

UNIVERSITÉ DE MONTRÉAL

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KNOWLEDGE IS POWER

ANNUAL REPORT 2004









MESSAGE

HOMAGE

On behalf of the university community, it is my honour to present the 2003-2004 annual report of the Université de Montréal.

For 126 years, the Université de Montréal has been pursuing a twofold mission of research and teaching, offering the youth of Québec and elsewhere the opportunity to study in French on the North American continent. I myself had the good fortune to study here in the sixties, and I am proud to be one of the 200,000 or so UdeM alumni. Today, it is an enormous privilege for me to hold the office of Chancellor.

This document covers the Université de Montréal's achievements during the past university year. It also looks back on the mandate of Rector Robert Lacroix, allowing us to see how far we've come in the seven years since he took office. Dr. Lacroix will leave his post next May at the end of an adventure that has changed the face of the Université de Montréal.

To say the Université de Montréal was transformed under his leadership is putting it mildly. In only a few short years, Québec's largest university renewed its program offering and adapted it to an especially fast-paced socioeconomic world. It has doubled the volume of its research activities and considerably broadened its sphere of influence on five continents. With flying colours, it has converted itself to scientific transfer by creating more than fifty private research chairs with its industrial partners and by serving as an incubator for many commercialization ventures. And, of course, it has bolstered its orientation capacities to give students a support framework worthy of a renowned international university.

A team player, Robert Lacroix has always had a talent for mobilizing his colleagues to raise the bar of excellence. He was the driving force behind the most ambitious fundraising campaign ever undertaken by a francophone university in Canada. He himself piloted major research projects launched on campus over the past few years. Many attribute the success of the University's joint initiatives with its institutional partners – universities, governments, private companies and public bodies alike – to his talent as a leader to appeal to all sides.

Such a track record can only elicit admiration. May it be a source of inspiration for all who are exerting themselves to better our society in the 21st century. Robert Lacroix is a man with a single cause, that of knowledge, and he has always demonstrated a passionate commitment to university training and scientific development. In this era of the knowledge-based society, he believes in the power of universities – and university students and faculty! – to change the world. It is this deep conviction that steered his course at the helm of the Université de Montréal, and that will no doubt continue to buoy him as he prepares to take his leave from academic life.

I add my voice to all those of the university community to express my heartfelt gratitude to him.

For several years now, Montréal's intellectual and scientific dynamism has been the envy of large North American cities. Montréal owes its reputation primarily to its universities. Montréal universities employ 65,000 people, and the impact of their activities on the Canadian GDP is estimated at \$6 billion. Close to 75% of university research in Québec is conducted in Montréal, earning the city ninth place in the ranking of North America's R&D university capitals, ahead of Toronto.

Montréal is a city of knowledge, and the Université de Montréal is its main adjunct in the conquest of North American academic and scientific space. Canada's second largest centre of teaching and research, UdeM and its affiliated schools form a university complex of exceptional wealth. The calibre of teaching it provides to its students in practically every domain of knowledge is recognized worldwide, and is the honour of the men and women who constitute its teaching body.

For a society such as ours, the Université de Montréal represents more than an asset. It is an inexhaustible source of ideas and the leading crucible of Québécois innovation. Whether in physics or law, music or philosophy, dentistry or optometry, our establishment is an extraordinary breeding ground of skills. Our alumni fill command positions throughout the great institutions that govern life in society and they strongly contribute to social and economic development above and beyond national borders.

It goes without saying: I love this university. When I leave the office of Rector next May, it will be with a sense of having served it to the best of my ability. When I took office in 1998, my first act was to propose an ambitious revitalization plan to the university community. This initiative aimed to get our establishment back on track after the period of cutbacks in the nineties, and to lay the groundwork for its development for the decades to come.

Seven years later, the Université de Montréal recruits more students, its research income has doubled, and with it, the number of research groups for which it is the cornerstone. It has earned fervent support from the community for all the projects it undertakes. And it is a great pleasure to see the energy and vitality that emanate from its campus. An irrefutable sign that right here, on Mount Royal, is where things happen.

I leave it to others to take stock of our team's record of achievement. However, I would like to take advantage of these pages to salute the admirable work accomplished by the Vice-Rectors and the Secretary General of the University, as well as the Dean of the Faculty of Graduate Studies. Throughout my mandate, I have found faithful companions in the members of this select cenacle. The achievements recounted in this report can be largely attributed to the actions they collegially led in the various spheres of university life.

On behalf of the university community, I must thank you, dear colleagues, for all you have done for our students, our professors and our personnel. Today, the University is indebted to you for the smooth running of our academic life, a vital condition for the pursuit of its mission.

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Robert Lacroix Rector

André Caillé Chancellor

Unite Raile



TRAINING THAT LEADS TO THE LEADING-EDGE

BETWEEN REDESIGNED PROGRAMS, NEW
BIDISCIPLINARY STREAMS AND MORE DIVERSIFIED
LEARNING OPPORTUNITIES, STUDYING AT UDEM
BURSTS WIDE THE DOORS OF THE KNOWLEDGE-BASED SOCIETY.

A job portal

It takes typical graduates of the Université de Montréal 10 weeks to find a job, and 8.5 times out of 10 that job matches their training. Their average starting salary is \$792 a week, and they enjoy 4 times less risk of finding themselves jobless than young Quebeckers their age.

These findings were brought to light last year in an inquiry held by Quebec's Ministry of Education into the employment situation for Québec university graduates. With a mere 3.2% unemployment rate among its holders of bachelor's and master's degrees, the Université de Montréal is clearly a driving force on the job market and a real portal to highly skilled jobs.

Programs fully attuned to society

These figures delight Maryse Rinfret-Raynor, Vice-Rector for Undergraduate and Continuing Education. "Everything we've done over the last few years has been geared to offering our undergraduate students the best possible training adapted to a highly competitive and very international job market," she declared.

The course calendar attests to the sweeping changes that have taken place in undergraduate studies at UdeM. Responding to the needs of students and society in general, in all, 130 programs have been created or modified since the dawn of the new millennium. Without even knowing it, students entering the Université de Montréal now advance in a much more diversified academic environment.

The cross disciplinary challenge

The key word of this reform was "multidisciplinary". As Dr. Rinfret-Raynor explained, "We analyzed what society needs and adapted our programs to the complexity of today's world by introducing programs that remove the traditional barriers between disciplines."

This is how 16 bidisciplinary programs came to be added to the 10 programs already in place. They include communications and politics, demography and geography, Asian studies and anthropology, mathematics and economics, and film studies and comparative literature. Among the three multidisciplinary programs ushered in, the bi-faculty International Studies program opens five broad avenues: international development, managerial economics, law, history and political science. It has been a great success. The University has also introduced co-op programs in translation, statistics and actuarial sciences that allow students to alternate one semester in school and the other in a workplace internship. "We innovated," recalled the Vice-Rector, proudly, "and today we're seeing the results. At the undergraduate level alone, we've attracted 25% more students than in 1998."

+22.2%

98-99 45,126 04-05 55,150







UdeM extends its reach

UdeM has been expanding its network of regional campuses since 2000, giving thousands of students the opportunity to study close to home. The creation of these satellite campuses is just one of the University's initiatives to broaden access to its programs. Leaning more toward the professional development side of education and backed by the Faculty of Continuing Education, these campuses offer courses in a variety of fields for which UdeM has become known, such as pharmacology, education, nursing and theology. This year, Terrebonne, in the Lanaudière region, became the latest city to welcome UdeM, rounding out a list that includes Laval, Québec City and Longueuil.

UdeM welcomes UdeM woos anglophone students

This year, UdeM admitted approximately 1,200 students from English Canada. To address this clientele's particular needs, the Vice-Rector for Undergraduate and Continuing Education decided to launch an Anglophone Student Support Program designed to provide better orientation and enrich the university experience for these discerning students who chose to study in the langue de Molière. According to Program Coordinator Isabelle Daoust. "This involved setting up an orientation program for Canadians from outside Québec similar to the one for international students." Among other things, the program offers customized French-language training exercises. As Englishspeaking students must pass a French proficiency test to graduate, this linguistic assistance is well appreciated.

doctors to the St. Maurice Valley

Last fall, UdeM inaugurated a medical training centre in the St. Maurice Valley. Established with the joint cooperation of the regional hospital centre in Trois-Rivières and the Université du Québec à Trois-Rivières, and launched on a community initiative, this innovative project aims to train physicians in a region suffering from a serious doctor shortage. This is a first in Québec for a faculty of medicine. This year, there are 24 students enrolled in the program, and new cohorts are planned for the next five years.

55,150 students



Teaching and learning: Quality, for a start

A degree is only worth the value of the courses taken to get it. That's why UdeM set up a postsecondary education training and study centre, known by its acronym CEFES (for Centre d'études et de formation en enseignement supérieur), open to all teaching personnel, including instructors and ancillary staff. Designed to provide pedagogical support and recognize quality teaching, the CEFES is a community of 150 professors who make their expertise available to their colleagues, young and not so young alike, who would like to improve their teaching techniques. The centre offers tools to facilitate work in the classroom, such as a course planning guide, and it regularly organizes workshops for new professors.

While supporting efforts on the teaching front, UdeM launched broad pro-active measures on the student front to improve the quality of what and how they learn: foreign language courses, workshops to develop their ability to synthesize and analyze, initiation to research, and more. UdeM libraries have set up several areas for learning and technology interfaces, which help initiate students in documentary research. Information technology has revolutionized research in the last decade, allowing areas like archiving and social sciences to make great leaps forward. This is evident in the wealth of databases now available for all university learning. UdeM's next cohort of students will already know how to use these banks of information efficiently and, most of all, discerningly.

Mastering French has also received a lot of attention. Writing in French can be a serious problem for some students, regardless of their mother tongue. To help them acquire or brush up their skills, a writing centre called the Centre for written communication was set up. In addition to organizing an annual Semaine du français and holding a Francophone lunch each month, the Centre offers students individual tutoring and over 30 workshops on various aspects of the French language, from proofreading through to using all the resources of the Petit Robert dictionary, organizing one's thoughts according to the text and the context, using one's imagination to write, and learning proper punctuation.

UdeM and its affiliated schools form the most populous university complex in Québec. Last year, 41,362 students were enrolled in undergraduate programs and 13,788 in master's and doctoral programs. There are 22,763 men and 32,387 women on campus.

Eyes on the prize: The degree!

Admitting students is one thing. Graduating them is another. Since 1998, UdeM has made undergraduate completion an absolute priority, and has stepped up its efforts to keep undergraduate students from dropping out. First, by increasing the number of teaching assistants, thereby lightening professors' load and providing more support for students. Second, by offering students services specially designed to help them integrate, such as the Contact-Études (studies contact) initiative that puts first-year students in phone contact with their thirdyear colleagues. The calls coincide with the end of the first exam period to identify students in distress and refer them to the University's orientation and psychological counselling service.

UdeM will stop at nothing to help students finish the university adventure they started. "The completion rate went up by 2% in seven years," Vice-Rector Maryse Rinfret-Raynor is pleased to report. "In a student population of 30,000, that's more than 600 students we've saved from dropping out each year."

Undergraduate studies: Beyond disciplinary borders

The Université de Montréal does not hesitate to think outside the box, especially when it comes to the compartmentalization of sciences inherited from the past. At the undergraduate level, the list of these bidisciplinary programs gets longer every year.

