth during most of the period covered in this book. Another important influence on the school's formation was the relationship between Calgary and Edmonton, which could be described as a mix of wary co-operation, long-standing competitiveness, and fear that the other party might be favoured—for example, in health-care funding.[6] The U of C began as a branch of the U of A. Its journey toward independence was long and at times contested.[7] For example, in 1963 Dr. Walter Johns, the U of A's president from 1959 to 1969, referred to Calgary's efforts at local autonomy as both "useless and uncalled for."[8] A federated model like the California State University system was considered but eventually discarded. In 1966, the U of C became a separate, autonomous institution.

One striking feature of the early years of the U of C medical school was the modest size of its host university. Though it now has over 30,000 students, in the late 1960s the U of C had only approximately 4,000 full-time students, compared to the approximately 17,500 then attending the U of A.[9] Medical education in Edmonton pre-dated that of Calgary by nearly sixty years, and the number of students and the breadth of the educational program there were substantially larger during much of the era covered in this history. The founding of the Calgary school would not have occurred as easily as it did without the acquiescence of Dean Mackenzie and the U of A faculty.[10] There was likely reluctance, though, within the U of C medical faculty to seek advice and support from colleagues in Edmonton because of the recent separation from the U of A, coupled with a natural desire to chart their own path. Calgary's distance from the seat of government has been felt by some as a barrier to advocating effectively for the U of C, though this separation may have provided greater licence for independent action. The two Alberta schools do work together in advocating for academic medicine but interact less on a day-to-day basis than might be anticipated, with collaboration generally greater when financial

times are tougher and the faculties feel threatened by external parties.

MacFarlane's affirmative 1965 report to the Board of Governors and the university president on the feasibility of a medical school stated that it "should be an active and integral" part of the U of C campus. In addition to building the required home for the school, it was recommended that a 350- to 400-bed teaching hospital separate from the Foothills Provincial General Hospital and under university control be constructed. A combined "medical school and teaching hospital related to the general science building on the university campus" was envisioned.[11]

Though supported by President Armstrong, the request for a hospital on campus was rejected by the provincial government because of cost and the availability of the recently opened Foothills facility in close proximity.[12] While some wanted the Health Sciences Centre (the U of C medical school's home) to be built on campus, others, especially the physicians involved, pushed for having it constructed at the Foothills site,[13] which was eventually chosen. An unanswered question is what would have happened if the HSC had been built on campus with or without a teaching hospital. Some linkages would likely have been strengthened (e.g., with other faculties) while others weakened (e.g., with the Foothills Hospital).

The MacFarlane report also mentioned the desirability of integrating dental and nursing education with medicine.[14] Dental training never was established at the U of C, while nursing opted to go its own way. The presence of a diploma program in nursing based at the Foothills site caused considerable tension after the creation of a U of C Faculty of Nursing. The Foothills program had previously negotiated an affiliation agreement with the university, which obtained university status for its students. Both the Foothills administration and the U of C registrar signed graduates' diplomas. While collegial relationships with medicine were desired, the leadership of the Faculty of Nursing declined the offer to move into the HSC when it was built so as to avoid "control by either medicine or the hospital."[15] They instead obtained space on the main campus.

Organization, Administration, and Financing

An interdisciplinary structure with a diminished role for traditional departments was the organizational model chosen at the school's founding.[16] Departments were initially called divisions. Done partly to get around the legal status granted departments in the provincial Universities Act, this choice was also made in reaction to the fear that strong departments might impair the flexibility required for achieving institutional goals.[17] While divisional heads were responsible for recruiting faculty and defending their interests, university salaries were controlled by the dean and decisions about institutional matters like the undergraduate medical education program rested with faculty.[18] Over time, the structure evolved with the strengthening of central institutional authority,

the weakening of the power vested in faculty, and the establishment of departments, though they did not achieve the status seen in older schools. The other three schools founded in the wake of the Hall Commission (McMaster, Sherbrooke, and Memorial) also selected administrative structures that curtailed the power of traditional departments.[19] One is struck by similarities on this and other initial decisions made by the leadership groups of the four schools.[20] As the U of C grew over the last fifty years, the role of the dean evolved from that of a one-man band expected to function as a visionary leader, hands-on manager, faculty ambassador, and chief fundraiser, into one where the primary responsibility was negotiating collective action to achieve common goals.[21]

