



dareto**discover**
report card

ACADEMIC YEAR 2011-2012

Executive Summary

In the fall of 2011, Alex Usher, president of Higher Education Strategies Associates and one of Canada's leading commentators on universities, wrote that "the intellectual centre of gravity of Canada is shifting west much faster than people realize." The University of Alberta is one of the reasons for that shift. In the past five years, we have achieved extraordinary successes: winning four of 10 Canada Excellence Research Chairs, hosting more Natural Sciences and Engineering Research Council Industrial Research Chair programs than any other university, out-pacing all other Canadian universities in the number of 3M Undergraduate Teaching Awards our faculty members have won, and attracting major international partnerships with stellar organizations in China, India, Germany, and Brazil.

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Because of strong provincial investments in expanding and renewing University of Alberta teaching and research infrastructure made in the early 2000s, we have created (and now opened) innovative new buildings (i.e., the Centennial Centre for Interdisciplinary Science, the Edmonton Clinic Health Academy, and the Augustana Library and Forum) and renovated many other spaces to take full advantage of the positive changes that are reshaping post-secondary education around the world—changes such as the rise of interdisciplinary research and teaching, and the incorporation of the full range of new digital technologies in learning.

Increasingly, U of A researchers are becoming the "go-to" people that Canada's major media outlets and government agencies turn to for expert opinion: for example, Wenran Jiang on China, Tim Caulfield on medical health ethics, Arya Sharma on obesity, David Schindler on the environment, and Andrew Derocher on polar bears and climate change in the Arctic. Our students excel in national and international academic competitions in areas as diverse as bio-chemical engineering, industrial design, business, and law.

As Alex Usher notes, the nation is taking notice of our rise—as is the rest of the world. We have made this significant progress in recent years because of our dedicated commitment to fulfilling the vision and mission carefully developed by the full campus community eight years ago in *Dare to Discover*. In striving to strengthen and build on the four cornerstones of *Dare to Discover*—Talented People; Learning, Discovery and Citizenship; Connecting Communities; and Transformative Organization and Support—the faculty, staff, and students of the U of A have made decisions and taken actions that have enriched the learning and discovery environment on our campuses and advanced our reputation for excellence.

The following *2011–2012 Dare to Discover Report Card*, covering the period from April 1, 2011 to March 31, 2012, provides an overview of the many and diverse initiatives undertaken by faculties, departments, and units in the last year. This

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overview is not intended to be exhaustive but is representative of the full extent of the work occurring across the U of A's five campuses.

In addition to these qualitative indications of our progress, there are also 18 quantitative measures included in this report, most of which remain consistent from the last five iterations of the report card. These measures show how the U of A compares with 13 peer institutions in Canada and the United States in terms of a critical inputs and outcomes. A full account of the methodology used is available in Appendix A of this report.

Universities able to attract the following human and financial resources often have a competitive advantage:

- Recruitment and retention of outstanding faculty
- Numbers and quality of graduate students versus undergraduate students
- Student-to-faculty ratio
- Diverse mix of local, provincial, national, and international students
- Numbers and contributions of post-doctoral fellows
- National research funding per faculty
- Operating revenue per student
- Scholarship and bursary expenditures per undergraduate and graduate student
- Endowment per student
- Capital expenditures
- Libraries and information technology infrastructure

Because of that competitive advantage, they also tend to out-perform peers in terms of key outcomes and impact such as:

- Quality and influence of research and publications
- Number of companies that are formed out of research and are successful
- Faculty awards and honours
- Fundraising dollars earned

Taken together, the qualitative content and quantitative data of the 2011–12 *Dare to Discover Report Card* show that the U of A is committed to the fulfillment of its goals, and although challenges remain, the faculty, staff, and students are consistently making significant progress and continuously striving to create an intellectual community dedicated to the public good and the uplifting of the whole people.

Priority: Building Reputation, Generating Benefit

The advancement, enhancement, and when needed, protection of a university's reputation are critically important in today's media-saturated milieu. The U of A's consistent reputation for academic excellence and rigour underpins all of our efforts to secure human and financial resources for the institution, from sources such as government, foundations, donors, and alumni. In addition, reputation is a critical factor in recruiting top students from Alberta, from other parts of Canada, and from abroad.

A recent study reveals that the U of A's overall economic impact on the province's economy is \$12.3 billion—five per cent of Alberta's gross domestic product.

