

25 October 2002

Introduction I. North America's Oldest Public University II. Seizing the 21st Century III. The Challenges We Face IV. Agenda for change Conclusion

## Introduction

The beginning of a presidency seems an appropriate time to lay out one's hopes and dreams for the future of Our University. It is fair to say that I have rather ambitious plans for UNB, both in terms of its role as a national centre for teaching and scholarship, and as a key instrument for the economic and social transformation of Atlantic Canada.

In this paper, I have set out three overarching goals for the next five years:

- Sustaining and furthering UNB's role as a national university.
- Advancing UNB's role as a learning institution.
- Promoting UNB's fundamental role in the economic, social and cultural well-being of the Province and Atlantic Canada.

To realize them will require a level of commitment, from both within and outside UNB, that is well beyond what we have enjoyed over the past few decades. It will require a belief in ourselves, our history and our values. It will require reaching out to the people of New Brunswick, advancing a new narrative about our potential. It will require fundamental and sustained support from within the academy for a new academic agenda and a collective commitment to academic excellence and accountability.

The challenges will be immense but, if we are successful, we can and will profoundly change our world for the better.

John D. McLaughlin, B.Sc.E., M.Sc.E., Ph.D., P.Eng. 17th President & Vice-Chancellor Installed 25 October 2002

## I. North America's Oldest Public University

They came, calling themselves "loyal Adventurers," to a forested frontier that even by 18th century North American standards was remote and severe. Fourteen thousand people, fleeing the aftermath of the American Revolution, disembarked in New Brunswick in 1784. Naturally, their first thought was for their basic survival. Remarkably, their second was for the education of their children.

Seven of these Loyalists presented a petition to Lieutenant-Governor Thomas Carleton in December 1785 for the establishment of a Provincial Academy of Arts and Sciences. It was the progenitor of several educational institutions, most notably the University of New Brunswick. It also ensured that education--the need for it and the importance of it-was forever woven into the fabric of the developing Province.

Through several more incarnations--as the College of New Brunswick (1800-1828), the royally chartered Kings College (1828-1859), and finally the legislatively mandated

Firm may this Institution ever stand and flourish – firm in the liberal constitution and Royal foundation on which I have this day instituted it – enlarging and extending its material form, and all its capacities to do good, to meet the increasing demands of a rising, prosperous, and intellectual people; and may it soon acquire, and ever maintain, a high and distinguished reputation, as a place of general learning and useful knowledge.

- Sir Howard Douglas, Lieutenant-Governor of New Brunswick,

> At the opening of King's College, Fredericton, 1 January 1829

I believe a university best serves its society in the long run by taking the long view – behind and before; that is to say, by knowing its character and context and remaining true to them. What our Loyalist founders wished us to be, we should wish to remain: a solid, useful, humane, and friendly institution of learning. Not "Harvard of the North" nor "Oxbridge in the Bush," but exhibiting those solid qualities of character of the people we have sought and still seek to serve.

> - Dr. James Downey, 14th President & Vice-Chancellor

From "For the Cause and the Company," a welcoming talk to new faculty, September 1988 University of New Brunswick-this institution managed, sometimes against all odds, to survive and slowly develop, though it was not always well understood or supported by the general populace and the government.

Influenced by British, European and American trends, Canadian higher education did not arise from a single national tradition. The Loyalists initially eschewed the American influence they had fled and held tenaciously to class distinctions and other elite conventions. By the early 19th century, however, this institution had begun to feel the impact of the Scottish Enlightenment and its notion of progress and individual improvement through theologian James Somerville (1775-1852), botanist James Robb (1815-61), and physicist-astronomer William Brydone Jack (1820-86). Educator and linguist Marshall d'Avray (1811-71) brought European pragmatism and Harvard-educated scientist Loring Woart Bailey (1839-1925) introduced the American commitment to service outside the institution. These individuals not only built the university but also helped to shape and develop the intellectual life of New Brunswick.

Their research contributed to a better understanding of New Brunswick society and the era's growing body of scientific and technical knowledge. With the support of Lieutenant-Governor Sir Edmund Head in the mid-1850s, they worked to enlarge the practical components of the curriculum to meet the needs of a frontier province. Their students became influential in society, in government and in business.

Advances that would have a major impact on New Brunswick were made: popular lectures were offered in 1838; several economic organizations were developed by faculty in the 1840s; timber policies, communications strategies, and the longitudinal boundaries of Canada were determined through research expertise lent to the government in the 1840s and '50s; an astronomical observatory was established in 1851; and the first engineering courses in British North America were taught in 1854. Through the determination of the first female student Mary K. Tibbits, women were officially admitted to UNB in 1885, eliminating a major barrier to equality for all New Brunswickers. Distinguished graduates emerged on the 19th and early 20th century world scene: political figures Sir George Foster and Sir George Parkin, both important to Canada's role in the British Empire; literary giants Sir Charles G.D. Roberts and W. Bliss Carman; respected botanist William Francis Ganong.