Financially, the school has diversified its funding. In its early years, the provincial Department of Education provided, through the university, up to 80 per cent of the medical school's budget.[22] By the early 1990s, this had fallen to less than 50 per cent, with the remainder coming from the Department of Health through the local hospitals, research support from agencies such as the AHFMR, and the school's practice plan.[23] Additional sources were needed to deal with the deep cuts in provincial funding experienced during 1990s, and the role of private donors has grown rapidly. As described elsewhere, a series of successful fundraising campaigns were undertaken, and there are now six named research institutes and over fifty endowed chairs and professorships.

University buildings and affiliated hospitals and clinics critical to the medical school's mission have been added, removed (for example, when three hospitals were closed in the 1990s), renovated, and repurposed over time. For some additions, like the HSC, form followed (hoped-for) function. Competition for limited physical space and clinical resources has at times constrained choices but also forced clarification of institutional priorities.

Faculty and Staff

The quality of an institution is dependent on its people. Recruitment, retention, and diversification of highly skilled faculty and staff are two of the school leadership's most important activities.[24] As with other aspects of the school, there has been an impressive growth over the years in the number of such faculty and staff. The awards and other forms of acknowledgement received by these individuals attest to their and the institution's collective quality. While necessary to deal with the school's expanding activities, faculty growth likely has detracted from the sense of cohesiveness that marked the school's early years.

Education and Research

The original undergraduate medical program was taught around body systems. This owed much to the educational program developed at the Western Reserve University School of Medicine,[25] which the other three Hall Commission schools also embraced (though McMaster became best known for emphasizing problem-based learning in its delivery).[26] During the 1990s the limited number of

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Non-Academic Staff

In 1898 Sir William Osler replaced William H. Welch (1850–1934) as dean of the Johns Hopkins School of Medicine. It was not a position he desired, referring to it as an "infernal nuisance," and, not surprisingly, his tenure was short. Using a bout of acute bronchitis and bronchopneumonia as cover, he resigned in 1899.[1]

According to the historian Michael Bliss, Osler's duties as dean were not onerous, and he quoted neurological surgeon Harvey Cushing (1869–1939) as saying the medical school ran itself. The truth, as it usually is, was more complicated than that. Osler played a leading role in making Johns Hopkins the leading American medical school of its time.[2] While Dean Osler fulfilled his responsibilities, the school was also blessed with motivated students and excellent academic faculty. Another factor underpinning its smooth operation was the role played by non-academic staff. Cushing qualified his belief that the school "had a way of running itself" by noting this was due to George J. Coy, the registrar from 1893 to 1926,[3] whose duties were much wider than solely being the official keeper of academic records. Coy organized faculty meetings, identified and referred talented students for postgraduate work,[4] tracked the health of the students,[5] and otherwise kept the school functioning. The importance of non-academic staff to the operation of a medical school was clear to Cushing, who described them as "trusties" of "real merit" wielding "actual power."[6]

At the Cumming School of Medicine, non-academic staff includes the senior administrative group, management and professional staff (MaPS), and a diverse group of support workers. Local 52 of the Alberta Union of Provincial Employees (AUPE) is the bargaining unit for the latter. Reflecting the essential nature of their role, representatives of AUPE sit on both the Board of Governors and Senate of the University of Calgary.

The school functions because of their administrative, secretarial, technical, and professional talents. In 2017 MaPS staff accounted for 144.56 full-time equivalents (FTEs) in the Cumming School of Medicine, while support staff totalled 989.23 FTEs.[7] The two combined (1,133.79 FTEs) amounted to more than twice the number of full-time academic faculty members.[8] A key element to the success of a medical faculty is the quality of the collaboration between academic and non-academic staff.[9] A positive student experience, producing high-quality research, and

having a meaningful engagement with the community all depend on the ability of these two groups to work effectively together. Growth in size and complexity of an institution can create challenges in maintaining this essential attribute.[10]