Bidisciplinary bachelor degrees

- Bioinformatics
- Communications and Politics
- Comparative Literature and Philosophy
- Demography and Geography
- Demography and Statistics
- East Asian Studies and Anthropology
- East Asian Studies and Geography
- East Asian Studies and History
- Economics and Computer Science
- Economics and Politics
- English Studies and Comparative Literature
- Film Studies and Comparative Literature
- French Studies and Linguistics
- French Studies and Philosophy
- German Studies and History
- History and Classical Studies
- Mathematics and Computer Science
- Mathematics and Economics
- Mathematics and Physics
- Philosophy and Classical Studies
- Physics and Computer Science
- Political Science and Philosophy
- Psychoeducation and Psychology
- Psychology and Sociology

Multidisciplinary bachelor degrees

- Biomedical Sciences
- International Studies
- Literature and Humanities
- Security and Police Studies

Graduate studies: New programs, new ground to break

Creating a university program involves redefining the boundaries of contemporary science. The following is an overview of the channels added to UdeM master's and doctoral programs in recent years.

Master's and doctoral levels

- Master's in Mathematical and Computational Finance
- Master's in Health Technology Assessment
- Master's in Aging, Health and Society
- Master's in Electronic Commerce
- Master's in International Studies
- Master's in Bioinformatics
- Master's in Genetic Counselling
- Master's in Social Statistics
- Doctorate in Applied Human Sciences
- Doctorate in Bioinformatics
- Doctorate in Social Statistics

SGSD, SSD, IPSD, option, orientation and microprogram

- International microprogram and SGSD in Insurance Medicine and Expertise in Health Sciences
- Microprogram in Health Quality
 Management
- Microprogram in Magnetic Resonance –
 Abdominal Vascular
- Microprogram in Magnetic Resonance Musculoskeletal
- Microprogram in Magnetic Resonance Neuroradiological
- Master's microprogram in Anaesthesiology – scientific bases of
- Master's and doctorate in Biomedical Sciences, "Psychiatric Sciences" option
- SSD in Pediatrics, "Infectious Diseases in Children" option
- Master's in Health Services
 Administration, "Management of the Health Care System" option
- Master's in Health Services
 Administration, "Quality Management"
 option
- Master's in Health Services
 Administration, "Quality, Evaluation,
 Organization and Performance of
 Healthcare Facilities" orientation
- SGSD in Music Orchestral Repertoire
- In-depth Professional Studies Diploma (IPSD) in Education
- Master's in German Studies, "Teaching German as a Foreign Language"
 orientation
- Master's level microprogram in Methodology of Sociological Analysis
- SGSD in Industrial Relations
- SGSD in Administration of Education and Training Systems

- Master's level microprogram in Administration of Education and Training Systems
- Master's level microprogram in Evaluation of Skills
- Master's level microprogram in Change Management in Education
- Microprogram in Pedagogical Integration of Information and Communications Technologies
- Master's level microprogram in Didactics and Subject Integration
- _ Master's level microprogram in Didactics
- Master's level microprogram in Professional Insertion in Teaching
- Master's in Law, "North American Common Law" option
- Master's in Law, "International Law" option
- _ Microprogram in International Law
- _ Microprogram in Law and Labour
- In-depth Professional Studies Diploma (IPSD) in Public Health



GRADUATE STUDIES

THERE ARE 13,788 MASTER'S AND DOCTORAL STUDENTS ON THE CAMPUS THIS YEAR. AT UDEM, WE DO EVERYTHING TO HELP THEM COMPLETE THEIR DISSERTATION OR THESIS. AFTER ALL, WE HELPED THEM START IT.

A priority

From the moment he took up his post in 1998, Dean of the Faculty of Graduate Studies Louis Maheu was a member of the University Management Committee. "It was a clear signal sent by UdeM management," he recalled. "Graduate Studies had become a priority."

The Faculty of Graduate Studies is responsible for mobilizing all the University's components to achieve its graduate and postgraduate institutional objectives: link teaching and research, keep programs relevant, recruit the best young students and researchers, improve funding and rigorously evaluate all training. Three words sum up the spirit of the initiatives carried out by the Faculty to give graduate studies at UdeM fresh impetus: openness, funding and supervision.

Relevant programs

Like its undergraduate counterpart, Graduate Studies has gone through a profound restructuring. As Dr. Maheu pointed out, "With science going through so many changes, it was inevitable that we would change, too." Also like at the undergraduate level, a multidisciplinary template was applied to the program grid.

Now students can enrol in master's and doctoral programs in bioinformatics and molecular biology. Those who opt for the bioethics program will be taking philosophy, biology and theology courses. Several other streams, such as the master's programs in electronic commerce, mathematical and computational finance, and health technology assessment, draw on various disciplines. UdeM even has a database of teaching positions specifically reserved for teaching and research in interdisciplinary programs.

Graduate Studies has also made inroads in professional training. Specialized master's programs have been introduced that target job market needs. A master's was developed and specifically adapted to the needs of future CEGEP philosophy teachers. Another was created in pharmaceutical sciences to address industry needs for the development of new medications. In human terms, quite literally, a person who works in a community health centre who wants to analyze ethnic populations and their health reports can now enrol in the doctoral program in applied human sciences, which focuses research toward the solution of specific problems in the workplace.

Funding for master's and doctoral students

1,800

UdeM scholarships

\$12,127

in average annual funding per student

\$8.1M

in student funding

\$43M

toward scholarships, research contracts, contract teaching staff and teaching assistants 60%

of students receive funding from UdeM

636

holders of scholarships from federally and provincially funded bodies



Nursing In Morocco

Since September 2004, the Faculty of Nursing has been offering a master's program in Rabat, Morocco. This is a first for the Université de Montréal, which had never implemented a full master's program abroad. Funded through the Canadian International Development Agency and the World Health Organization, this joint project is backed by the Moroccan Minister of Health. Fourteen Moroccan students – seven men and seven women – will benefit from the experience of about fifteen UdeM professors. "This program is intended for senior personnel who already work as nurses, and who upon completing the new Moroccan program, could teach the subject matter themselves," explained Bilkis Vissandjee, a professor in the faculty and the project director.



A Rhodes Scholarship

Bill Clinton had one. Former Ontario premier Bob Rae had one, and so did the father of the Québec Ministry of Education, Paul-Gérin Lajoie. In the pantheon of scholarships, the Rhodes is the most hallowed. Each year in Québec, it allows two young researchers to study at Oxford University in England. Catherine Ouimet, a doctoral student in neuropsychology at UdeM, is one of the 2005 holders. This 22-year-old student attached to the Research Centre in Neuropsychology and Cognition excels outside the classroom, too. She is a member of the Carabins tennis team and was named female rookie of the year in 2003 for her winning doubles performance in the Québec Grand Chelem tournament. "The Rhodes Scholarship will allow me to broaden my horizons," she stated.



Microprograms and Specialized Graduate Studies

Professional development is itself developing at an astounding pace. Traditionally restricted to the undergraduate level, there is a growing demand for it at the graduate level. Professionals who already hold a bachelor often come to the University to seek out a training complement or upgrade their knowledge in a certain field. In response to this demand, the Faculty of Graduate Studies has been increasing the number of short programs it offers. Of the 84 master's programs that have been created since 1998, 45 are microprograms (9-18 credits) and 30 lead to a Specialized Graduate Studies Diploma (SGSD) (30 credits). Some have become extremely popular, such as the microprogram in postsecondary teacher training, tailored to CEGEP teachers who want to reconnect with the pedagogical roots of their profession.

664 programs



Funding students

Over the past few years, UdeM has made every effort to create conditions that pave the way for master's and doctoral students to earn a degree as smoothly as possible. The objective? Raise the graduation rate at the graduate level.

Of all the steps taken by the University to encourage future master's and Ph.D. holders to stick with it, the most significant is the most obvious: muscle up more student funding in the budget. This also redresses a situation that needed changing. In the last four years, the University has tripled funds dedicated to UdeM scholarships, from \$2.2 million to \$8 million. In the 2003-2004 academic year, close to 1,800 scholarships were awarded to graduate and postgraduate students.

Some of these scholarships were designed as persistence incentives. The FGS created a bursary program to encourage fourth year doctoral students to earn their degree in only one more year of study. To start with, they are asked to put together – and commit to – a 12-month action plan that would take them through to the end. This qualifies them for financial support. Already the program is a terrific success: 80% of the first 40 scholarship recipients respected their agreements, and the second call for submissions has attracted more than 80 submissions.

UdeM has many other sources of income that it can draw upon to assist graduate students: endowed funds, research funds from granting agencies, teaching contracts, and teaching assistant and research positions. All told, that translates into \$43 million allocated to students.

UdeM offers a comprehensive range of programs in practically every field of knowledge. The Registrar lists 240 undergraduate programs, 200 master's and 87 doctoral programs. Programs offered by HEC Montréal and École Polytechnique round out this total to 283 undergraduate programs and 381 graduate and postgraduate programs.

Encouraging dialogue

These measures are all part of a strategy to enhance student support. For example, the Faculty of Graduate Studies put out two handbooks, one for professors and the other for students, which detail the responsibilities of dissertation or thesis directors and define the nature of the commitment between them and the students whose work they direct. "The goal was to establish the most open, healthy and appropriate academic rapport possible," explained Dean Louis Maheu.

A survey of students who had either completed or abandoned their course of study led to a better understanding of both groups' motivations and their respective paths. This was followed by a critical study of teaching practices and their monitoring and support. An online graduate student section was launched to offer both easy access to student records and to modernize the University's management system. Finally, the Faculty maintains close ties with its teaching units to continuously improve teaching practices and to sensitize professors to the reality of their students' situations.

"We won't fully reap the benefits of these actions for a couple of years," said Dr. Maheu, "but the initial results already give us reason to be optimistic."



TO SEEK IS TO DREAM

Guy Sauvageau, Scientific Director of the Institute of Research in Immunology and Cancer (IRIC)

"The IRIC stood out at the last Canada Foundation for Innovation competition, and soon it will be equipped with a technological platform unlike any other in the country. For us, this is the start of a scientific team that will generate results with applications for the treatment of cancers and auto-immune diseases."



THE STRATEGY OF EXCELLENCE

WITH CLOSE TO HALF A BILLION DOLLARS IN RESEARCH INCOME, THE UNIVERSITÉ DE MONTRÉAL IS ONE OF THE WORLD'S LEADERS IN SCIENTIFIC DEVELOPMENT. RESEARCH HAS NEVER BEEN SO FUNDAMENTAL.

Regrouping to innovate

The Institute of Research in Immunology and Cancer (IRIC) can be summed up in a few figures: 30 research teams, 18 Canada Research Chairs, 250 master's and doctoral students, 50 postdoctoral students, 20 laboratories, technological platforms for cellular biology and proteomics, an SPF transgenic mouse facility and \$50 million in laboratory equipment. Housed in the new Marcelle Coutu Building, this new research centre is the first in Canada, and one of the first research institutions worldwide, to apply a systems biology approach.

Yet IRIC is not the only one of its kind at UdeM. It is just one of 30 major strategic groups, 19 of which were created in the last few years. The most venerable of these groups, the Public Law Research Centre, started 40 years ago and has since become an international benchmark in several fields, such as information technology law. The most recent is the Institut d'évaluation en santé (IDÉES), which regroups researchers in health administration with specialists in health care administration and the integration of medical technology.

Whether they are set up in centres, networks or institutes, these groups all have one thing in common: they gather a critical mass of researchers who will work on structuring projects. Their recent proliferation on the campus is at the core of the University's strategy for scientific development.