By the end of the First World War, the University of New Brunswick had become a deeply rooted institution and was on the verge of a period of extended growth. The patronage of Max Aitken, Lord Beaverbrook, beginning in 1920, coupled with the government's increasing recognition of UNB's role, resulted in campus development, new academic programs, scholarship support for students, and enhanced research capabilities. At the end of the Second World War, the influx of returning veterans eager to improve themselves and the generous flow of federal dollars heralded the beginning of the modern UNB.

Builders with extraordinary vision saw the opportunities for UNB, builders such as war hero Milton Gregg who, as president in the mid-1940s, instituted a faculty structure and established that emblem of post-war optimism, Alexander College. Builders such as Colin B. Mackay who, in partnership with Lord Beaverbrook, expanded the University in every conceivable way during his 16-year presidency (1953-69); builders such as historian, anthropologist and poet Alfred G. Bailey (1905-97) who, over a 40-year career, did so much to broaden and strengthen the humanities and social sciences, and chemist Frank J. Toole (1894-1975), whose success in main-streaming graduate studies and research programs in the 1950s and '60s benefitted not only UNB but Canadian universities generally.

UNB's international reputation was forged by such scholars as renowned chemist Karel Wiesner (1919-86), whose lifetime achievement in research was recognized by the prestigious Izaak Walton Killam Memorial Prize, and Gottfried Konecny (1930-) who established the Department of Surveying Engineering, an international leader in the field of geodesy and geomatics engineering, and who laid the foundation for New Brunswick's world-class geomatics technology sector. Burgeoning enrolments attracted new, dynamic faculty, called for more diverse and specialized academic programs and state-of-the-art facilities, and fostered the further development of graduate studies and applied research.

A second campus in Saint John, established in 1964, was a response to UNB's provincial mandate and the demand for more, higher education opportunities for the citizens of New Brunswick. Beginning rather modestly in the downtown core of the city, the Saint

John campus took shape under the leadership of founding principal, G. Forbes Elliot (1912-93), attracting gifted and dedicated faculty, moving to its spacious and picturesque site in Tucker Park in 1969, offering full degree-programs in business and arts by 1972, and growing with greater rapidity than any other university in the province. Its research strengths developed around the needs of the Fundy region: marine biology and ecology, history and politics, business and e-commerce, and social issues. The campus has distinguished itself through strong ties to the community and in its international outreach, and its contributions enrich substantially the partnership embodied in the "two-campus/one-university" concept first articulated by former UNB president John M. Anderson in the 1970s.

Thus, with a rich history and a legacy of excellence, today's multi-campus UNB is making a vital contribution to economic, intellectual, social and cultural development. We have been and continue to be a primary resource of knowledge creation and talent, the critical foundation of competitiveness and prosperity. Our people-our faculty, staff, students and alumni--are making a significant difference in business and industry, government, the arts, law, communications, education, health care, recreation and culture, here in New Brunswick and around the globe.

# II. Seizing the 21st Century

The University of New Brunswick has built its reputation over the past two centuries on a foundation of teaching and scholarship that met the needs of the local community and contributed to the larger world. But the accomplishments of the past decade presage an even larger, pre-eminent role.

We are ranked among the top 20 per cent of engineering programs in North America. Our law school is ranked fifth in the nation and our MBA programs on both campuses are in the top 10 in Canada. Sixty-five per cent of our science graduates are accepted into professional, medical and graduate schools-10 per cent above the national average. On a per capita basis, UNB engineering students receive more Postgraduate Scholarships from the Natural Sciences and Engineering Research Council than at any other school in Canada. We have had more Rhodes Scholars over the past decade than any other Atlantic Canadian university.

Behind these impressive statistics are the people-faculty, staff and students-whose achievements these are. A few representative examples:

Over the past 10 years, some 339 of our Varsity Reds athletes have been designated Academic All-Canadians, achieving an average of at least 80 per cent in their studies. This puts UNB among the top five institutions, per capita, in the country. One of our Academic All-Canadians, Carla Geurts, is a native Netherlander, PhD candidate and Olympic swimmer who moved to Fredericton to train with UNB's then-swim coach, Andrew Cole. Her record-breaking performance in the pool earned her Atlantic Canada's nomination for this year's Howard Mackie award, recognizing national calibre athleticism and sportsmanship among the country's top athletes.

The Institute of Biomedical Engineering, established in 1965, is one of UNB's oldest and most successful research centres, involving large numbers of graduate students. Adrian Chan is one. His award-winning research proves graduate students can make an impact even before they graduate. The speech recognition system this electrical engineering, PhD candidate is developing as an alternative control technology for jet aircraft has already received international recognition and the backing of the Defence Evaluation Research Agency in the U.K.

Business students on the Saint John campus are among some of the most winning in the country, having a long record of successfully competing against many of Canada's larger schools. BBA students Krista Veysey and Sarah McGee recently beat out 14 competitors from across the country to earn a gold medal and \$500 in the Canadian Marketing Association's prestigious Student RSVP competition. Their award-winning marketing strategy was judged the best by a panel that included six industry leaders.