It would be impossible to acknowledge all the non-academic staff members who have or are providing essential services to the school. As of 2017 two have been inducted into the Order of the University of Calgary. They will be mentioned as examples of the key contributions made to the research and teaching mission of the school by non-academic staff. Terrance J. Malkinson, who was inducted into the Order in 1997, joined the school shortly after it opened. During a quarter of a century as a biomedical research technologist, he supervised laboratories, taught methodology, and worked with Drs. Keith Cooper, Warren Veale, Quentin Pittman, and others on a number of research projects.[11] Adele Meyers retired from the Cumming School in 2016 after forty years of remarkable service as a trusted adviser, confidant, and friend to medical students.[12] Hired in 1976 as an assistant to the admissions coordinator, she assumed that position in 1989. Many students kept in touch with her long after their graduation. Meyers was inducted into Order in 2004. Hundreds of students, alumni, faculty, and staff generously donated toward the creation of the Adele Meyers Award, which provides financial assistance to deserving MD students. Without the contributions of Terrance Malkinson, Adele Meyers, and many others, the school would be a lesser place.

ways a patient can present to a physician became the organizing principle for Calgary's undergraduate medical curriculum. (This shift in curricular design is dealt with in more detail in chapter 4.)

Calgary and McMaster are the only three-year medical schools in Canada. A forgotten recommendation of the Hall Commission was "that funds be made available to those schools that wish to convert to year-round operations for the purpose of improving the quality of instruction and/or reducing the total length of time required to qualify for graduation or licensure to practise."[27] Because of the perceived crisis in physician resources, there was a push at the time to shorten medical education.[28] Possible advantages of graduating a year earlier for students included savings on tuition and living expenses (leading to a reduced debt burden upon graduation), while society would benefit from increasing the vocational life span of graduates by a year. This is not to mention the one-time "bonus" of two graduating classes in a calendar year (if a four-year school converted to a three-year one). It was believed that the three-year option would be particularly attractive to older, more experienced students.[29]

As early as 1967, the prospective Calgary MD program was described as three years in duration with an eleven-month academic year. This would lead to nearly the same number of months of education as conventional four-year programs (i.e., in Calgary there would be 136 weeks of instruction over three years compared to 144 weeks over four years at the U of A).[30] Undergraduate training

would be followed by at least two years of postgraduate medical training.

In the early 1970s, approximately a third of American medical schools operated as three-year programs or offered their students this option.[31] Most ended up reverting to a four-year program for a variety of reasons such as student and faculty burnout, the increasing complexity of medicine, quality issues, and diminished student competitiveness for residency positions.[32] The question of why Calgary and McMaster bucked the trend and remained three-year schools has not been fully answered.

Another of the U of C medical school's early priorities was training in family medicine.[33] W. A. Cochrane called the family practitioner the "key" person in health-care teams and wrote about their training.[34] He felt "at least 70% of our [U of C] students would likely 'stream' in the direction of the specialty of family medicine."[35] This prediction turned out to be overly optimistic. In 2008, only 18 per cent of U of C graduates chose postgraduate training in family medicine. By 2014, though, nearly half (45 per cent) were opting for this field of practice.[36]

Calgary was also one of the first two sites in Canada where postgraduate medical training in family medicine was piloted. A program based at the Calgary General Hospital accepted its initial residents in 1966.[37] The College of Family Physicians approached the nascent medical school two years later about becoming involved, as it was hoped an integrated "undergraduate-graduate program for . . . family medicine" would emerge.[38] In 1969, a year before the first undergraduate class started, family medicine residents at the CGH became postgraduate medical trainees of the U of C.[39] Over the years, the members of the Department of Family Medicine have played key roles within the Cumming School of Medicine. As previously noted, in addition to family medicine, the school offers excellent postgraduate medical education opportunities in a variety of other specialties.

An educational strength in Calgary has been continuing medical education.[40] Strong graduate science offerings and other educational programs have also emerged. The U of C can boast of highly respected educational programs in kinesiology, nursing, clinical psychology, social work, and veterinary medicine offered through other faculties as well. And yet, opportunities for training in other health disciplines (e.g., dietetic education, occupational therapy, optometry, pharmacy, physical therapy) and greater integration of training across disciplines have not developed as initially hoped.