Strategic choices

From the moment he became Vice-Rector of Research, Alain Caillé made the expression "make choices to excel" his personal mantra. He did. Working closely with the deans, he chose 20 strategic research fields. They include international studies, ethnic studies, theoretical and applied ethics, nanotechnology, sustainable development, agricultural biotechnology and oncogenesis. "The best way to raise the level of all research is to raise it in targeted areas, the peaks, so to speak. That way, the valleys will benefit, too."

Seven years later, the approach has paid off and the whole University has benefited. Research income has more than doubled, and UdeM placed second in Canada on Research Infosource's 2004 Top 50 Research Universities List, a ranking of Canadian university research intensity and income. Above and beyond the funding allocations, there is the scientific activity itself. Never has it been this proliferate. Not a week goes by without an article in the *Forum*, the UdeM's weekly newspaper, on a new research project or another scientific first.

Dr. Caillé attributes this performance to having such a concentration of resources, not only at the institutional level but at the individual level. "The University stands out not just because it has more researchers, but because – and mostly because – its researchers excel in their respective fields of expertise." The numbers are there to prove it. With on average \$217,900 in sponsored research income per professor, UdeM ranked second in Canada in terms of research intensity.

\$446.21\ Growth in research income, 1998-2003 (UdeM, HEC Montréal, École Polytechnique) \$206.2M \$251.7M \$349.5M \$349.5M \$349.5M \$3394.4M \$394.4M \$394.4M \$394.4M \$394.4M \$394.4M







A man of vision

A specialist in experimental neuropsychology, Jocelyn Faubert has for years had a passion for visual perception problems, especially those caused by wearing progressive lenses. Thanks to the NSERC-Essilor Chair, which he is the first to hold, researchers from the School of Optometry can now tap into a \$1.5 million fund for his research into visual perception and presbyopia. Most of Faubert's work is carried out at the Virtual Reality and Image Treatment Centre of the Psychophysical and Visual Perception Laboratory. Designed like an immersion tank to allow the creation of controlled virtual environments, the Centre studies visual distortion effects on our ability to maintain our posture, a sort of gigantic video game at the service of visual sciences.

Supercomputer superresearchers

Since February 2004, UdeM houses the most powerful shared memory computer in Canada for the Québec High Performance Computing Network (RQCHP, the Réseau québécois de calcul de haute performance). With its 128 processors and 512 gigabytes of RAM, the SGI Altix 3700 has a huge theoretical capacity. It will allow some 60 RQCHP researchers to carry out projects in all kinds of disciplines, covering the spectrum of physics, bioinformatics, pharmaceutical chemistry, aeronautic engineering, the nanosciences and astrophysics. In the United States, there are only two other Altix supercomputers of comparable size.

Fighting atherosclerosis

Atherosclerosis will kill eight million people in the world this year. Due to our immoderate love of meat, sugar and trans fats, this figure could rise to eleven million in the years to come. To fight this leading cause of death in Canada, the Université de Montréal created the Pfizer Chair in Atherosclerosis. Funded by a \$1.5 million donation from Pfizer Canada and a \$350,000 grant from the Canadian Institutes of Health Research, this new chair will make it possible to study the role of antioxidants and antiinflammatories in the treatment of this disease. The first recipient is cardiologist Jean-Claude Tardif, an associate professor in the Faculty of Medicine and the director of the Montreal Heart Institute Research Centre. The Pfizer Chair is one of 34 chairs created with the funds raised during the A World of Projects fundraising campaign.

200 research units



Investing in the infrastructures

It takes construction to get important projects off the ground. In addition to the Marcelle Coutu Building, set to house the Institute of Research in Immunology and Cancer, UdeM has erected two new research centres. The first is on the Faculty of Veterinary Medicine campus in Saint-Hyacinthe: the Institute of Veterinary Biotechnology and Food. The Institute's 450 m² main laboratory will allow the Faculty to carry out leading-edge R&D projects in the veterinary biotech field. Other significant areas of study at the Institute include animal health and nutrition, sanitary conditions, safety and food quality. With mounting public and political concern over food safety, the Institute is poised to become an important training ground for researchers in this highly sensitive field.

The second, the J.A. Bombardier Building, could well become the finest material sciences centre in the country. Inaugurated last spring, this ultra sophisticated centre is dedicated entirely to leading-edge research in sectors at the crossroads of engineering, chemistry and physics: astrophysics, aeronautics, biotechnology and new materials. The study of nanotechnologies alone will take up 40% of the space and mobilize numerous research teams, whose projects could soon make Montreal the international benchmark for research on an infinitesimal scale. Constructed on the flanks of École Polytechnique, the building heralds a new era in scientific collaboration between researchers from the engineering school and the University.

The building has been a lightning rod for other research. National Research Council Canada's Aerospace Manufacturing Technology Centre has moved into brand new premises just a stone's throw away. This will allow the NRC researchers and the UdeM researchers to work in perfect synergy, after they discover each other.

Chairs, groups, centres, institutes... UdeM and its affiliated schools regroup under the same roof close to 200 research units and thousands of researchers. A unique scientific concentration that covers the spectrum of theoretical and applied disciplines.

Equipping researchers

In science, it's not enough to have new buildings; you also have to have the right tools. "It's impossible to attract top researchers if you don't have the latest equipment," stated Dr. Caillé, who spends half his time putting together financial plans to better equip labs.

At the last competition held by the Canadian Foundation for Innovation (CFI), the federal body created to fund the purchase of scientific equipment in universities, UdeM came away with the lion's share when it was awarded a total of \$60 million. In all, the CFI announced it would fund 13 UdeM and École Polytechnique projects in such sectors as nanoscience, nanotechnology, genomics, immunology, combinatorial chemistry and water treatment. That brought to \$517 million the total amount the University's researchers have raised to fund their research infrastructure needs. To date, UdeM has received 9.27% of all the infrastructure funds awarded to Canadian universities.

The future of science

So what awaits the world of science in the 21st century? Vice-Rector Caillé predicts a real boom in the area of life sciences. "We're just starting to realize how important this field will be in the years to come." But according to him, it is actually the very structure of the scientific world that will have to change. Vast networks of researchers could spell the end of the well-financed single research centre. Whatever the future holds, the Vice-Rector feels confident that UdeM is well positioned to take on the emerging challenges of an exciting multi-polar and cross-disciplinary science.

UdeM's strategic networks

Université de Montréal exerts solid leadership in Québec scientific circles. It is behind many of the most successful joint university ventures and is assembling a growing number of research groups. Overview of the thirty major research groups created on the UdeM's initiative.

Literature, Human and Social Sciences

- Centre d'études ethniques des universités montréalaises www.ceetum.umontreal.ca/english
- International Centre for Comparative Criminology (CICC) www.cicc.umontreal.ca
- The Québec Inter-university Centre for Social Statistics (QICSS) www.cigss.umontreal.ca/Home.htm
- Public Law Research Centre (CRDP)
 www.crdp.umontreal.ca/en/index.html
- Centre for Research on Intermediality (CRI) http://cri.histart.umontreal.ca
- Centre de recherche interuniversitaire sur la formation et la profession enseignante
- http://crifpe.scedu.umontreal.ca

- Centre de recherche interdisciplinaire sur les problèmes conjugaux et les agressions sexuelles (CRIPCAS) www.cripcas.umontreal.ca/en/index.htm
- Centre de recherche interdisciplinaire sur la violence familiale et la violence faite aux femmes (CRI-VIFF) www.criviff.qc.ca/langues.asp?p=3
- Groupe de recherche sur les aspects sociaux de la santé et de la prévention (GRASP) www.grasp.umontreal.ca
- Research Unit on Children's Psychosocial Maladjustment www.gripinfo.ca/Grip/Public/www/
- The Centre for Interuniversity Research in Quantitative Economics (C.I.R.E.Q) www.sceco.umontreal.ca/divers/ centrerech e.htm

- Centre de recherche interuniversitaire sur la littérature et la culture québécoises (CRILCQ) www.crilcq.org
- Interuniversity Research Centre on Globalization and Work (CRIMT) www.crimt.org
- Centre de recherche en éthique de l'Université de Montréal (CREUM) www.creum.umontreal.ca
- Centre for International Studies at the Université de Montréal (CERIUM) www.cerium.ca/rubrigue229.html

atural Sciences and Mathematics

- _ Calcul Haute-Performance Québec (CHPQ) www.chpq.qc.ca
- Centre de recherches mathématiques (CRM) www.crm.umontreal.ca
- Center for Research on Transportation www.crt.umontreal.ca/en/index.php
- Group for Interuniversity Research in Limnology and Aquatic Environment (GRIL) www.unites.uqam.ca/gril/grilframe1.html
- Observatoire du mont mégantic (OMM) www.astro.umontreal.ca/omm
- Regroupement québécois sur les matériaux de pointe (RQMP/GCM) http://gcm.phys.polymtl.ca
- Réseau québécois de recherche en synthèse organique (RQRSO)
- Biocontrol Network <u>www.biocontrol.ca</u>
- Groupe de recherche sur les maladies infectieuses du porc www.medvet.umontreal.ca/gremip/ang/ index.htm

iomedical and Health Sciences

- Groupe d'étude des protéines membranaires (GEPROM/GRTM) www.geprom.umontreal.ca/en/index.html
- Groupe de recherche en neuropsychologie expérimentale et cognition (GRENEC) www.fas.umontreal.ca/psy/grplabs/grene/ centre.htm
- Groupe de recherche interdisciplinaire en santé (GRIS)
 www.gris.umontreal.ca
- Biomedical Modeling Research Group (GRMB)
 www.igb.umontreal.ca/GRMB/EngHome. html
- Groupe de recherche sur le système nerveux central (GRSNC) www.grsnc.umontreal.ca
- Canadian Network for Vaccines and Immunotherapeutics (CANVAC) www.canvac.qc.ca/publik/frameset.htm
- Institute of Research in Immunology and Cancer (IRIC)
 www.iric.ca/Default2.asp?lang=EN
- Robert-Cedergren Centre for Bioinformatics and Genomic Sciences (CRC)
- Groupe de recherche universitaire sur le médicament (GRUM)
- Institut d'évaluation en santé (IDÉES)

Canada Research Chairs

Since 2000, the federal government has been multiplying initiatives to support scientific activity in Canadian universities. The Canada Research Chairs Program plans to establish 2,000 research professorships across the country. There are currently 69 UdeM chair holders in an array of fundamental disciplines.