How can we measure reputation? A number of national and international ranking systems attempt to do this each year but with little success. The problems with the methodology used by many national and international rankings are both serious and numerous—and the fact that universities can shift up or down in rankings on annual basis is more of an indication of the weaknesses in the rankings' methodology than in the universities. Many rankings rely on opinion surveys that are based on the subjective judgment of academics, employers, or students who may have little, if any, knowledge of institutions or individual researchers far outside the realm of their own direct experience.

The Shanghai Academic Ranking of World Universities is an exception; this ranking remains relatively stable from year to year because it relies on fixed measurable factors, such as the number of Nobel Prizes and Fields Medals won by alumni or staff, the number of papers published in *Nature* and *Science*, and the number of times publications are cited. These scores are then divided by the size of the institution to determine per capita performance. Please see Appendix B for 2012 and 2011 results, comparing the U of A with our peer institutions in key subject areas.

Perhaps the most important flaw in international ranking is that no organization accurately captures the actual benefits a university with a reputation for excellence—especially one supported primarily by public dollars—brings to its local, national, and international communities.

What are those benefits? A well-educated and engaged citizenry; diversified economic prosperity; sound, evidence-based public policy; highly skilled a knowledge workforce across all professions and sectors of society; and productive national and international partnerships. By these measures, the U of A's reputation is clearly growing. Seventy-seven per cent of U of A alumni remain, find employment, and create businesses in Alberta. More than 9300 students graduate each year, contributing to all areas of the economy, including high demand areas such as health and engineering.

A recent study reveals that the U of A's overall economic impact on the province's economy is \$12.3 billion—five per cent of Alberta's gross domestic product.¹ As Figures 7 and 8 demonstrate, the U of A's capacity to generate viable, long-standing start-up companies based on university discoveries and innovations also ranks an impressive third among our peer institutions, and shows that we generate this new economic activity in a very cost-effective manner.

The U of A's reputation for excellence was also confirmed in the last year by the show of support we received from donors. As Figure 11 shows, an all-time high of \$162.7 million in philanthropic support was recorded in 2011–2012, including \$42 million in gifts to endowed funds, helping to increase the market value of our university's endowment to \$800 million. Some 21,700 individuals, foundations, and corporations donated to the university last year, including 5,700 first-time donors.

¹Briggs, Anthony and Jennifer Jennings. *The Economic Impact of the University of Alberta: A Comparative Approach*. Report commissioned by University of Alberta, 2012.

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On the international stage, the U of A is developing a reputation for devising innovative, multi-level international partnerships that include a range of agreements, such as student exchanges and internships, university-to-university research projects, and university-industry initiatives. The U of A has done this by targeting a limited number of countries—Germany, India, the United States, China, and most recently, Brazil—all of which have excellent international research reputations and have expertise in areas that are aligned with university priorities and provincial priorities.

In addition to creating international research consortia, we have established partnerships with other jurisdictions and institutions that can advance our objectives in undergraduate and graduate recruitment, global citizenship, faculty and student research mobility, innovative graduate programs, and increased federal funding. This includes conducting research, fieldwork, and mentoring on post-secondary program development in Tanzania, Ghana, Korea, and the sub-Sahara.

What's next?

As we continue to move forward with our strategic international initiatives, the U of A's reputation for being an influential contributor, collaborator, and leader in areas important to the global community will also continue to increase. Our designated priority areas—energy, environment, food and bio-industries, water, and health—represent a critical intersection of university strength, provincial interests, and global challenges and opportunities. By focusing and leveraging this intersection of strengths, the U of A will be recognized as an influential partner able to bring together provincial, national, and international organizations, industries, and companies.

Priority: Undergraduate Student Experience

An outstanding student experience is at the heart of an outstanding university, and attracting talented students and providing them with highly competitive, enriched learning experiences continue to be two of the University of Alberta's key priorities. Throughout this report card are examples of significant changes that will enhance our students' experience, from the moment they first visit our website, through to their admission into a program and eventual graduation. More effective services are now in place to support students' success, especially when they encounter academic, financial, or mental health difficulties.

However, from the students' perspective, the quality of their experience depends largely on their access to and engagement with their teachers—our faculty members. In 2012, the U of A won an astounding four of the 10 available national 3M Teaching Fellowships for Excellence in Undergraduate Teaching, bringing our all-time total to 38. The range of our award winners demonstrates that excellence in teaching is a priority across all disciplines in the university; this past year alone, the winners came from pediatrics, psychology, library and information studies, and chemistry.