A hallmark of research at the Cumming School of Medicine has been the structures developed to support interdisciplinary inquiry. One can trace over the years the evolution of these structures from research groups to institutes. In contrast to other parts of the country, in Alberta research centres or institutes that are based in hospitals or hospital networks largely do not exist,[41] though both research and innovation are strongly supported by Alberta Health Services.[42] It is important to acknowledge both the impetus and continued support for research provided by

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Graduates

The reputation of a school is highly dependent on the accomplishments of its graduates. The Cumming School of Medicine has done well by this metric.

Since the first MD student entered the school in 1970, a total of 3,892 medical degrees have been awarded as of April 2017.[1] This represents just over half (52 per cent) of all University of Calgary degrees conferred after a course of study in the school. Since the establishment of the school there have been 2,499 MSc or PhD, 618 BHSc, and 410 BCR graduates.

At the time of the U of C's fortieth anniversary in 2006–7, the Alumni Association selected for recognition forty graduates. Seven had received an MD at the university. Listed alphabetically, they were Evan Adams (2002), Mary-Wynne Ashford (1981), Cyril Frank (1976), Catherine Hankins (1976), Luanne Metz (1983), Curtis Myden (2006), and George Wyse (1974). Drs. Ashford, Frank, Hankins, and Wyse, as well as Marvin Fritzler (PhD 1971 and MD in 1974) and Douglas Hamilton (MD and PhD in 1991), have also received the university's Distinguished Alumni Award.

Often not counted as university alumnae or alumni, postgraduate clinical trainees and postdoctoral scholars may spend more time than undergraduate and graduate science students at a school, making important contributions while there, as well as afterwards, to the institution and its reputation. The first full-time learners in the U of C medical school were postgraduate clinical trainees who joined a year before the inaugural MD class. In 2016–17, the Cumming School of Medicine provided residency training to 967 physicians.[2] Over half (57.1 per cent) had received their MD outside of Alberta.

Postdoctoral training has been described as "part apprenticeship, part education, [and] part self-help course."[3] Not fully a student, faculty member, or support staff, postdoctoral scholars inhabit the Bermuda triangle of academic life. In 1996, Caren C. Helbing and Cheryl L. Wellington, while doing postdoctoral work in Calgary, conducted, with the support of Marja Verhoef, the first survey of the postdoctoral experience in Canada.[4] Many then felt "underpaid, overworked and worried by an uncertain future."[5] In 2016 the school had 247 postdoctoral scholars, about half of the university total.[6]

provincial funding bodies—first the AHFMR and now Alberta Innovates.

A source of pride for the school has been the active role it has played in global health. These contributions span both training and research that has occurred in Calgary and around the world.

Clinical Care

The extent and quality of the health-care resources available to the school have obviously had a significant impact on its academic mission. On the other hand, the school's ability to train needed practitioners, attract highly skilled clinicians and researchers, create knowledge, and foster innovation has benefited the local health-care system as well. Over the years, this bidirectional flow has been evident.

The Cumming School of Medicine has faced challenges when it comes to adapting to the changing organizational structure for health services in Alberta. When the school was founded, affiliation agreements with hospitals and other agencies had to be developed. The most important one was with the Foothills Provincial General Hospital, which Premier Manning envisioned in 1958 as a medical centre "designed after the Mayo Clinic."[43] When opened in 1966, Dr. J. Donovan Ross, the provincial minister of health, said that it would be the major teaching facility for the new medical school.[44]

The relationship between the two did have its trying moments, as we have seen, but overall this was a mutually beneficial partnership.[45] The same can be said for the agreements struck with other hospitals and agencies. When regionalization occurred, these affiliation agreements became null and void. Concurrently, closures limited clinical opportunities for students, residents, and faculty. Learning to work effectively with the Calgary Health Region, whose focus was on the delivery of health services—not teaching and research—became a vital task for the U of C school's leadership group. The need to adapt to changing circumstances at this time led to a number of innovative developments, such as the creation of Calgary Laboratory Services.[46] The founding of Alberta Health Services, an even larger provincial entity (at its launch it was the largest single health authority in Canada, the largest employer in Alberta, and the fifth-largest employer in Canada) potentially less responsive to local issues and concerns, necessitated another round of negotiations to develop effective channels of communication and mechanisms for collaborative action.