Social Sciences and Humanities

- Citizenship and Governance
- Law and Medicine
- International Migration Law
- Econometrics
- Ethics and Meta-Ethics

- Ethics and Political Philosophy
- Asian Studies
- Electoral Studies
- Nineteenth Century Art History
- _ Built Heritage
- Occupations in Education
- Information and Communication Technology (ICT) in Education

Natural Sciences and Engineering

- Statistical Learning Algorithms
- Solar Astrophysics
- _ Stellar Astrophysics
- Polymeric Biomaterials
- _ Supramolecular Optoelectronics
- Computational Physics of Complex
- _ Fluvial Dynamics
- Functional Genomics and Plant Signal Transduction

Differential Geometry and Topology

Islam, Pluralism, and Globalization

- Quantum Information ProcessingSupramolecular Materials
- Electricity-conducting Interfaces and Nanostructures
- Developmental Neuropsychology
- Cognitive Neurosciences
- Neuroscience and Neuropragmatics
- Optimization of Communication
 Network Planning

- Proteomics and Bioanalytical Spectrometry
- Experimental Cognitive Science
- Stochastic Simulation and Optimization
- Stereoselective Synthesis of Bioreactive Models
- Number Theory

Health Sciences

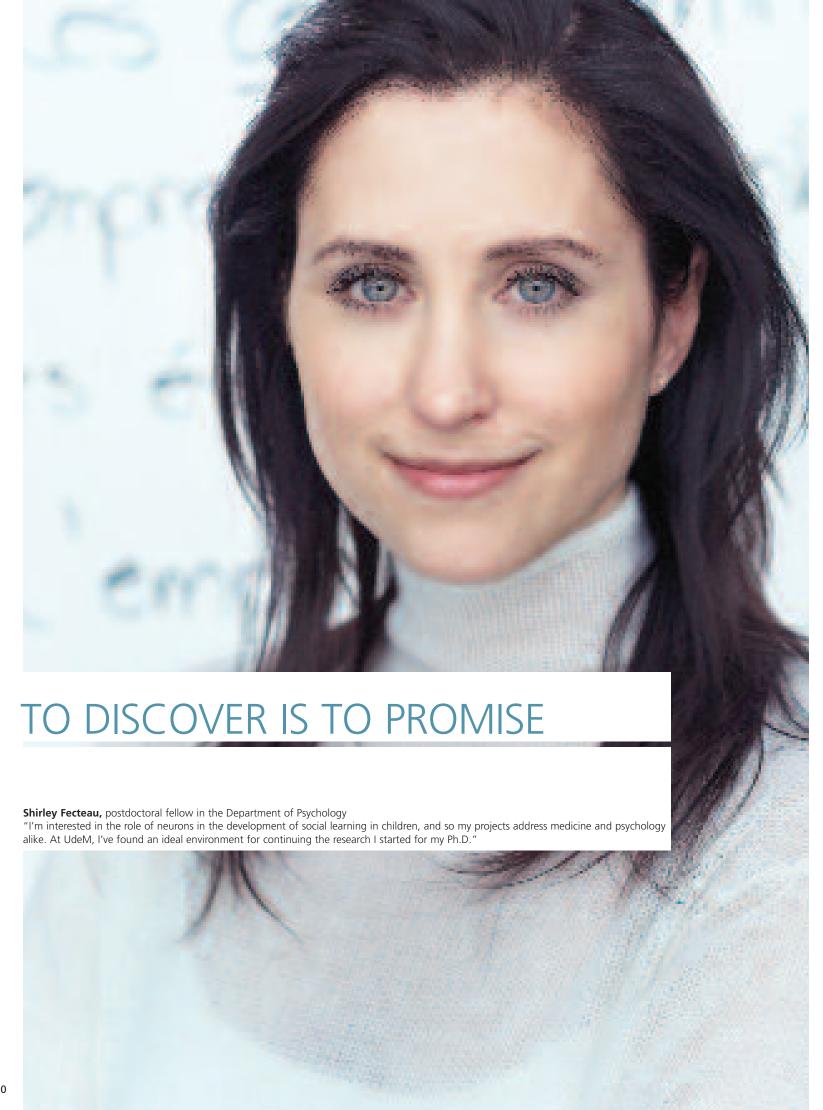
- _ Animal Diseases caused by Bacteria
- Biopsychosocial Pathways in Population Health
- Cardiovascular Cell Differentiation
- Cell Differentiation and the Genetics of Acute Leukemias
- . Cellular and Molecular Neurophysiology
- Cellular Biology and Biological Imaging for the Study of Infection and Human Immunodeficiency Virus (HIV) Immunopathology
- Cellular Microbiology
- Cellular Signalling
- Child Development
- Comparative and Evolutionary Genomics
- Controled Drug Delivery
- Embryonic Cloning and Biotechnology

- Endothelial Cell Functional Signalling
- Environmental Epidemiology and Population Health
- Evolutionary Bioinformatics and Genomics
- Functional Genomics
- Genetics of Kidney Disease
- Genetics of the Nervous System
- Human Retrovirology
- _ Immunobiology
- _ Innovation in Health
- Integrative Genomics
- Lymphocyte Development Using Transgenic and Knock Out Mice
- Molecular Biology of the Cell Nucleus
- Molecular Genetics of Normal and Cancer Cells

- Pathogenesis of Retrovirus-Induced
 Diseases
- Perinatal Epidemiology
- Perinatology
- Precursor Proteolysis
- Preventative Genetics and Community Genomics
- Proteomics and Broanalytical SpectrometrySignal Transduction and Molecular
- Pharmacology
- Signal Translation
- _ Signalling in the Immune System

19

Spinal Cord



MAKE WAY FOR TOMORROW'S RESEARCHERS!

NO TRUE MASTER'S OR DOCTORAL PROGRAM CAN BE WITHOUT FUNDAMENTAL RESEARCH. IT IS UNIQUE TO UNIVERSITY RESEARCH AND IT HELPS TRAIN GRADUATE AND POSTGRADUATE STUDENTS. WHO ARE ENROLING IN UDEM IN RECORD NUMBERS.

Training the next generation of scientists

We know that people who are blind from birth have a keen ability to identify and locate sounds. However, we've never really known why – until Frédéric Gougoux found some physiological reasons behind this mysterious sixth sense. The doctoral student in psychology used Positron Emission Tomography, commonly known as a PET-Scan, to observe the brains of blind people. He discovered that when they heard sounds, there was significant blood flow in the occipital region of the brain, an area usually associated with vision. In short, blind people "see" sound.

The young researcher would never have been able to complete his work had it not been for the help of the Centre for Neuropsychology and Cognition Research (known as CERNEC, the Centre de recherche en neuropsychologie et cognition). It has been working for several years to shed light on the phenomenal auditory abilities of the blind. CERNEC has been overseeing a growing number of projects thanks to the financial support of the Canadian Institutes of Health Research, the Canada Research Chairs Program, the Fonds de recherche en santé du Québec, and the Natural Sciences and Engineering Research Council of Canada. It has become an important training ground for the 140 neurology students now attached to the Centre.

Embarking on the adventure of knowledge

The case of Frédéric Gougoux is one example among hundreds of others of the very tangible benefits accruing from the accelerated scientific activity on campus. For UdeM's 13,000 master's and doctoral students, the opening of a research centre often translates into more funding, stronger supervision and support, and greater intellectual stimulation. Each new project broadens scientific horizons, and there are so many emerging sciences in the last few years being explored: nanoscience, biomedical engineering, biological complexity, sustainable development, and scientific and technological assessment. New programs have emerged along with them, and this, in turn, has considerably helped broaden study perspectives.

It's not just graduate and postgraduate students who are benefiting from all the new research projects launched by their directors. "We're hoping that our undergrads can really benefit from the research environment being strengthened to such a great extent over the last few years, and it should make the transition to graduate studies that much easier," stated Maryse Rinfret-Raynor, Vice-Rector for Undergraduate and Continuing Education. Soon, the University's honours program will allow students working toward their bachelor to be involved in research, even in their first year.

2ND IN CANADA Research income Per university Per professor McGill UdeM McMaster Queen's Laval Alberta McMaster Ottawa Calgary Queen's 0 \$200M \$400M \$600M Sound Soun

Source: Research InfoSource, 2002-2003 data



Diabetes and cancer

Health risks. That's what interests Marie-Claude Rousseau, a postdoctoral fellow in environmental epidemiology and population health at the Université de Montréal. She made an amazing health-risk discovery after turning on its side a 20-year-old study of cancer patients. She observed that diabetics were three times more likely to develop liver cancer and twice as likely to develop pancreatic cancer.

The link between diabetes and cancer had already been established, but what Rousseau demonstrated was the importance of sociodemographic and lifestyle factors. "Cancer is very complex," said the 35-year-old researcher. "More and more, we see the interplay of genetic and environmental factors that relate to what we're breathing and eating, and what's in our workplaces and homes."



A centre specializing in bioinformatics

In its strategic plan, the Université de Montréal designated bioinformatics an axis for its development. In September 2001, it became the first Canadian university to offer a specialized bachelor degree in the field. To bring together its specialists in this booming area, the University created the Robert Cedergren Centre, named after a pioneering bioinformatics researcher at UdeM. The Centre's director, Franz Lang, a researcher in the Department

of Biochemistry, is very pleased with the progress being made in his discipline. "Bioinformatics is expanding at UdeM, both in terms of research and training. The University has brought together a dozen researchers who are internationally recognized for their work in bioinformatics." UdeM researchers at the Robert Cedergren Centre are also responsible for the Génome-Québec (BioneQ) network.

21 libraries



Graduating more students

Without a doubt, the proliferation of research projects at UdeM contributes to the growing popularity of graduate studies. Last decade's decline in graduate student enrolments has been stabilized and even reversed. Since 1999, there has been a significant rise in the number of enrolments in master's (20.4%) and doctoral (15.7%) programs.

Not only are there more students, but more graduating students. Two years ago, the number of graduate and postgraduate degrees awarded surpassed 3,000 for the first time. This year, one out of every ten graduating master's and doctoral students across Canada will obtain their degree from UdeM. For the moment, this increase is strongest at the master's level, but the phenomenon should be echoed on the number of doctoral front very soon.

This is good news for Dr. Louis Maheu, Dean of Graduate Studies. "Québec is not producing enough Ph.D.'s for the size of its population. It's also low compared to other Canadian provinces. UdeM has a real responsibility in this regard. As a research university, it must be able to train the women and men who will shape the knowledge-based society of the future."

In collaboration with the faculties, the Faculty of Graduate Studies and the Office of Communications and Student Recruitment are currently putting the final touches on a plan that promises to increase the number of doctorates. It will include a series of recommendations ranging from widening the recruiting circles to creating an accelerated degree for both the bachelor and master's-to-doctorate streams, along with measures to better assess the calibre of candidates. Already, a number of master's programs have been reorganized to streamline advancement to a doctoral program in just one year, rather than the usual two or three years.

Try to imagine 3 million books, 2 million audiovisual documents and 50,000 periodicals. These are the resources that the UdeM library network makes available to its users throughout the campus. Not counting the innumerable computer terminals that provide instant access to scientific databases.

Straight through to postdoctoral studies

One of the ways to measure a university's research strength is by looking at the number of postdoctoral fellows working in the institution. In 1994, UdeM had 179. By 2003, it had 446. Much of the credit goes to the University's decision, in 1998, to provide a structure that better fosters their integration into the university community. This underscores the value the institution places on postdoctoral fellows, whose participation in research, orientation and teaching activities contributes enormously to the University's reputation and growth.

Why is UdeM investing so much energy into supporting and training its doctoral students and postdoctoral fellows? Because it knows what awaits them on the university job market. With a current faculty shortage in this country, it's estimated that by the year 2011, Canadian universities will need to hire about 20,000 professors, and recruiters will head to the ranks of Ph.D. graduates to find their candidates. The demand will be strong outside university enclaves, too. It's no coincidence that in its 2002 Innovation Strategy, the government of Canada set a goal to raise the levels of graduate and postgraduate enrolment by 5% per year.



A UNIVERSITY ON THE MOVE

IT'S UDEM'S VERSION OF THE BABY BOOM, THERE ARE 10,000 MORE PEOPLE ON CAMPUS TODAY THAN THERE WERE IN 1998. NOW THE CHALLENGE IS HOW TO MANAGE THIS GALLOPING DEMOGRAPHIC.