For the first 25 years after the discovery of Magnetic Resonance Imaging (MRI), it was generally believed that most solids and many gases could not be imaged using this method and many standard texts still assert that this is true. UNB Fredericton physicist Bruce Balcom has proved this assertion wrong, having invented a series of MRI techniques that permit unrivaled and unprecedented visualization of a very large range of materials, from food stuffs to geological samples to polymers. With colleagues from mechanical and chemical engineering, Dr. Balcom is establishing the Institute for

Materials Visualization and Analysis to help industries transform traditional materials into new products, processes and uses. With substantial funding from the Canada Foundation for Innovation and the Atlantic Innovation Fund, the Institute will have unique and unusual strengths built around its interdisciplinary use of MRI, x-ray and electron microscopy. Dr. Balcom holds the Canada Research Chair in Materials Science and was awarded a prestigious Steacie Fellowship for his advances in science in 2000.

Space research has figured large in UNB Fredericton's life. As early as the 1960s, surveying engineers were involved in lunar mapping for the Apollo missions and later the analysis of data from radio observation of quasars and other extragalactic objects for precisely positioning points on the earth's surface. Today Fredericton boasts the only NASA-supported Planetary and Space Science Centre in Canada, where geologist John Spray and his graduate students are studying moon rocks and helping NASA scientists prepare for the first trip by robots to Mars. And the Department of Geodesy and Geomatics Engineering continues to work closely with the Canadian Space Agency and others in the applications of GPS and other global navigation satellite systems.

Saint John politics professors Don Desserud and Joanna Everitt are conducting a federally funded province-wide survey to determine and evaluate how New Brunswickers work together. Wondering whether they will be able to shatter some of the myths that affect federal government policy toward the Maritimes, the political scientists intend to discover whether or not the stereotypes concerning New Brunswickers, their work ethic and their interest in their communities are true. Their comprehensive poll will provide concrete, quantitative data on everything from volunteer involvement to voting patterns to the ways individual communities develop prosperity.

"If you want to know about the health of a river, ask the fish," quips Kelly Munkittrick, one of two Canada Research Chairs who are part of the Canadian Rivers Institute. A bi-campus initiative, the institute is unique in Canada and one of only a handful in the world. Its mandate is to undertake basic and applied research on river ecosystems for the purposes of protection, conservation and habitat restoration, as well as provide training for future professionals and offer educational programs worldwide. Led by biologist Rick Cunjak, who also holds a Canada Research Chair--one of the first three awarded to UNB-the institute is the hub of a global network of scientists involved in studying and restoring the health of this critical part of the earth's biosphere.

A visit to Poets Corner on the Fredericton campus reveals the deep roots of UNB's literary tradition that began in the 1880s with such luminaries as W. Bliss Carman, Sir Charles G.D. Roberts and Joseph Sherman, all graduates of this institution. Nurtured by the "father of Canadian literature" W.C. Desmond Pacey (1917-75) and the eclectic scholar-poet, Alfred G. Bailey--who founded The Fiddlehead, Canada's oldest continuously published literary journal, in 1945--creative writing is one of UNB's longest-lived strengths. At both the undergraduate and graduate levels, the creative writing program is nationally and internationally recognized. Its alumni include acclaimed authors Alistair MacLeod and Wayne Johnston, as well as recently successful writers such as Matt Robinson, Susan Clair and Shane Rhodes. Its faculty have included Fred Cogswell, Kent Thompson and Don McKay. Alden Nowlan (1933-83), one of the finest 20th century poets, was its writer-in-residence for many years. His successors have included the award-winning writers David Adams Richards, Karen Connelly, Bill Gaston and Ann Michaels. Its extensive public reading program and Maritime Writers Workshop have brought the works of both established and budding authors to the community at large.

This is but a sampling of the quality of people and programs that Our University has to offer. As New Brunswick's largest and most comprehensive institution of higher learning, UNB has a depth and breadth of activities that speak to virtually all areas of human endeavour and achievement.

## III. The Challenges We Face

At the end of the Second World War, Canadians built one of the strongest economies in the world. And New Brunswick played its part. Starting with the 1944 Post-War Reconstruction Plan, New Brunswickers built the infrastructure--especially transportation, power generation and rural electrification--developed the resources and, at a critical point in the 1960s, overhauled our public institutions to meet the demands of the post-industrial age.

Following the war, Canadians also built one of the world's best systems of higher education in terms of widespread access to quality programs. Well into the 1980s,

Canada as a whole prospered and New Brunswick was successful in beginning to close economic gaps with the other provinces, as measured by gross domestic product per capita, personal disposable income, and unemployment rates.

For almost 40 years, Canadians were arguably the envy of the world. How regrettable, then, that this shining achievement is now in serious jeopardy, due in part to nearly two decades of neglect by provincial and federal governments, loss of direction and focus within the university community and increased external competition.

Universities across the country are facing critical challenges as they compete for qualified faculty members and gifted students; seek additional sources of funding; work to repair their aging infrastructure; find appropriate structures and mechanisms to participate meaningfully in research, development and innovation; and forge effective, reciprocal partnerships with government, industry and the community at large.

At UNB these challenges are writ large. We recognize that we will have to work harder, longer and smarter to maintain and strengthen our stature as a national institution. We begin from a smaller base in terms of people and resources. We continue to have to make the case that UNB plays a significant role in the well-being of the Province and that the people of New Brunswick realize a substantial return on their investment in education. In recent years, universities have been seen as drivers of the economy largely through the research, development and commercialization of innovative products. While this function is important and must continue to be fostered, the most important thing UNB can contribute to a diversified and dynamic economy is smart, talented and well-educated people.