Social Accountability

Medical schools have an obligation to direct their education, research, and service activities toward the broadly defined health priorities of the community they serve.[47] The U of C School of Medicine's commitment to these priorities dates to its founding, which, as has been noted, occurred in response to the Hall Commission's call for increasing national physician training capacity. Indeed, as Dean Cochrane wrote in 1972, one of the "responsibilities of any modern medical school

should be the periodic assessment of its educational program as an effective response to public needs and expectations."[48] At the time of the school's founding, there was an expectation among the public that it would address local requirements for physicians. This expectation has been met. Between 1972–3 and 2014–15, the Cumming School of Medicine had 3,216 MD graduates. Over half (n = 1,790) of them currently reside in Alberta, with 1,315 (40.9 per cent of the total) working in Calgary.

A core principle of medical schools' social accountability has to do with ensuring physicians appreciate the importance of maintaining competence and the value of the patient-physician relationship.[49] The U of C school's curriculum has always sought to foster the attitudes and skills required for life-long learning, so its graduates could adapt to changes in medical practice and community need during their vocational life span. As described by Dean Cochrane, graduates of the U of C school should adopt the attitude of "once a student, always a student."[50] Likewise, the school sought to emphasize the centrality of the physician-patient relationship through the early introduction of patient contact. Other highly valued principles of the Cumming School of Medicine have included conducting ethically sound, curiosity-driven research, providing evidence-based care, and translating research into practice.[51] The preceding chapters and accompanying appendices give numerous examples of student-, faculty-, and institution-initiated activities that have served these aspirations.

The Cumming School of Medicine's current mission, as described in the 2015–20 strategic plan, is to "Fulfill our social responsibility to be a school in which the common goal of improved health guides service, education and research . . . [and] foster the collective pursuit of knowledge and its translation, through education and application, to better the human condition."[52]

A direct assessment of a medical school's ability to improve health in a region is not possible, as there are too many inputs to identify specific and certain causal linkages. However, benchmarking efforts comparing health-care performance and/or population-level health status for various regions provide some indirect evidence of the Cumming School's impact in Calgary. A review of available data indicates no evidence of harm and the following possible benefits:

- In 2000, *Maclean's* magazine ranked fifty Canadian regions in terms of health-care provision. Calgary ranked fifth among the fourteen communities with a medical school (which, collectively, tended to score higher than communities without one) and ninth overall.[53]
- In 2016, the Conference Board of Canada released the first issue of the *City Health Monitor*.[54] This examined the health performance of ten Canadian metropolitan areas (Vancouver, Calgary, Edmonton,

Saskatoon, Winnipeg, Toronto, Ottawa, Montreal, Québec City, and Halifax) using twenty-four indicators grouped into four categories. Calgary finished second overall, receiving an overall A grade, though Calgary fared relatively worse in the "access to health care services" category (based on the percentage of the population with a regular family physician and the per capita number of specialists, nursing/midwifery personnel, and hospital beds), with a particularly low grade on access to hospital beds.

- The Canadian Institute for Health Information now provides community-level indicators on the performance of the local health-care system and population health. In 2017, the Calgary region scored above average on seventeen of the thirty-five indicators considered, average on seventeen, and below average on only one.[55]
- At a provincial level, some evidence suggests that the investment in research through the AHFMR that occurred during the 1980s, and which built local research capacity, led to a measurable health benefit for Albertans compared to those residing in other provinces.[56]

Past, Present, and Future

In 1995, Dean Smith co-authored an article in the *Calgary Herald* justifying the existence of two medical schools in Alberta. The reasons given included the training of physicians to meet provincial requirements, the benefits of research, improving access to quality medical care, and the local financial impact.[57] This book has sought to provide a partial picture of how the U of C school has created knowledge, trained highly qualified professionals, and improved the quality and breadth of local health services. This chapter has so far noted the number of physicians the school has added to the provincial pool and provided indirect evidence of the health benefits to Calgarians of having a medical school. What follows aims to address the school's financial impact.