Welcoming the academic invasions

Between 1998 and 2004, the number of students attending the University and its affiliated schools jumped from 45,126 to 55,150. UdeM alone saw a 25% increase. That kind of phenomenal growth has meant that certain unrestricted programs, like the popular International Studies, have had to limit inscriptions.

Not only are there more students, but better students. It's not just admissions numbers that have gone up. So has the calibre of applicants. Proof of that is the changing cote de rendement au collégial (cote R), a system used by the province's universities to assess CEGEP applicants. Its average has been rising steadily since 1999.

The spectacular student boom has had direct impacts on university life. Measures had to be taken to absorb such a contingent, notably a full review of the entire student services architecture. Student services are now all under one roof in the J.A. DeSève Building, and cover: student orientation, student health, cultural events, counselling services, a job bank and a number of other student-oriented services. Another priority was managing student records, particularly in the area of admission applications, which can now be done online.

Hiring across the board was obviously another major priority, so it was no surprise in 2002 when the university decided to create the position of Vice-Rector Human Resources. It awarded the position to Dr. Gisèle Painchaud.

Fortifying the faculty

Between 1998 and 2004, 450 new full-time professors took up posts on the growing campus. Hired for newly created positions, they were also brought in to fill gaps left from a large number of retirements. The actual net rise is 122 positions. "We are talking about a 10% rise and a 33% renewal of the professorial ranks," explained the Vice-Rector. "That means one out of every three professors we pass in the hallways of UdeM wasn't here at the end of the last century."

With 1,353 professors on campus, UdeM still needs to fill another 77 positions. Hopefully, not for long, according to Dr. Painchaud. "You can feel a real momentum at UdeM, and this sense of renewal is seen as a real asset by candidates around the world."

The University is attracting more and more people from outside Québec. Naturally, most of the professors come from the other Canadian provinces and from France and Belgium. But the University has also been welcoming professors from the US and other European countries. Many have appreciated the University's help in easing their arrival and integration. Since 2004, new faculty have been able to take advantage of various programs that help them deal with the immigration process, find employment for their spouse, find a house or school, or navigate the provincial and federal tax systems. With a 98% retention rate, UdeM can boast that it not only brings the best minds to Montréal, it helps them make Montréal their home.

\$14,061

UdeM expenses per student (full-time equivalent)

26







The Carabins charge to victory

"The Greatest Show in Town." That was the headline in a Montreal daily during the height of last year's football season. The year 2004 will go down as the year of the Carabins. The University's football team racked up a season of eight wins and no losses, earning it the top ranking in Canadian university football. It dazzled its fans by giving them win after win. Their outstanding performance bodes well for next year's season. The success of coach Jacques Dussault's team also reflects well on UdeM's elite sports program, which brings together 300 student athletes in 10 disciplines. The program had experienced cuts before the end of the last decade, but now it's benefiting from the financial assistance of a Club des gouverneurs, which regroups personalities from the business world under the presidency of Normand Legault.

A student scouts out his future

Christian Girard, a UdeM master's student in International Studies, won the top award at the Forces Avenir 2004 gala. The title of Personnalité par excellence came with a \$15,000 scholarship. For the last two vears. Girard has been working with underprivileged students in Peru. He helped train 18 young scouts from the Montreal district of NDG to take part in an international project in Lima. The project helped provide 75 students in one of the city's shantytowns with food and vitamins. It also gave the pupils access to educational and recreational resources. Christian Girard grew up as a scout, spending 17 years in the organization. He said it formed the basis of his social outlook. "The scout philosophy has always been at the heart of who I am "

Greening the campus

Located on the northern slope of Mount Royal, the Université de Montréal eniovs exceptional natural surroundings. Its 60 hectares with lots of green spaces and leafy wooded areas are an environmental heritage that UdeM preserves with care. In Canada's university circles, the University has a reputation for being on the leading-edge in ecological practices. Along with its responsible environment policy and policies on purchasing investments, it regularly adopts measures to reduce the impact of its activities on the environment to a minimum, including systematic paper recycling and waste disposal from its biotechnology lab. All to ensure the campus's sustainable development.

professors



Promoting a university career

Recruiting is only half the story. Comprehensive support is the other. The accelerated pace of faculty renewal has made integrating professors into university life a sensitive issue. It is being addressed in several ways, such as professors being given their own laptops, UdeM covering most professional expenses, and start-up funds for research being made available.

However, it's the creation of a new teaching office, the Bureau du personnel enseignant, that has done the most to promote a university career and harmonize all the activities associated with teaching. The new unit deploys a team of managers who specialize in faculty employment issues, including working conditions, career prospects, compensation and benefits. This is how UdeM ensures that dealings between administrators and academic staff (professors, researchers, part-time lecturers, teaching and research assistants), and the policies and practices put into place, create as collegial a university environment as possible. Vice-Rector Gisèle Painchaud underlines the important role of professors. "They are at the very heart of the University's mission. They are its soul."

Faculty is the assurance of quality teaching and research at UdeM. More than 2,000 contract teaching personnel assist our professors with the classroom workload. Students in the health sciences can also rely on training offered by a staff of 1,600 clinical professors and instructors.

Supporting teaching and research

Ensuring the right support for UdeM faculty is the responsibility of administrative and support personnel. Here again, this area has been beefed up. Between 1998 and 2003, non-academic personnel saw their numbers jump by 16%. Due to the complexity of the changing workplace, the professional and technical side saw the largest increase. "With regard to our non-academic staff, we hired 540 new people," reported

An upcoming challenge will be in the area of management renewal. In the next five years, 40% of UdeM's managers will be taking their retirement, 75% in the next ten years. "Given the current demographic context, recruitment planning will become an important issue for UdeM," predicted Vice-Rector Gisèle Painchaud.

TO THINK IS TO CREATE

AN EXPANDING CAMPUS

BRICKS AND MORTAR, BUT FIRST AND FOREMOST, PROJECTS. WITH FINANCIAL HEALTH, THE APPETITE FOR MAJOR PROJECTS HAS RETURNED TO UDEM.

The construction site of knowledge

Since 2001, the campus has been transformed into a construction site, the most ambitious the University has seen since the sixties. The major construction projects come courtesy of public and private investments in the order of a half billion dollars, and have changed the face of the Côte-des-Neiges neighbourhood, which UdeM moved to 60 years ago.

Five new buildings now flank the famous mountain-side tower atop the Roger Gaudry Building. To date, that makes a total of 38 buildings. "Inside each new building, what's being built is the knowledge and the know-how and the society of the future," proudly observed the man behind all the construction, Dr. Michel Trahan, Executive Vice-Rector, Responsible for Academic Development.

It should be noted that even though the project was massive, each building was completed on time and came in on budget. Counting all the new construction, as well as acquisitions, the campus now has 93,000 more square meters – up a whopping 17% in total surface area.

Here's a bit of a riddle. UdeM had a surplus of 3,000 m² when it began construction, but in 2004, it was missing 20,000. How did that happen? According to Dr. Trahan, "the rise in student numbers combined with the research boom has put an enormous amount of pressure on our current infrastructure needs. When research funds double, the labs and classrooms have to follow."

Infrastructures for research and teaching

Research cornered much of the new floor space. With the marked growth in researchers teaming up, UdeM had to design centres that met the new standards of modern science. Three figured prominently in the construction projects. The Marcelle Coutu and J.A. Bombardier buildings and the Institute of Veterinary Biotechnology and Food have changed the face of the campus.

In addition to welcoming the Institute, the Faculty of Veterinary Medicine in Saint-Hyacinthe grew by 5,544 m² during its first expansion phase, at a cost of \$28 million. The new premises now house a frontline facility for domestic pets, an exotic pets clinic complete with an operating room, separate dog and cat shelters, an auditorium, cutting-edge laboratories, offices for new faculty members, plus a convenience that members of the campus very much appreciate, a tunnel connecting the main building with the new complex. Phase 2 will give the Faculty twice the amount of space for clinical work and animal hospital research. The work will add up to \$50 million, including new equipment.

All this new research construction certainly does not mean teaching is being forgotten. Classrooms will be finished for the spring of 2005 in the 12,362 m² Jean Coutu Building, which will house the Faculty of Pharmacy and allow it to handle the steadily rising cohort of pharmacy students needed to fill the need in Québec for more pharmacists.

The University is not thriving on construction alone. Renovations have been completed and new installations set up. In addition to sprucing up certain outdated properties, UdeM set up new areas in its libraries for learning and IT interfaces and moved its Special Collections Department. Those looking for rare books or searching through archives now have a more modern and comfortable space in which to conduct their searches. The reinvigorated CEPSUM has been able to both welcome more users and give the Carabins even better facilities. Finally, the University has acquired the former mother house of the Sisters of the Holy Names of Jesus and Mary, which will house the new Institut d'évaluation en santé (IDÉES) and other social science teams.

The new research powerhouses



Marcelle Coutu Building

Construction:

\$50 million

\$50 million



Construction: \$60.5 million \$69 million

Areas of research: cancer, viruses and the immune system

Equipment:

Equipment: \$150 million \$10 million

Areas of research: nanotechnology, aeronautics, biotechnology, aerospace, new materials



Construction: Equipment:

Areas of research: animal biotechnology, animal health and nutrition, public health and safety, food inspection

faculties



Healthy planning

The expansion in recent years would never have been possible had it not been for some complex budget planning. The heavy lifting for that task was accomplished by Vice-Rector Michel Trahan, who kept a tight eye on the revenues and expenses columns. "In 1998, our operating budget was running an accumulated deficit of more than 80 million dollars. By following the UdeM recovery plan, we were able to cut that debt by half."

The keystone of this recovery plan was to increase student numbers, which had been in a freefall in the '90s. "You can't get a university back on its feet without the help of students. They give life to an institution. They also help to increase the supply side of your needs through subsidies." Consequently, while the government increased its quotas for certain areas of study such as medicine, UdeM began to reform its programs and targeted the professional streams that attract more full-time students. The results were very positive. Income earned from admissions jumped 32% in seven years, in line with the leap in full-time student numbers.

Université de Montréal offers one of the most varied selections of faculties in the country. UdeM is the only Canadian university that covers all the health sciences disciplines, it runs the only faculty of veterinary medicine in the province, and it is affiliated with Québec's two leading professional schools, HEC Montréal and École Polytechnique.

For the benefit of students

That windfall, along with the benefits gained from lowered pension-fund contributions and instituting performance contracts through the Ministry of Education, made a balanced budget possible. Between 1998 and 2004, the total increase in operating revenue was \$186 million and expenses were kept to \$181 million.

What makes Dr. Trahan proudest, as the person also responsible for academic development, is that spending on students has gone up. Thanks to a new internal redistribution structure, academic units receive a higher share of the revenues created by the increase in the student population. In 1998-1999, UdeM spent \$11,289 to educate a student; in 2003-2004, it spent \$14,061. "At the end of the day, it's the students who are benefiting most from our improved financial health."



PASSPORT: KNOWLEDGE

TRAVEL NOT ONLY TRAINS YOUTH, IT SHAPES UDEM, WHICH HAS MADE INTERNATIONALIZING ITS PROGRAMS AND RESEARCH ACTIVITIES A PRIORITY. TOGETHER, WE'RE TAKING ON THE WORLD.

Bridging the international divide

In 2001, an exciting new service was created to further support research and teaching. The International Relations Division (known as DRI, Direction des relations internationales) has a mandate to reach agreements with institutions around the world, create international research and teaching partnerships, and promote student and professor mobility.