We have been through some difficult times in the past decade: cuts to government funding both federally and provincially, combined with declining enrolments that are related to the Province's population trends, have put considerable pressure on our finances. Tuition fees have increased substantially. Early retirements offered to our faculty have addressed financial pressures but eroded our intellectual capital. Our ability to respond quickly to both problems and opportunities has been limited. We have seen federal government policy move toward the creation of a two-tier university system, concentrating research and development investment in a few large, central and western Canadian institutions and creating a serious have/have-not disparity. This marginalization of Atlantic Canadian universities is troubling in many ways, not least of which is its impact on our ability to compete.

The University and the Province are affected by many of the same challenges: a dispersed and largely rural population that is both declining in number and ageing; a too great and continuing dependence on a resource-based economy; a lack of investment and capacity in research and development; relatively low productivity; pressures from global competition; reduced government support; and difficulties building and sustaining a knowledge-based economy.

This is nothing new, of course. Adversity has dominated our history, our literature and our public discourse since the 18th century. But it is a theme that is taking on a new urgency-both in terms of the challenges we need to address and in terms of the opportunity we have before us to realize substantial, long-term change.

In sum, the most substantial challenge facing us as a Province and as a region is the need to build a society rich enough, creative enough and confident enough to provide a home for any one who wants to be a part of it. The University of New Brunswick is fundamental to meeting this challenge.

## IV. Agenda for change

Almost 60 years ago, in an address given at Harvard College, Winston Churchill stated, "The empires of the future are the empires of the mind." If this were true in 1943, in the midst of the Second World War, how much more pertinent it is today, at the beginning of the 21st century.

Education is now the main barometer of competitiveness among countries, more than capital and more than technology. People's knowledge and skills determine the prosperity of their families, the competitiveness of their economies and ultimately the quality of their lives within their communities and their countries. As New Brunswick's largest, most comprehensive, research-intensive, graduate-level educational institution, UNB has a fundamental role in ensuring the Province and the region are competitive by today's standards. To meet this responsibility effectively, we will need to embrace

### change.

I have learned a great deal from reflecting on our history, participating in our Renewal process and observing other initiatives over the past several years that have sought to create a culture of change. Like many older institutions, we have tended over the centuries to be conservative and cautious, a bastion of tradition in terms of subject matter and customs that have contributed to the stability and continuity of society. While is it still important and appropriate to be a guardian of the wisdom and knowledge of the past, today's imperatives require that we be a leader in the development of world knowledge, be conversant in all the technological advances that surround us, and demonstrate, by example, what the future will be like.

To achieve these goals, I begin with a set of essential beliefs:

- The modern university is a core component of our society, both in terms of its contributions to human capital development and innovation, and in advancing and sustaining our social and cultural institutions. Despite its flaws-periodic aloofness, disconnectedness, lots of talking and not much listening--the university nevertheless has a profound power to transform lives. It is fundamental to all economic, social and cultural success.
- The community of scholars, built on mutual respect among all disciplines and based in large measure on the effective integration of teaching and research, should be our constant ideal.
- Arts and science, which were introduced to the woods of New Brunswick by our founders and which to this day are key to all other disciplines, are essential to the education of a civil society. Over the centuries, we have been particularly adept at balancing the humanities, pure sciences and the professions, a strength on which we must continue to build.
- Effective academic management requires the setting of priorities, assigning responsibilities and accountability on the one hand, while preserving collegiality and collective decision-making on the other. We need some of the focus and discipline of the business environment, while recognizing that universities are not businesses.
- Our governance and organizational structures must allow us to respond more quickly to the challenges and opportunities of our time while never losing sight of our mission.
- Ultimately, a university must inspire, challenge, mentor and support its peoplefaculty, staff, students and alumni--at every stage of their intellectual development.

I couple these beliefs with our core purpose, as articulated in our mission statement, adopted in 1991:

The University of New Brunswick, with campuses in Fredericton and Saint John, and with its diverse programs and varied activities, strives:

- to be known for its excellence in teaching by providing students with the highest possible quality instruction, library and laboratory resources which are appropriate for both undergraduate and graduate learning, and an environment conducive to the development of the whole person;
- to achieve national and, in selected areas, international recognition for its research programs by capitalizing on its comparative advantages and by maximizing the benefits to be derived from its two-campus structure through reinforcement and enhancement of their individual strengths;
- to serve New Brunswick, the Atlantic Region and the Nation through the provision of broadly educated graduates, and through the development of applied programs involving the private sector and government agencies;
- to co-operate with governments and post-secondary institutions in developing a coherent system of advanced education, and to recognize the need for long-term financial stability and accountability;
- to serve as a source of information and expertise to help society understand and deal with the major issues and opportunities of our time;
- to encourage the development of a network of international co-operation in teaching, research and community development;
- to be a responsible and responsive employer.

With these foundational elements-our core beliefs and core purpose-to guide us and be our touchstones on the way forward, I am committed to pursuing three major goals during my Presidency.