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As a research-intensive university that values excellence in undergraduate teaching, the U of A is able to provide a learning environment that differs appreciably from most other institutions within Campus Alberta—a learning environment that includes research as an integral part of the undergraduate experience. To that end, the Undergraduate Research Initiative launched in September 2011 and had great success in expanding its activities and attracting major student participation. In partnership with the Students' Union, the URI held the first Undergraduate Research Symposium in November 2011, at which more than 120 students from 12 faculties presented their research. The first competition for the 2012 summer undergraduate research stipend attracted 140 applicants for 41 awards.

What's next?

Over 2011–2012, the worldwide academy witnessed a sharp rise in new forms of online and digital learning strategies and technologies, with some of the world's top universities taking the lead. The U of A has anticipated this change, and in the last few years, we have upgraded our digital infrastructure significantly. All classrooms now have smart technology, the entire campus has moved to Google Apps for Education, and the U of A web environment has been enhanced. The result is that we are now in a position to respond effectively to potentially revolutionary changes in education, and to become a leader in digital learning. In the coming year, the U of A will develop a vision and plan for digital learning that will align with our overall mission and vision, and meet the needs of a new generation of "digital natives."

Priority: Graduate Student Recruitment

Since the inception of *Dare to Discover*, the recruitment of high-quality graduate students from Alberta, Canada, and the world has been a priority for the University of Alberta. An enriched graduate student experience at its best should provide mentorship, inspiration, and support for original, innovative research—research with the potential for revolutionizing old ways of thinking and tired methods of approaching major questions and challenges. To achieve this kind of environment, we need to recruit major talents and create the right mix of undergraduate and graduate students. Our long-term target is to achieve the undergraduate-to-graduate student ratio of 3:1 that is common among our peer institutions. While we have made progress, as Figure 2 indicates, we still lag behind our peers in terms of the number of graduate students we attract. We also face another significant challenge: we are not attracting the calibre of graduate students that the U of A should be capable of recruiting, given the quality of faculty supervisors, facilities, and funding that we can offer.

It is vitally important that we address this challenge. The global competition for graduate students will only intensify as countries such as China and India increase their capacity to provide high-quality education to the millions of young graduate students in their countries. Countries and regions that have a history of strong

investment in graduate students also tend to be regions with impressive records of innovation, productivity, and competitiveness.

What's next?

In the coming year, addressing our short-comings in graduate student recruitment, admissions, and administration will be a priority. In the portfolio review of the Provost's Office undertaken last year, the review committee noted our challenges in this area and suggested a few alternative models for our consideration. We will assess their recommendations as well as a variety of best practices at comparable institutions to determine which alternative structures could fit with the U of A's culture and help us fulfill our aspirations. Our aim is to work and act quickly to put the U of A in a much better position to attract the best calibre of graduate students possible, and to support them as effectively as possible while they are here.

Conclusion

The University of Alberta's recent successes in attracting top talent, creating innovative programs, and building state-of-the-art infrastructure are due in large part to the continuing support of provincial and federal governments. Over the next three year, the Alberta government has indicated that the university will receive annual increases of two per cent. Given that funding increases of three to four per cent are necessary to maintain the current complement of services, consistent and strong advocacy will be required as the new provincial government begins the work of setting new priorities. It is crucial that the U of A—and the benefits that we bring to the province—be central to that planning.

The University of Alberta is a great university. We continue on the path of becoming even greater. University of Alberta faculty, staff, and students, with the support of partners in government, business, and the broader community, are committed to meeting our own high expectations for excellence and earning our reputation as one of the world's top public research universities through our achievements and service to the province, the nation, and the world.

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our **cornerstones**

Talented People

Learning, Discovery and Citizenship

Connecting Communities

Transformative Organization and Support

cornerstone 1

talented **people**

The world's most talented faculty, most promising students, most dedicated staff—the world's most creative thinkers, most prolific researchers, most innovative teachers—seek a university that offers the support, facilities, and commitment to excellence they need to thrive. The right environment is essential if the University of Alberta is to become a supermagnet for superstars.

Strategies and Achievements

THE STRATEGY: **Attract outstanding students from Alberta, Canada and the world.**

As the province's flagship postsecondary institution, the University of Alberta is the destination of choice for hundreds of Alberta's top high school students each year. However, the university is aware that students have choices and complacency is not an option. The Registrar's Office, working with students and the Campus Community, is striving to create a dynamic student-focused space, both physical and virtual, to provide exceptional service throughout the recruitment and admissions process. In order to fulfill this vision, a project team was formed in 2011; it has already developed a transformational service delivery model and is in the process of designing an organizational structure to support execution of the new model.