Nationally, the seventeen Canadian faculties of medicine and their affiliated teaching hospitals were responsible for $66.1 billion in quantifiable economic activity and more than 295,000 full-time jobs in 2012–13.[58] Though we have no direct data for the Cumming School of Medicine, we know that in 2011–12 the U of A Faculty of Medicine and Dentistry was responsible for nearly $2 billion in economic activity and 13,517 jobs.[59] These estimates do not include wealth created by research commercialization or capture social benefits such as enhanced community attractiveness to practitioners, researchers, entrepreneurs, and newcomers that arise from having a medical school. In 2014–15, seven Calgary post-secondary institutions—the U of C among them—had an

estimated total economic impact on the regional economy of $8.6 billion.[60] For every dollar spent by provincial taxpayers, there was a return of $3.50.[61]

The successful reviews of the U of C medical school by the Committee on Accreditation of Canadian Medical Schools and Liaison Committee on Medical Education, our postgraduate medical education programs by the two national colleges, and the continuing medical education office by the Committee on the Accreditation of Continuing Medical Education, all speak to the academic quality of the institution. Though at times the school's reputation has suffered in the wake of less rigorous evaluations (for example, in *Maclean's* magazine university rankings during the 1990s),[62] the Cumming School of Medicine is viewed as a vibrant institution that plays an important regional, provincial, national, and international role. Geoffrey Cumming's generous gift, matched by the provincial government, will allow the U of C school to build on areas of strength and attract (and retain) the best people.[63] Without doubt, the future will hold equivalent challenges to those faced by the school over the last fifty years, but they will, to use Bertram Carr's memorable phrase, be met with the spirit of "the optimist to whom every difficulty is an opportunity, and not as the pessimist, to whom every opportunity presents some difficulty."[64]

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Geoff Cumming

In June 2014, the University of Calgary's school of medicine was rebranded the Cumming School of Medicine in honour of the generous $100-million donation from businessman Geoff Cumming, in turn matched by the Alberta government. Cumming explained that, "Looking out 10–20 years, Calgary looks very strong to me, and in the medical field we need to put the foundations in properly and hire the best people and build out the team that will do the research over the next two decades. This is Year 1, and it's an important one."[1] Cumming's donation to the faculty hoped to stimulate cutting-edge research in the fields of brain and mental health, and infections, inflammation, and chronic diseases. Cumming stated, "When you go into the labs and spend time with medical researchers, you find incredibly talented individuals. Bright and driven, they are capable of making important advances into diseases and disorders where we currently have only limited understanding."[2]

A U of C alumnus (BA economics 1974), Cumming runs an investment firm in Calgary, and has had a successful career in the energy and financial sectors. Both his parents have

ties to medicine. His father, Harold, was a Kingston physician with connections to the Queen's University School of Medicine, and his mother was involved with the medical admissions committee there. Cumming explained that his gift was also a tribute to his parents. Beyond the good fortune of being born in Canada, Cumming claimed that "the extent to which I have enjoyed success in my life, the credit should go to my family."[3]

Like many others, Cumming was drawn westward to Calgary by the promise of opportunity and the grandeur of the Rocky Mountains. He hoped that his donation would tempt others to follow his footsteps and attract the foremost medical minds to Calgary. The *Globe and Mail* reported that "Mr. Cumming wants to attract the best researchers to the university, with the promise that his money will help them spend less time writing grant application proposals and more time doing the research work that changes the world."[4] University president Elizabeth Cannon said of Cumming's "transformational" gift that, "At the end of the day, you're trying to bring world-class talent to the University of Calgary, who in turn bring other talent, younger talent, and great students."[5]

Aside from his name adorning the Cumming School of Medicine, the philanthropist-businessman was granted an honorary degree in 2016. His recommendations to graduates were: to surround oneself with leading, honest, and vigorous colleagues; to preserve and maintain a determination to achieve; and to have a meaningful and impactful influence on the community and environment.[6] In their own praise of their benefactor and alumnus, university representatives stated that "Cumming feels strongly that a balanced society must offer high quality healthcare, education and environmental stewardship. He is passionate about global leadership and mentorship of young people, and believes a diverse education is one of the keys to becoming a successful global citizen. His incredible vision, leadership and generosity make him an excellent model and mentor for the next generation of global citizens."[7]

Table 1: Comparison of 1972–3 with 2011–12

	1972–3	2011–12
Calgary population	424,787	1,120,225
Faculty budget (current CDN dollars)	$2,526,777	$60,319,583
Faculty budget (adjusted for inflation—2017 CDN dollars)	$13,596,960	$64,970,970
Number of endowed chairs	0	52
Size of dean's office	4 including assistant deans	13 plus assistant deans
Number of MD graduates	27	172