**GOAL ONE:** Sustaining and furthering UNB's role as a national university. By this I mean that our programs, our facilities and our people will continue to be of a quality comparable to any other institution in the country. Why is this important?

There are a number of reasons.

First, our students deserve a first-rate education equal to that offered anywhere in Canada. What could be more harmful to New Brunswick's prosperity, to the future of this country in fact, than to have our students in any way disadvantaged by attending UNB? We must continually strive and be ever vigilant in maintaining and sustaining the quality of this institution, lest we do a great disservice to ourselves and to those who depend on us to be the best. We must fight the trend toward a two-tiered system of higher education in Canada.

Second, in a global economy and a shrinking world, our graduates must be prepared to compete internationally. Their opportunities know no political or geographic boundaries and our alumni must be able to hold their own with the best and the brightest anywhere.

Third, intellectual capacity is needed everywhere. Arguably, there is even greater need in places that face the kind of immense competitive challenges that New Brunswick does. To be an effective partner with the government and business in creating greater prosperity for our people, we must provide knowledge and skills on a par with the rest of the world.

Knowledge and innovation-the cornerstones of today's economy-are limitless in their scope. Unlike the resource-based economy of the previous centuries, knowledge and innovation are never exhausted. We can only live well and continue to advance when our University's knowledge, research and capacity for innovation are on the leading edge.

Fourth, accreditation of our professional programs such as engineering, computer science and nursing is based on national standards. Any diminution of our standards will mean the decertification of our programs and the loss of crucially important educational opportunities for New Brunswickers.

Fifth, bright, ambitious, high-achieving people are attracted by others like themselves. Organizations such as UNB that subscribe to high standards and work to meet them are magnets for those who share the same goals. Projections for the coming decade show that there will be a severe shortage of qualified faculty members in Canada. We will only be able to compete for the best teachers and the best researchers-those who can make a truly significant difference to the Province-if our institution is known and proven to be of national rank.

But this attribute has much more far-reaching implications. National calibre programs and facilities attract fine students. They also attract knowledge workers looking for a stimulating and vibrant community in which to settle and raise their families. They attract people from abroad and help to convince immigrants that New Brunswick is a location worthy of calling home.

As a national institution, UNB is literally a talent magnet that can help to attract and retain those who have much to offer as we seek to transform our economy and our society.

Finally, and perhaps most important, through its extensive research capacity and graduate programs UNB has connected this Province to a knowledge network that stretches across the country and around the world. As a national institution with this sort of stature and reach, UNB has a mandate and a responsibility to be this Province's voice on the national scene in matters relating to innovation, culture, human resource development, technology and the knowledge-based economy. We must speak out and speak up.

To achieve this goal-**sustaining and furthering UNB as New Brunswick's national university**-we will need additional support, support that can only be born of a deeper understanding of UNB's vital role and the potential it holds for making all aspects of life better. More government grants, though needed, will not be sufficient. Higher student fees may be necessary but must be coupled with substantial increases in scholarships and bursaries. In the next five years we will:

• diversify our revenue base through fund raising, joint ventures, research spin-offs

and technology transfer, entrepreneurial activity, and a greater breadth of lifelong learning opportunities;

- set priorities and make choices about the specific areas in which we can and will excel to a national and, in some cases, international standard. These priorities will be based on our current strengths and the identified needs of the Province and Atlantic Canada;
- fortify our capacity for research, development and innovation by increasing graduate student enrolment on our two campuses from 1,000 to 1,500 students and expanding our research activity by faculty and graduate students from a \$20-million-a-year enterprise to \$50 million annually.

**GOAL TWO:** Advancing UNB's role as a learning institution. How effective we are as a learning institution is determined entirely by our own community of scholars. At present, we are as good as anywhere else. But we can be better. And, on my watch, we will be.

#### The Community of Scholars

A "community of scholars" is harder to define today than ever before. Once clearly the exclusive domain of a largely sequestered faculty, we have now a scholarly community that includes librarians, technicians, practitioners, graduate assistants, peer mentors and students themselves, who have a new interest in and responsibility for their own learning. In my view, a successful community of scholars is highly interactive, vibrant, fluid and collaborative. Its focus is on learning, at all levels and in all its manifestations. Its emphasis is on involvement in academic institution-building rather than individual career-building. Though characterized by considerable decentralization and autonomy, my ideal scholarly community understands and engages in its collective responsibility for the quality of public life and public discourse. To this UNB must aspire.

Universities have long had a three-part mission: teaching, research or the creation of knowledge, and service to the community both within and outside the institution. For too long, most academic institutions have judged and rewarded professors' work through the narrow lens of published research, giving short shrift to the importance of teaching and the value of service, particularly when our knowledge is actively applied to problems within society.

I propose that, over the next five years, we debate and redefine what it means to be a scholar in our context. We must find better ways to tap and utilize the vast diversity of talent resident in our scholarly community. A broadening of our definition of scholarship would have a truly transforming effect on UNB's learning environment and distinguish us as a true leader in higher education.