On September 6, 2011, the RO launched a new website (admissions.ualberta.ca) for prospective undergraduate students, offering a one-stop shop for recruitment and admissions information which is much easier for prospective students to navigate and use.

Along with the website launch, new resources were devoted to a social media strategy for both national recruitment and the main UAlberta Facebook pages, where event information, advice

on applying, deadline reminders, and other useful admissions tips can be posted. The creation of tools, such as "Reg the Robot", an online character who helps students navigate the admissions process, and U of A stories, news clips and videos, has doubled the number of Facebook users to more than 10,000.

The 2011 Open House had the highest attendance on record with approximately 7200 guests. Campus tours were provided throughout the day by 50 student volunteers. The majority of visitors came from Alberta, but

prospective students living in Vancouver, who had met President Samarasekera earlier in the month, also came to the event to apply and receive early admission. This year, 178 students in total were offered "on the spot" admission.

In 2011, due to targeted recruitment efforts, the number of Ontario residents entering the Faculty of Law increased to 29, up from 8 in the previous year. The Faculty of Law participated in the Toronto Law Forum, along with representatives of 110 other North American law schools, and also held an event in March 2012, hosted by McCarthy Tétrault in Toronto, for Ontario students who had received offers of acceptance. The event was organized by D.J. Lynde, a graduate of the

U of A Paleontologist Honoured

Sir Edmund Hillary: the first European to conquer Everest. Neil Armstrong: the first man to walk on the moon. And, now, . . . Philip Currie: the man who discovers dinosaurs. After decades of globetrotting in search of dinosaur bones, University of Alberta paleontologist Philip Currie was honoured earlier this year with the prestigious Explorers Club Medal, awarded to explorers and scientists, such as Hillary and Armstrong, who travel to remote and unexplored territories. Founded in 1904 by Arctic and Antarctic explorers, the Explorers Club is a professional society dedicated to advancing field research and to preserving and honouring the instinct to explore. Currie, who has worked at both the north and south poles and many points in between, was awarded the medal for his extensive contributions to paleontology, including his leadership in the founding of the Royal Tyrrell Museum in Drumheller.

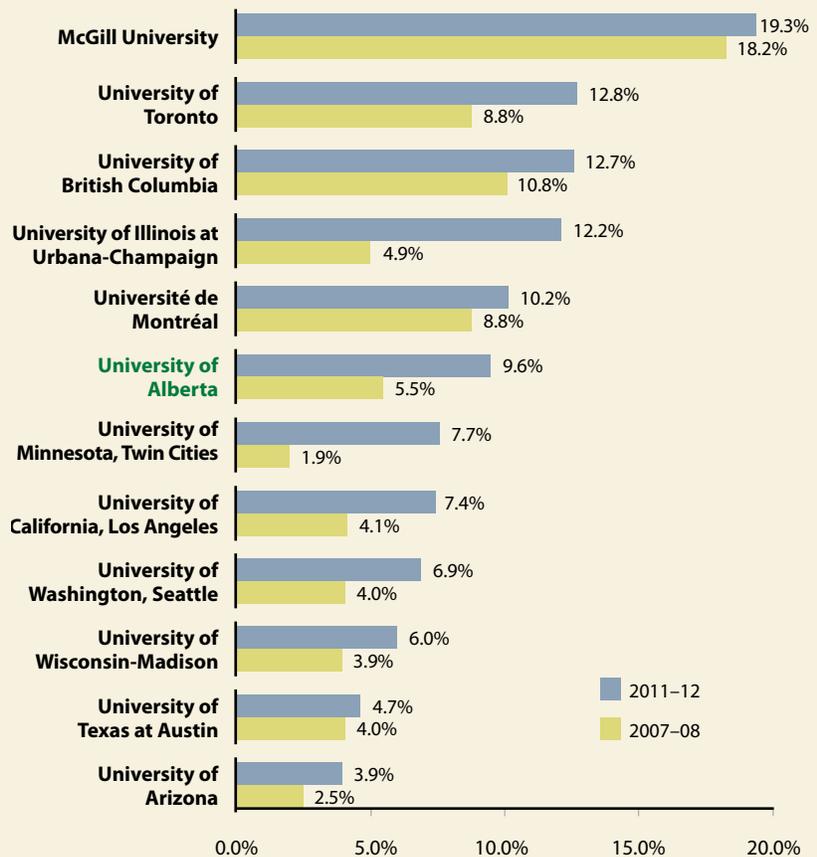


international students:

In a global economy, students who work and learn with those who are from outside their home country will be better prepared to succeed in diverse work environments. In addition, there are financial, cultural, and reputational benefits to internationalizing the University of Alberta.