The creation of the DRI is a sign of UdeM's increasingly international outlook, according to the Vice-Rector of Planning and International Relations, François Duchesneau. "The University has traditionally built its international reputation on the projects of individual professors. Now it's creating initiatives on its own to offer better research conditions to professors and students, who rival the best in the world."

International research centres

UdeM's research sector is internationalizing at the speed of light. Many centres, such as the International Observatory of Musical Creation (Observatoire international de création musicale) and the Centre for International Studies, have international research as their common denominator. Administration wise, many projects have one foot in UdeM and the other in foreign institutions. One such project is the International Institute of Research in Ethics and Biomedicine (IIREB), which is run in partnership with the Faculty of Law's Public Law Research Centre and the Laboratoire d'éthique médicale, de droit de la santé et de santé publique at the Faculté de médecine de l'hôpital Necker de l'Université Paris V.

Also on the strength of its research expertise, UdeM has been selected as the site for several institutes governed by international bodies. The Institute for European Studies, the UNESCO Institute for Statistics, the College of the Americas (COLAM) and the Canadian Centre of German and European Studies now have a foothold on the mountain, and the roots they are laying down on campus attest to the powerful pull UdeM and Montréal enjoy internationally.

International development

International development has long been one of UdeM's strengths because of its rare concentration of its programs in social sciences and public health. For several years, the University has been doubling its initiatives in the North-South axis, most of it in French-speaking Africa.

Consider these examples. About a hundred of China's 180,000 judges came to perfect their knowledge of law, a field that is increasingly sensitive to the differences between national jurisdictions. The International Health Unit of the Faculty of Medicine works in conjunction with African universities to halt the ravages of AIDS on the continent. The Institute of Urban Planning of the Faculty of Environmental Design is wrapping up a large-scale project in urban management in Vietnam and has supervised the creation of the Training and Research Centre in Urban Planning at the Hanoi University of Architecture. The list of UdeM researchers' interventions south of the equator could easily get longer in fields as diverse as transportation management, education, economics and veterinary medicine.

A society of nations

Distribution of international students by continent*

Africa A
North and Central America B
South America C
Asia and the Orient D
Europe E
Oceania F



*UdeM, excluding HEC Montréal and École Polytechnique.

Exchange programs

495

Number of UdeM students abroad

678

Number of foreign students at UdeM



CERIUM

The University had dreamed of it for decades. Dr. Robert Lacroix since he took office. Inaugurated last spring in the presence of the chair of its board of directors, His Excellency Raymond Chrétien, and the former premier of Québec, the Honourable Lucien Bouchard, the Centre for International Studies / Centre d'études et de recherches internationales (CERIUM) embodies the international direction taken by the University in recent years. This new research and training unit will bring

together the University's live assets in the field of international studies. Since its founding, it has partnered with other research groups, including the Canadian Centre for German and European Studies, the Jean Monnet Chair in European Integration and the European Studies Institute. Transatlantic policy, globalization, democratic governance, securities and identity questions are among its main research interests. "We are very enthusiastic," said the scientific director of CERIUM, François Crépeau,

a professor in the Faculty of Law and a specialist in refugee law. "International issues are of concern in Québec society, and I think that it was time for the University to equip itself with a centre like this." CERIUM will also convene the leading lights of the political world to share their thoughts on the world situation. Last fall, former Vermont governor Howard Dean came to Montréal at the Centre's invitation to comment on the American election campaign a week before the vote.

5,111 international students



Internationalization of degree courses

In 2000, the University Council adopted an internationalization policy with a student focus. Since then, the internationalization of programs has been proceeding at a brisk pace. A new bachelor's program in international studies explores the economic, political, legal, social and cultural dimensions of the planet's major socio-political groups, and a new master's program overlaps about fifty disciplines and offers interdisciplinary courses on the background of the world system, international economic policy, governance, globalization and cultural diversity.

Internationalization also runs through the make-up of programs shared with foreign universities. The Department of Political Science, for example, has partnered with the Institut d'études politiques de Paris to create an integrated master's curriculum that allows students to take courses in both establishments. The formula will soon be imitated by the faculties of law at UdeM and the Université Lumière Lyon 2.

According to Vice-Rector François Duchesneau, the doctoral programs "tend to be more and more decentralized, given the growing specialization in research fields." UdeM is championing joint thesis supervision in Québec. Launched in 1996, this provincial program allows doctoral students on both sides of the Atlantic to work under the supervision of two thesis directors, one attached to a Québec university and the other to a French institution. At the end of their studies, students obtain a degree from both institutions. This year, there are 173 students working under joint supervision; 70 residents of Québec and 103 residents of France. Agreements have recently been reached with Belgian, Swiss and German institutions to implement this type of program, which is particularly well suited to today's research conditions.

With close to one out of every ten students hailing from outside the country, UdeM and its affiliated schools are now ranked Canada's second most cosmopolitan university complex. Students from 140 different countries are enrolled in its programs.

An invitation to travel

The growing internationalization of research and study programs has, of course, had a real impact on student mobility. Between 1998 and 2003, the number of UdeM students who took part in exchange programs quadrupled, while the number of foreign students enrolled in UdeM through exchange programs more than doubled.

All this movement, combined with the growing popularity of university studies in the Montréal communities, has had a striking change on the ethnic composition of the student population. In seven years, the number of international students on the campus has risen from 2,662 to 5,111. Here's a little known fact: Université de Montréal and its affiliated schools form the second most cosmopolitan university complex in Canada. An undeniable sign that its zone of influence stretches well beyond national borders.

TO LEARN HERE IS TO HAVE IT ALL

SPOTLIGHT ON UDEM

IT'S TALKED ABOUT. IT'S ATTENDED. IT'S VISITED. FROM MONTRÉAL TO OUAGADOUGOU, UDEM IS EXPERIENCING AN UNPRECEDENTED LEAP IN PUBLIC AWARENESS, AND IS ATTRACTING THE GENEROSITY OF A GROWING NUMBER OF DONORS.

200,000 alumni



A new communications strategy

If Montrealers are asked which university springs to mind when they think of universities, close to half of them answer Université de Montréal. This is what came out of the latest poll on public awareness of universities held each year by Impact Research for the Université de Montréal.

Dr. Guy Berthiaume, Vice-Rector, Public Affairs and Development, attributes this leap in popularity to the change that has taken place in UdeM's communications strategy in recent years. "Before, the general attitude was to let communities discover our great achievements for themselves. Now, we seek not only to do well, but to be seen to do well."

As this new approach calls for media complicity, UdeM now enjoys closer ties with them. In 1998, the UdeM press attaches received two calls a day from journalists. They now receive close to six, not to mention calls from Anglophone reporters, who are put in touch with UdeM's new Anglophone press attache. Last year, UdeM was the subject of 2,616 mentions in the Canadian media, and its professors and administrators granted 2,197 interviews.

"Our media presence has improved considerably," stresses Vice-Rector Berthiaume, "but the most important thing is that journalists have developed the reflex to ask our experts. So they speak on various news issues, from faits divers to international policy questions and strictly scientific subjects."

What do Pierre Elliott Trudeau, Robert Bourassa, Denys Arcand, Jacques Parizeau, Antonine Maillet, Hubert Reeves and Louise Arbour all have in common? They all walked the halls of UdeM or one of its affiliated schools. One out of every six graduating students in Québec does so from UdeM. Last year the University awarded 9,693 degrees.

The UdeM look

At the same time, the Communications and Student Recruitment Office has worked hard to clarify UdeM's institutional message and redefine its branding. On campus, everyone remembers the master stroke the day after the last provincial election when UdeM published the long, long list of its newly elected graduates in newspapers, under the heading: *La tendance se maintient* (The trend remains firm). The deft simplicity of UdeM advertising has been instrumental in reshaping the University's public profile – and the various promotional campaigns, particularly in the subway system, have won several awards.

All these initiatives have made it possible to unify UdeM's various components under a single banner. "We're working on harmonizing the speech style and the image of various institutional units," specifies Dr. Berthiaume. "There is a UdeM look which is reflected in all publications. A unified tone is also found in the Rector's communications, in the annual report, in press releases, etc."

That includes the website. Since 2000, graphic designers, content writers and webmasters have taken on the monumental task of revising the content and presentation of all the sites on the University's portal, a project made necessary by the growing popularity of 'umontreal.ca'. In January 2003, the main site got 100,000 hits. One year later, that number had tripled. Twice. Without factoring in hits on the library sites and the Guichet étudiant (the student affairs section), each of which can get up to 300,000 hits during the busiest months.

A World of Projects

Last November, UdeM launched a training program in partnership with the Université de Ouagadougou in Burkina Faso to build capacity for population and health research and policy in sub-Saharan French-speaking Africa. The project, which mobilizes a network of demographers and public health experts, attracted a lot of attention because of the generous US\$11.7 million grant from the Bill & Melinda Gates Foundation, set up by the founder of Microsoft.

It was not the only foundation to back UdeM. The J.-A. Bombardier, Jean Coutu, J.-A. DeSève and Hydro-Québec foundations were among the many who answered the call launched in 2000 by UdeM as part of *A World of Projects* campaign. When the curtain fell on this capital campaign in October 2003, a staggering \$218 million had been raised from the private sector and UdeM alumni.

For Dr. Berthiaume, this is one of the defining events of Rector Robert Lacroix's mandate, and a glorious page in the history of Québec philanthropy. "It's a first for a francophone institution. And it's a first for the Québec business community, which was quick to grasp the stakes related to knowledge and higher education for a society like ours." The funds raised have made it possible to create 58 research chairs and to set up 120 scholarship funds in the University and its two affiliated schools.

Open house, open arms to the world

The Vice-Rectorate, Public Affairs and Development has been very active in a recruitment drive for new student clienteles. Between 1999 and 2003, the number of off-campus recruitment activities nearly doubled, from 59 to 106. The Salon des études is more and more popular, and the Open House Day welcomes a growing number of college students. All aimed to get the word out about UdeM's advantages, strengths and incredible range of programs.

The next step of this outreach is to open up English Canada and the vast region south of the border. "UdeM is not well known outside Québec and the French-speaking world," commented Dr. Berthiaume. "Who in Calgary or Boston knows that our institution is the second largest university in Canada?"

To reach this anglophone clientele, the Communications and Student Recruitment Office has translated the main pages of the UdeM website into English and is publishing an English version of *IForum* and *Forum Express*, which report on our professors' research projects. In the last year alone, UdeM took part in a good fifty recruitment events in Canada and the United States, and helped set up the UdeM-HEC Alumni Association in New York, a bridgehead that will be used to extend the University's reach in the US.



A bequest to the Faculty of Music

In September 2004, the Faculty of Music received a grant of close to half a million dollars from Raoul Gadbois, brother of Abbot Charles-Émile Gadbois, the father of *La Bonne Chanson*, a publishing company dedicated to the dissemination of French and French-Canadian songs of quality. The businessman is a loyal friend of the Faculty. In 1986, he created a foundation in his brother's honour to

continue the work of the person who did so much to shape traditional French Canadian culture and who marked several generations of Quebeckers through the publication, among other things, of eleven collections of the best of *La Bonne Chanson*. This year's contribution will go to the Opera Support Fund and will also ensure the production of an opera with the University orchestra.