#### Teaching

An outstanding learning environment today requires more than a broadened definition of scholarship, as critical as that is. The quality of our teaching is paramount, certainly to our students but also to our faculty, for it is by transmitting knowledge that we professors also learn. Teaching, or the dissemination of knowledge, and research form a continuum, informing and enlarging each other. Discoveries do not happen spontaneously or in a vacuum; they are the result of what people have learned and the way they build on or utilize that knowledge.

We will, therefore, reinforce and re-emphasize the high value we have always placed on teaching, encouraging and assisting faculty members in honing their pedagogical skills throughout their careers and recognizing those individuals who excel in the classroom. There is no greater calling than to teach and no greater reward than to be an effective teacher. All faculty must be empowered and, where necessary, helped to achieve this. Exceptional teachers must be celebrated and emulated because our students' experience at UNB and their future success is in large measure influenced by the quality of their professors' teaching.

## Curriculum

Curriculum, too, is essential to advancing our learning environment. We cannot overlook the power and significance of an education well grounded in the liberal arts and sciences, the foundation from which all specializations are derived. For me, such an education would ensure that students have enough knowledge of their cultural tradition to know how it got to be the way it is. This involves political and social history, along with mastery of some of the great philosophical and literary texts. It also entails knowing enough of the natural and applied sciences that one is not a stranger in the world--at minimum, knowing enough about physics and chemistry to understand how the world is constructed, and enough biology to understand both Darwinian evolution and recent developments in genetics and microbiology. Students need to know something about how society works in terms of political economy as well as the processes of technology and innovation. Ideally, students will also learn a second language well enough to read the best literature that language has produced. Students need to be computer literate and comfortable with the methods of logical analysis. Finally, and perhaps most important, it is critical that students acquire the skills of writing and speaking that make for candor, rigour and clarity.

Though UNB began with a classical curriculum and has had a large number of exceptional teachers over the past two centuries, there will be a number of challenges in getting the mix of educational requirements and electives right today. Everyone associated with the academy will have his or her ideas about what should be core and concerns will be raised about the value of professional and applied programs in this context.

As part of our commitment to developing the educated citizen, we must engage in this dialogue. UNB has been progressively successful, since the 1850s, in integrating the liberal arts and sciences with diverse professional disciplines. This is a strength that will inform and shape our debate.

Time constraints notwithstanding, research and teaching are not conflicting activities. At the graduate level particularly, they must be integrated and symbiotic, with research providing hands-on insight into the subject of study. At the undergraduate level, too, opportunities to participate in research activities are extremely valuable and make the curriculum more immediate and more meaningful.

Our laboratories, libraries and technological facilities must be, to the extent we can make it so, state-of-the-art to ensure our students, as well as our faculty, are able to access existing and create new knowledge.

# Student Life

To enable all of our students to be successful we will foster and develop an even more supportive learning environment. Students come to university today faced with a great many challenges, both academic and personal. We must create a climate that is more student-centred, predicated on the principle that it is our responsibility to ensure every student can maximize his or her full potential and develop into a well-rounded person prepared to play an active and productive role in society.

This means a richly textured student life filled with opportunities to pursue extracurricular interests and activities. For those who choose them, our residence communities must be safe, comfortable and inclusive places to live, where students interact with and learn from their peers in an atmosphere of tolerance, understanding and friendship.

For everyone, there must be opportunities to learn about and accept other cultures, whether through the international students who come to study with us or, even more effective, through opportunities for our Canadian students to study outside this country.

Finally, student services--counselling, tutoring, health care, advising, financial aid, work-study programs, services for the disabled, career and employment services, support for international students-must be strengthened to ensure that everyone who is enrolled at UNB has an equal opportunity to succeed. Despite changing demographic trends, a majority of our students still are making the transition from the home in which they grew up to life on their own as they attend university. Older students, too, come with challenges: single parenthood, unemployment and financial burdens, health concerns. We must help everyone if and when they need it, and in so doing demonstrate to ourselves and others what it means to care about and be responsible for the welfare of our community.

#### Innovation

Experiential learning, gained through co-op programs, professional experience programs, internships and practica in the community must be extended so that every student has the opportunity to learn through the direct application of his or her knowledge and develop a better appreciation of the complexities of life outside the classroom and beyond the textbook. The integration of instructional technology into the classroom and

the availability of online learning must be accelerated to increase and enhance accessibility to knowledge, wherever students may be, at whatever stage of life.

## Accountability

Trust and confidence derive from accountability. We will recommit to both our internal and our public measures of quality. These include ongoing national accreditation, research rankings, and student questionnaires on the classroom performance of faculty and the learning environment--both during and upon completing degree programs. These also mean faculty assessments for promotion and tenure, curriculum reviews, evaluation of our students' standings and promotions, and the scrutiny of expert external reviewers.

To advance UNB's role as a learning institution over the next five years we will:

- engage in an active and open debate about what it means to be a scholar in 21st century Canada;
- examine and evaluate our curriculum to ensure it is developing the educated citizen as well as the competent professional;
- rededicate ourselves to excellent teaching at all levels, fostering the integration of research into the curriculum, the development of critical thinking and problemsolving skills, encouraging the appropriate use of technology, and recognizing teaching as the single most important activity of the academy;
- engender a student-centred environment that encompasses a rich extra-curricular and co-curricular life; a climate of safety, inclusivity, diversity and tolerance; facilities that enhance learning; and services that are supportive of and responsive to the needs of today's students;
- be publicly accountable in a variety of measurable ways for the quality of the learning environment we provide.

**GOAL THREE:** Promoting UNB's fundamental role in the economic, social and cultural development of New Brunswick and Atlantic Canada. Since the original petition was presented by the Loyalists more than 200 years ago, the futures of our Province and of our University have been intimately interrelated. As go New Brunswick's fortunes, so go ours. And vice versa. It is therefore incumbent upon us to find solutions together for the immense challenges facing New Brunswick.

This year, Statistics Canada added New Brunswick to the provinces whose population is declining. The out-migration of young people, combined with a falling birth rate, is a formula for stagnation and decay.

Recent comparisons of the 50 states and 10 provinces rank New Brunswick 58th out of 60 in terms of the standard of living, and 58th in productivity. The old economic order has led to an array of policies, strategies and attitudes on the part of government, business, labour and individuals that have left our economy, in Canada as well as New Brunswick, ill-equipped for the changes sweeping across the global economy. We have failed to innovate for the Canadian context, simply replicating the strategies of firms in the U.S. and elsewhere, and relying on lower raw material and labour costs, along with a declining dollar, to maintain our relative prosperity.

New Brunswick has been stalled for some time at about 75 per cent of the gross domestic product (GDP) of Canada. We are export-dependent, with nearly 70 per cent of our GDP derived from international and interprovincial exports of goods and services. Even so, our export growth has been below the national average in recent years. We have remained too reliant on exporting traditional resources to traditional markets.

At a much deeper level, we have a significant productivity and innovation gap with the rest of the country. A couple of years ago the Atlantic Provinces Economic Council estimated that if we could improve our productivity levels to the Canadian average, it would produce an additional \$1.4 billion-worth of real output per year.

# The Way of the Future

Citizens of Canada have been preoccupied of late with the future of the health care system. This is indeed important. But I submit the future well-being of Canada and Canadians, New Brunswick and New Brunswickers, will ultimately be much more dramatically affected in the long term by the quality and effectiveness of education.

We in New Brunswick need a new plan, a new vision of what we can be, one focused on innovation and productivity, human capital development and an orientation toward

exporting value-added products and knowledge. These are absolutely key to creating wealth and raising our living standards.

Governments clearly have an important role in this new agenda through direct public investment in education, training and research; by creating an environment that encourages productive private sector investment; through taxation reform and through smarter public spending.

If the role of *governments* is to help create the climate for change, then it is the role of *business* to be the engine of change. We require a new generation of business leaders totally dedicated to innovation and global competitiveness, a generation of business leaders who understand the role of higher education and who are eager and able to expand their capacity to utilize fully our highly educated graduates and our research capabilities.

Finally, it is the role of *education* to be the instrument of change through teaching our citizens, solving problems through research, and applying our knowledge in the community.

There is no bigger player in education in this Province than the University of New Brunswick.

## A Partnership for Change

The Province has laid out its prosperity plan and called for an integrated strategic partnership among government, business, workers, communities and universities to enhance our collective ability to achieve prosperity more quickly and effectively.

I am fervently committed to such a partnership, a partnership that will enable New Brunswick to marshal all of its resources in a disciplined way to transform the Province's economy, social and political systems, and intellectual culture. It will require a sense of common purpose, an efficient, honest and accountable government, an education system focused on quality and accountability, an entrepreneurial economy that is productive and agile, a social infrastructure defined by the highest standards of service and fairness, and a quality of life that is very special.

As the most comprehensive educational institution in New Brunswick, we have been quietly doing our part. We are ready to do more--more boldly and more effectively--and to seize opportunities to contribute in ways not yet conceived of.

### Our Role in It

Currently, we see an urgent need in this Province to build a greater sense of community, to engage many more people in meaningful social discourse and to promote lifelong or perpetual learning not just as a social development tool but also as a civic activity that leads to societal reform. We feel very strongly that people from all levels of society must be empowered to become part of the dialogue that shapes the nature of their community-be it village, province or country-and to become confident that their opinions are being heard and valued. Collaboration and leadership in the creation of a stronger and more sustainable community will be our key contribution to a civil society. This is far more important to our long-term economic future than has been appreciated to date.

A number of our faculty have been working toward this objective for some time. We are now developing an important critical mass of experts focused on public policy initiatives. Here are just three examples:

A pioneer in Canadian women's studies, Margaret Conrad recently joined the Department of History on the Fredericton campus, drawn by its strong tradition and exemplary record in examining and promoting the history of this region. Dr. Conrad, who takes up the Canada Research Chair in Atlantic Canada Studies, has already played a vital role on issues of national debate related to Canadian identity and public policy. Her role at UNB is to stimulate further political debate about Atlantic Canada's history and culture in order to improve its political cohesiveness and its ability to compete in the global economy.