Lise Gauvin honoured

Everyone knows that writers use words to create their works; we are less aware that they are also constructing the language we use every day. For demonstrating this in a solidly documented personal essay, *La Fabrique de la langue* (The Making of Language), Lise Gauvin, a professor in the Department

of French Studies, was singled out for a special mention by the jury of the 2004 Grand Prix de la critique. This jury is made up of literary critics who are members of the French P.E.N. club. Published by Les Éditions du Seuil, Lise Gauvin's work garnered waves of praise in France and Ouébec.

UdeM philanthropic chairs

Since 1999, UdeM has created more than thirty research chairs with the financial support of private corporations and foundations. Productive partnerships that make it possible to push back the frontiers of knowledge in a great many fields.

- Bell Canada Chair in Industrial Economy
- Bell Canada Chair in Interdisciplinary Research on Emerging Technologies
- Chair in Business Law and International Commerce
- Chair in Poultry Research
- Chair in Religion, Culture and Society
- _ Chair in Scleroderma
- Chair in Toxicological Human Health
 Risk Analysis
- _ CIBC Chair in Breast Cancer Research
- CN Chair on Intermodal Transportation
- Colonel Harland Sanders Chair in Vision Sciences
- Desjardins Chair in Nursing Care for Older Persons and Families
- Doctor Sadok Besrour Chair in Family Medicine
- Eli Lilly Canada Research Chair in Schizophrenia

- François-Karl Viau Chair in Pediatric Oncogenomics
- GlaxoSmithKline (GSK) Chair in Optimal Management of Chronic Diseases
- Hydro-Québec Chair in Integrated Risk
 Management and Mathematical Finance
- Industrial Alliance Research Chair on Leukemia
- L. R. Wilson Chair in Information Technology and Electronic Commerce
- Marie-Lou and Yves Cotrel Chair in Orthopedic Research
- Michael and Renata Hornstein Heart Surgery Chair
- Michel-Saucier Chair in Geriatric
 Pharmaceutical Care
- Paul David Chair in Cardiovascular Electrophysiology
- Pfizer Chair in Atherosclerosis
- Research Chair in Meat Safety

- Research Chair on New Nursing Practices
- Saputo Chair in Biomedical Development of Dairy Products
- Scotia Bank Chair in Diagnosis and Treatment of Breast Cancer
- Study and Research Chair in Teaching Science and Technology in Schools and Colleges
- The Philippa and Marvin Carsley Chair in Cardiology
- Université de Montréal Chair in Arthrosis
- _ Université de Montréal Chair in Prostate
- Université de Montréal Movement
 Sciences Chair at the Mother-Child
 University Hospital Centre –
 Sainte-Justine Hospital
- _ Université de Montréal Notarial Chair
- Université de Montréal Orthopedics
 Research Chair at Sacré-Coeur Hospital

DEGREES AWARDED

JUNE 1, 2003 TO MAY 31, 2004

MASTER'S DOCTORATES **BACHELORS** FACULTIES Arts and Science 131 1,939 706 Continuing Education 154 72 Dentistry 16 446 10 Education 176 **Environmental Design** 184 89 **Graduate Studies** (faculty programs) 79 11 12 Kinesiology (Department of) 66 279 120 Law 57 Medicine 512 501 Multifaculty Programs (baccalaureates) 243 101 75 Music 253 27 Nursing Optometry (School of) 42 9 Pharmacy 125 74 Theology and Religious Studies 20 16 Veterinary Medicine 49 UNIVERSITÉ DE MONTRÉAL 4,436 1,949 243 **POLYTECHNIQUE** 677 340 32 HEC MONTRÉAL 1,211 788 17 TOTAL 6,324 3,077 292 **GRAND TOTAL** 9,693

STUDENTS

FALL 2004 SEMESTER

UNIVERSITY FACULTIES AND SCHOOLS	
Arts and Science	15,913
Continuing Education*	6,591
Dentistry	457
Education	3,180
Environmental Design	1,416
Kinesiology (Department of)	455
Law	1,382
Medicine	4,234
Multifaculty Programs	1,746
Music	704
Nursing	1,742
Optometry	232
Pharmacy	977
Theology and Religious Studies	329
Veterinary Medicine	600
UNIVERSITÉ DE MONTRÉAL	38,959
POLYTECHNIQUE	5,022
HEC MONTRÉAL	11,169
TOTAL	55,150
Graduate Studies**	13,788

^{*}Includes students counted in the "Multifaculty Programs" column who are administered by the Faculty of Continuing Education. In the Fall 2004 Semester, the total number of these students was 999. However, these students are included only once in the total.

Number of students enrolled at the University in the Fall 2004 Semester in exchange programs not listed in this table: 560.

PERSONNEL

	AS AT DECEMBER 1, 2004	AS AT MAY 31, 2004	AS AT MAY 31, 2004	
	UdeM	POLYTECHNIQUE	HEC MONTRÉAL	TOTAL
Professors and Researchers	1,964	210	247	2,421
Clinical Professors, Clinical Lecturers	1,665	_	_	1,665
Lecturers, Clinical Instructors	1,401	448	450	2,299
SUBTOTAL	5,030	658	697	6,385
Managers	349	78	43	470
Professionals	890	65	116	1,071
Technicians	1,121	149	103	1,373
Clerical Personnel	465	204	158	827
Trade and Service Personnel	328	91	56	475
SUBTOTAL	3,153	587	476	4,216
TOTAL	8,183	1,245	1,173	10,601

LIBRARIES*

AS AT MAY 31, 2004

HOLDINGS	UdeM	POLYTECHNIQUE	HEC MONTRÉAL	TOTAL
Volumes	2,372,846	320,487	353,681	3,047,014
Microforms and audiovisual documents	1,842,567	38,013	22,406	1,902,986
TOTAL HOLDINGS	4,215,413	358,500	376,087	4,950,000
SUBSCRIPTIONS				
Periodicals	18,330	5,877	4,981	29,188
Electronic periodicals	7,844	5,713	7,765	21,322

^{*}The Université de Montréal and its affiliated schools offer users the resources of 21 libraries and specialized services.

^{*}Program duration extended; no graduates this year

^{**} Students enrolled in graduate and postgraduate studies are included in the Faculty of Graduate Studies or the School affiliated with their discipline. They are therefore included only once in the total.

INCOME STATEMENT AND STATEMENT OF CHANGES IN FUND BALANCES

AS AT MAY 31, 2004

	2004			2003
OPERATING REVENUE	(in thousands of dollars)	%	(in thousands of dollars)	%
REVENUE	466,155	100	431,697	100
Québec Ministry of Education grant	336,307	72.0	322,034	74.6
Tuition fees	61,027	13.1	59,200	13.7
Student services	7,174	1.6	6,873	1.6
Physical education and sports centre	6,924	1.5	7,325	1.7
Ancillary services	20,018	4.3	17,275	4.0
Investment income	770	0.2	1,161	0.3
Other income	33,935	7.3	17,829	4.1
EXPENSES	469,749	100	424,945	100
Teaching and research	304,058	64.7	263,996	62.0
Academic and research support services	51,115	11.0	42,419	10.0
Student services	7,350	1.6	6,721	1.6
Physical education and sports centre	6,984	1.5	7,299	1.7
Scholarships	7,047	1.5	5,396	1.3
Administration	28,972	6.0	25,080	6.0
Property management	44,108	9.4	52,581	12.4
Ancillary services	16,793	3.6	14,892	3.5
Debt service	2,514	0.5	2,151	0.5
Expenses related to the strike	808	0.2	4,410	1.0
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENSES				
BEFORE OTHER ITEMS	(3,594)		6,752	
Adjustments to the "Voluntary Separation Plan"	(239)		(645)	
EXCESS (DEFICIENCY) OF REVENUE				
OVER EXPENSES	(3,833)		6,107	

TOTAL FUNDS – UDEM AND AFFILIATED SCHOOLS

AS AT MAY 31, 2004

TOTAL FUNDS* (in thousands of dollars)

UDEM POLYTECHNIQUE HEC MONTRÉAL

REVENUE	832,191	162,188	128,766
EXPENSES	764,484	152,397	117,109

^{*}Including funds with restrictions, capital assets fund, endowment fund and raised funds

RESEARCH INCOME

2003-2004

GOVERNMENT OF CANADA	(in thousands of dollars)
Canadian Institutes of Health Research	53,417
Canada Foundation for Innovation	57,553
Natural Sciences and Engineering	
Research Council	40,924
Canada Research Chairs	16,693
Social Sciences and Humanities Research Council	15,601
Others	26,063
SUBTOTAL	210,251
GOVERNMENT OF QUÉBEC	
Fonds de contrepartie FCI	23,191
Fonds de la recherche en santé du Québec	27,052
Fonds québécois de la recherche sur la nature	
et les technologies	8,504
Valorisation – Recherche Québec	13,070
Fonds québécois de la recherche sur la société	
et la culture	7,937
Others	39,142
SUBTOTAL	118,896
CORPORATIONS	63,673
NOT-FOR-PROFIT ORGANIZATIONS	40,691
FOREIGN ORGANIZATIONS	5,329
OTHERS	7,407
SUBTOTAL	117,100
TOTAL	446,247
(2002-2003)	394,426
Change	+51,821
	(+13%)

Source: Financial Services (École Polytechnique, HEC Montréal, Université de Montréal)

FACULTIES AND SCHOOLS

Université de Montréal

Faculty of Arts and Science

- Canadian Centre of German and European Studies
- Centre for Classical Studies
- Centre for East Asian Studies
- Centre for Ethnic Studies
- Centre for Medieval Studies
- Centre for Spanish Language Resources
- Department of Anthropology
- Department of Art History and Film Studies
- Department of Biochemistry
- Department of Biological Sciences
- Department of Chemistry
- Department of Communications
- Department of Comparative Literature
- Department of Computer Science and Operational Research
- Department of Demography
- Department of Economics
- Department of English Studies
- Department of French Studies
- Department of Geography
- Department of History
- Department of Linguistics and Translation
 Department of Pharmacology
- Department of Literature and Modern Languages
- Department of Mathematics
- and Statistics
- Department of Philosophy Department of Physics
- Department of Political Science
- Department of Psychology
- Department of Sociology
- Directorate of Computer Science Services Education
- Directorate of Language Education
- School of Criminology
- School of Industrial Relations
- School of Library and Information Sciences
- School of Psycho-education
- School of Social Work

Faculty of Continuing Education

Faculty of Dentistry

- _ Department of Oral Health
- Department of Reconstructive Dentistry
- Department of Stomatology

Faculty of Education

- _ Centre for Continuing Education
- Centre for Initial Teacher Education
- Department of Didactics
- Department of Education and Administration of Education Studies
- Department of Psychopedagogy and Andragogy

Faculty of Environmental Design

- Institute of Urban Planning School of Architecture
- School of Industrial Design
- School of Landscape Architecture

Faculty of Graduate Studies

Faculty of Law

Faculty of Medicine

- Department of Anesthesiology
- Department of Biochemistry
- Department of Environmental and Occupational Health
- Department of Family Medicine
- Department of Health Administration
- Department of Medicine
- Department of Microbiology and Immunology
- Department of Nutrition
- Department of Obstetrics and Gynecology
- Department of Ophthalmology
- Department of Pathology and Cellular Biology
- Department of Pediatrics
- Department of Physiology
- Department of Psychiatry
- Department of Radiology, Radiooncology and Nuclear Medicine
- Department of Social and Preventive Medicine
- Department of Surgery
- School of Rehabilitation
- School of Speech Therapy and Audiology