Doug Willms is the director of the Canadian Research Institute for Social Policy (CRISP) and the Canada Research Chair in Human Development. With funding from the Canadian Institute for Advanced Research, he was attracted to Fredericton in 1995 by UNB's and the Province's joint commitment to research into factors affecting children's success rate in school. As author of the study, *Vulnerable Children: Findings from Canada's National* 

Longitudinal Study of Children and Youth, Dr. Willms has been the recipient of numerous awards and several major grants. But the mandate of CRISP has been expanded from education to include social scientists from economics, health care, epidemiology, nursing, psychology and sociology to conduct research that will inform the development, implementation and assessment of social policies-locally, regionally and nationally.

In Saint John, a consortium of scientists working together since 1995, formed the Centre for Coastal Studies and Aquaculture. Collaborating with graduate students and honorary research associates from the scientific community, this interdisciplinary group has been influential and effective in addressing issues of integrated coastal management on a regional, national and international scale from biological, environmental, economic, community, political and social perspectives. One of its members, marine biologist Thierry Chopin, is incoming president of the Phycological Society of America and a key organizer of the Aquaculture Europe 2003 Conference that will take place in Norway next year.

We will also join forces with government, the private sector and our Province's other universities--St. Thomas, Mount Allison and Université de Moncton--to build and support the knowledge-based economy. We are committed to strengthening our research base, identifying research priorities, furthering the establishment of academic research networks and working more closely with our partners in advancing a coordinated research and innovation agenda. Our priorities include not only our historically strong research capabilities in the sciences and applied sciences, but also expanding our role in the social sciences and humanities in such areas as social policy, health care, community development, family violence research and furthering cultural industries.

We are encouraging research clusters and technology transfer, and more effectively supporting the innovation process. Seeing the world through our eyes, there is an urgent need to create a stronger "receptor" capacity-the capacity of the public and private sectors to absorb new knowledge and technologies as well as integrate our graduates and other skilled personnel.

Through a vigorous and committed partnership among all sectors, New Brunswick can become a "living laboratory" for the rest of the country, proving the value and the effectiveness of an energized and motivated society in which all players have a role and a stake.

## **Readying Ourselves to Respond**

We at UNB will enable this to happen. We will redesign our organizational and governance structures to foster and facilitate interdisciplinary activity and cooperation across the University. Our structures will be inclusive of faculty, staff, students and alumni, and draw upon our collective knowledge, talents and commitment. They will maximize our potential for effectiveness across the institution. Innovation, responsiveness and integration will be encouraged, recognized and rewarded; each individual's ability to contribute to the success of the University must be fully valued. This must involve open communication, which in turn should underlie all decision-making processes, and should promote both authority and accountability.

We will be a great deal more responsive and no longer dependent on the two-semester calendar of the academic year to make decisions or conduct activities. We will begin to consider students as clients and to foster positive, ongoing relations with a much wider group of stakeholders. And while the academic governing bodies that we call our Senates will continue to set academic priorities, they must do so with greater alacrity, less territorialism and more creativity. Our Board of Governors must engage in a dialogue with the external community, encouraging outreach and understanding, as well as more meaningful connections between and among the University and those we serve.

These largely internal changes will have tremendous impact outside the institution, fostering seamlessness between the University and the community. There will be virtually no boundary between where the University leaves off and the community begins. The Province itself will become a learning organization, not merely adapting and surviving but, most important, enhancing its capacity to create.

To expand and consolidate **our fundamental role in the economic, social and cultural advancement of the Province** over the next five years, we will:

• develop an innovation agenda based on models and best practices from across North America, building on the University's fundamental role and actively engaging partners from the public and private sectors;

- reorganize ourselves to provide dynamic leadership and responsiveness to the further development of the Province's economic, social and cultural well-being;
- engender substantially greater participation by the citizens of New Brunswick in the activities that foster a strong and prosperous community: dialogue and debate, volunteerism, strong voter turnout and, most important, understanding of the complexity of the issues and forces this Province contends with.

## Conclusion

Universities have been in existence for a very long time. In the North American context, UNB is among the oldest. In this and virtually every other culture, a university represents knowledge and enlightenment. We are a repository for cultural values. And we can be an instrument of reform. In our commitment to truth, we can and should challenge the status quo. We can and should provide leadership to society by educating its members, creating new knowledge, serving our communities, and most important, providing an example of the very best aspects of human interaction and endeavour.

Our founders, the "loyal Adventurers," sued for an educational institution so that "many publick [sic] advantages and many Conveniences would result." UNB has far exceeded this modest ambition, yet our current goals are very much rooted in this original mission:

- Sustaining and furthering UNB's role as a national university.
- Advancing UNB's role as a learning institution.
- Promoting UNB's fundamental role in the economic, social and cultural well-being of the Province and Atlantic Canada.

To fully achieve our potential in these three important areas, we rely on three important elements. First and foremost, our people-the faculty, staff, students and alumni who are making a significant difference in all that they do. Second, our commitment to setting and attaining the priorities that will make the most difference to our communities. And third, forging the partnerships with organizations and individuals who are ready, able and eager to transform this Province into a prosperous, productive and sustainable society.

I exhort each of you to join me in this endeavour. Let us engage together in shaping the future of UNB, and, through Our University, the future of New Brunswick and the world.

Questions & Comments Corner (QC2) : Sends an email to the President's Office

© University of New Brunswick webmanager@unb.ca