Faculty of Music

Faculty of Nursing

Faculty of Pharmacy

Faculty of Theology and Religious Studies Centre for Religious Studies

Faculty of Veterinary Medicine

- Department of Clinical Sciences
- Department of Pathology and Microbiology
- Department of Veterinary Biomedicine

Department of Kinesiology

School of Optometry

- Department of Accounting Studies
- Department of Finance

HEC Montréal

- Department of Human Resources Management
- Department of Information Technologies
- Department of International Affairs
- Department of Management
- Department of Management Sciences
- Department of Marketing Department of Production and
- Operations Management
- Institute of Applied Economics

École Polytechnique

- Department of Chemical Engineering
- Department of Civil, Geological and Minina Engineering
- Department of Computer Engineering
- Department of Electrical Engineering
- Department of Engineering Physics
- Department of Mathematics and Industrial Engineering
- Department of Mechanical Engineering
- Institute of Biomedical Engineering Institute of Nuclear Engineering

AFFILIATED HEALTH-CARE INSTITUTIONS

University Hospitals

- Centre hospitalier de l'Université de Montréal (CHUM)
 - Hôtel-Dieu du CHUM Hôpital Notre-Dame du CHUM Hôpital Saint-Luc du CHUM
- Hôpital Sainte-Justine (Mother-Child University Hospital Centre)

Affiliated Centres and University Institutes

- _ Hôpital du Sacré-Cœur de Montréal
- Hôpital Maisonneuve-Rosemont
- Centres jeunesse de Montréal
- _ CHSLD-CLSC Nord de l'Île
- _ CLSC des Faubourgs
- _ Montreal Heart Institute
- Institut universitaire de gériatrie de Montréal

Affiliated Hospital Centres and Institutes Other Affiliated Health-Care Institutions

- _ Centre hospitalier de Verdun
- _ Cité de la Santé de Laval
- _ Complexe hospitalier de la Sagamie
- Hôpital Louis-H. Lafontaine Hôpital Rivière-des-Prairies
- Institut de réadaptation de Montréal
- _ Institut de recherches cliniques de
- Montréal (IRCM) Institut Philippe Pinel de Montréal

- CLSC Ahuntsic
- CLSC CHSLD du Marigot
- _ CLSC CHSLD Pointe-aux-Trembles/Montréal-Est
- _ CLSC Côte-des-Neiges
- _ CLSC René-Cassin
- _ CLSC Saint-Hubert
- Centre Dollard-Cormier
- Centre de réadaptation Lucie-Bruneau
- _ Institut Nazareth et Louis-Braille
- Institut Raymond-Dewar

RESEARCH UNITS

An up-to-date listing of the research units of the Université de Montréal and its affiliated schools can be found at: www.recherche.umontreal.ca

AWARDS AND HONOURS

THE FOLLOWING LIST PROVIDES AN OVERVIEW OF THE AWARDS AND HONOURS CONFERRED ON THE PROFESSORS, RESEARCHERS AND STUDENTS OF THE UNIVERSITÉ DE MONTRÉAL AND ITS AFFILIATED SCHOOLS IN 2003-04.

Association francophone pour le savoir (ACFAS) Award

 Prix Léo-Pariseau: Jacques Montplaisir, professor, Department of Psychiatry, Faculty of Medicine

Killam Prize

Jean-Jacques Nattiez, professor, Faculty of Music

Royal Society of Canada

- _ Didier Lluelles, full professor, Faculty of Law
- Claude Manzagol, full professor, Department of Geography, Faculty of Arts and Science
- Pierre Jolicoeur, full professor, Department of Psychology, Faculty of Arts and Science

Université de Montréal Award for Excellence in Teaching

- Assistant Professor Category: Christine Théoret, Department of Veterinary Biomedicine, Faculty of Veterinary Medicine
- Associate Professor Category: Roch Chouinard, Department of Psychopedagogy and Andragogy, Faculty of Education
- Full Professor Category: Jean-Jacques Nattiez, Faculty of Music

Canadian College of Neuropsychopharmacology

- 2004 Young Investigator Award: Louis-Éric Trudeau, professor and researcher, Department of Pharmacology, Faculty of Medicine
- Heinz Lehmann Award: Guy Chouinard, full professor,
 Department of Psychiatry, Faculty of Medicine and researcher,
 Fernand-Séguin Research Centre at Louis-H. Lafontaine Hospital

The College of Family Physicians of Canada (CFPC)

 Canada's Family Physician of the Year – The Reg. L. Perkin Award: Francine Léger, professor, Department of Family Medicine, Faculty of Medicine

Québec Medical Association

Teaching-Clinician Award: Louise Samson, full professor,
 Department of Radiology, Oncology and Nuclear Medicine,
 Faculty of Medicine

Pfizer Canada Award of Excellence

 Alain Borsi, holder of a master's in information sciences, School of Library and Information Sciences, Faculty of Arts and Science

Académie des lettres du Québec

 Prix Victor-Barbeau: Robert Melançon, full professor, Department of French Studies, Faculty of Arts and Science

Canadian Veterinary Medical Association

Schering Veterinary Award: André Cécyre, full professor,
 Department of Clinical Sciences, Faculty of Veterinary Medicine

Canadian Association of Physicists

CAP-CRM Prize in Theoretical and Mathematical Physics: Jiri
 Patera, full professor, Centre de recherches mathématiques (CRM)

Canadian Dental Association

 CDA President's Award: Marie-Claude Desjardins, student in the Faculty of Dentistry

Québec Society of Landscape Architects (AAPQ)

 Award of Excellence: Catherine Allard, Anabelle Cadieux, Marc Lescarbeau, Nancy Charlton and Édith Morin, students in the School of Landscape Architecture, Faculty of Environmental Design

Canadian Society of Landscape Architects (CSLA)

- Medal: Sébastien Breton, student, School of Landscape Architecture, Faculty of Environmental Design
- Director's Award: Ophélie Huyet, student, School of Landscape Architecture, Faculty of Environmental Design
- Caroline Fink Scholarship for Excellence: Yannick Roberge, student, School of Landscape Architecture, Faculty of Environmental Design

Association of Universities and Colleges of Canada

 Fessenden Trott Scholarship: Geneviève Marquis, student, Department of Geography, Faculty of Arts and Science

Fernand-Séguin Scholarship

 Raphaëlle Derome, student, Certificate in Journalism, Faculty of Continuing Education

Pointe-à-Callière, Montréal Museum of Archaeology and History Foundation and Pratt & Whitney Canada Scholarship

 Élyse Lemay, master's student in anthropology, Faculty of Arts and Science

Interuniversity Research Centre on Globalization and Work (IRCGW)

 Scholarships: Annie Bélanger, Cathy-Soleil Cyr-Racine, Frédéric Lauzon-Duguay, Karine Pelletier and Élisabeth Woods, master's students, School of Industrial Relations, Faculty of Arts and Science; Sabrina Ruta, doctoral student, School of Industrial Relations, Faculty of Arts and Science; Frédéric Paré, doctoral student, Faculty of Law

HEC-Poly-UdeM Entrepreneurship Centre

2004 Innovation Competition: Philippe-André Généreux, student,
 School of Industrial Design, Faculty of Environmental Design

Environmental Design Research Association (EDRA)

 Career Award: Jacqueline C. Vischer, professor, School of Industrial Design, Faculty of Environmental Design

Canadian Foundation for Innovation (CFI)

- Career Awards: Jacques Archambault, Marko Horb and Daniel Lamarre, Faculty of Medicine;
- _ Shaw Collins, Department of Chemistry, Faculty of Arts and Science

Trudeau Foundation

 Fellowship: Daniel M. Weinstock, full professor, Department of Philosophy, Faculty of Arts and Science

Women's Y Foundation of Montreal

 Health Award: Diane Provencher, professor, Department of Obstetrics and Gynecology, Faculty of Medicine

Engineering Institute of Canada

 David Haccoun, full professor, Department of Electrical Engineering, École Polytechnique de Montréal

Canadian Institutes of Health Research

 Michael Smith Award for Excellence: Serge Rossignol, full professor, Department of Physiology, Faculty of Medicine, and holder of the Canada Research Chair on the Spinal Cord

Québec Order of Nurses

 Florence Award: Francine Gratton, full professor, Faculty of Nursing

Québec Order of Professional Dieticians

 2004 Ross Career Award for Excellence: Michèle Houde-Nadeau, full professor, Department of Nutrition, Faculty of Medicine

Order of Academic Palms

 Chevaliers: Jacques G. Ruelland and Ingo Kolboom, associate professors, Department of History, Faculty of Arts and Science, and Richard Bodéüs, professor, Department of Philosophy, Faculty of Arts and Science

Prix du Ministre de l'Éducation 2003-2004

 Prix spécial du ministre in the category of distance training courses: Volume, qualité de la langue (undergraduate teaching): Alain Polguère, associate professor, Department of Linguistics and Translation, Faculty of Arts and Science

Prix d'excellence of the Académie des Grands Montréalais 2004

- Health sciences sector: Julie Lessard, Ph.D., Molecular Biology Program, laboratory of Dr. Guy Sauvageau – IRIC
- Literature, humanities and social sciences sector: Karim Larose, student, Department of French Studies, Faculty of Arts and Science

Prix d'excellence of the Association canadienne des sociologues et anthropologues de langue française (ACSALF)

 Sophie Mathieu, student, Department of Sociology, Faculty of Arts and Science

Award for Excellence of the Québec Deans of Graduate Studies Association

- Julie Lessard, Ph.D., Faculty of Graduate Studies, Molecular Biology Program, laboratory of Dr. Guy Sauvageau – IRIC
- Philippe Coulombe, doctoral student, Molecular Biology Program, laboratory of Dr. Sylvain Meloche – IRIC

Gaz Métro Blue Flame Award for Excellence

 Jean-Francis Defoy, Lisseth Moreira, Annie Lavigne, students in the School of Industrial Design, Faculty of Environmental Design

Jean A. Vézina Award for Innovation and Excellence

 Jean Raymond, full professor, Department of Radiology, Radiooncology and Nuclear Medicine, Faculty of Medicine

Lizette-Gervais Award

 Marie-Catherine Leroux, Binh An Vu Van and Martine Robergeau, Certificate in Journalism, Faculty of Continuing Education

Molson Award

 Richard Tremblay, professor of podiatry, psychiatry and psychology and holder of the Canada Research Chair on Child Development

Canadian Society of Telehealth

 Special Recognition Award: Marie Carole Boucher, associate clinical professor, Department of Ophthalmology, Faculty of Medicine

Canadian Society of Endocrinology and Metabolism

 2004 Young Investigator Award: Sylvie Mader, professor, Department of Biochemistry, Faculty of Medicine

Canadian Society for Clinical Pharmacology

Distinguished Achievement Award in Clinical Pharmacology 2004:
 Guy Chouinard, full professor, Department of Psychiatry, Faculty of Medicine and researcher, Fernand-Séguin Research Centre at Louis-H. Lafontaine Hospital

EMERITUS PROFESSORS

- François Brisse
 Department of Chemistry,
 Faculty of Arts and Science
- Michael Florian
 Department of Computer
 Science and Operational
 Research,
 Faculty of Arts and Science
- Denis Forest
- Department of Stomatology, Faculty of Dentistry
- Serge Larivière
 Department of Pathology and Microbiology,
 Faculty of Veterinary
 Medicine
- Marc Le Blanc

School of Psycho-education, Faculty of Arts and Science

Claude Manzagol
Department of Geography,
Faculty of Arts and Science

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