FIGURE 1

International Student Proportion of Undergraduate Enrolment, University of Alberta and Selected Peers, 2007–08 and 2011–12



Notes: Enrolment represents headcount of all full-time and part-time undergraduate students, excluding: post-graduate medical experience residents. First professional programs (law, medicine, dentistry) are excluded from this chart because the American system categorizes these as graduate programs.

Sources: U15 and G10 Data Exchange for 2011–12 and 2007–08, respectively, Canadian institutions' enrolment data JS enrolment data from respective institution's Common Data Sets

class of 2010, who invited a number of other recent graduates to meet the accepted applicants and encourage them to attend the U of A.

In the Faculty of Engineering, undergraduate enrolment is at an all-time high for the 15th consecutive year, and is in the top 5% of over 400 engineering faculties in North America by size and quality.

International student recruitment also remains a U of A priority. In an age of globalization, universities around the world recognize the benefits of a diverse student population. Since we began tracking international student enrolments at our peer institutions, we have seen a marked increase in the numbers in almost all of the institutions.

At the U of A, international students comprise 9.1 per cent of the total undergraduate population (See Figure 1), while our graduate student rates are considerably higher at 31.5 per cent of total graduate student population. This marks an increase of nearly 2.5 per cent from 2010–2011.

Among U of A's international student population, new international student starts increased by 22.4 per cent over 2010, with total international enrolment increasing by 19 per cent (2,535 to 3,011) and graduate international enrolments increasing by 10.3 per cent (2,126 to 2,344) in particular.

Looking ahead, application growth for fall 2012 is very positive. As of March 1, 2012, applications from China are up 47 per cent, India 34 per cent, Hong Kong 54 per cent, and Kenya and Tanzania 44 per cent. Overall, all applications coming from outside of Canada have increased by 25 per cent.

To maintain and enhance these successes in international recruitment, U of A International administered an international student satisfaction survey in fall 2011 called "The International Student Barometer." Forty-one per cent of U of A international students responded. A working group has been formed to assess the survey outcomes and identify action steps to take in the immediate and medium term. Of the 70 per cent of students who reported using UAI's International Student Services, 94 per cent were satisfied.

The U of A's Bridging Program, created to help incoming international students complete their English-as-a-second-language requirements, moved into its second year, increasing enrolment

Award-winning Student Services

Petra Cegiely, Aboriginal Student Advisor at the University of Alberta's Augustana Campus, specializes in relationship-building. Hired in 2007, she quickly became well known as someone who not only goes out of her way to help, but does so with creativity, dynamism, and generosity. Because of her outstanding work, Cegiely was presented with the 2011 Marion Vosahlo Outstanding New Professional Award at the Alberta Services for Students Conference. This award recognizes a student services professional, with fewer than five years of full-time experience, who has made a significant contribution in that role. "Petra is a pillar of student services," says Mark Chytrcek, Director of Student and Residence Services at Augustana, responsible for hiring her to launch their first Aboriginal Students Office. "Her work has been transformative."



from 230 last year to 335, representing 11 countries. This year, the program was expanded to include additional courses as well offer unique activities to further engage international students. As well, U of A+, a new one-week program to assist international undergraduates in their academic success, was launched in August 2011. This program will be expanded to two weeks for August 2012, assisting 100 students.

Aware of the importance of social media in international recruitment activities, UAI increased the fan base of its Facebook page for prospective international students from about 3,000 to more than 11,700 fans, the largest fan base of any UAlberta Facebook page.

In addition to increases in international student registrations, the number of participants in the Visiting Student Certificate Program grew by 79 with a total of 109 students attending from 21 partner universities. This program is designed to give students attending universities outside of Canada a study-abroad opportunity during which they can earn credit towards their degrees while also taking English language instruction.

The Faculty of Arts' international profile continues to flourish, attracting 1,004 international undergraduate students from 71 countries—an increase from 796 students and 53 countries one year ago.

THE STRATEGY: Create a dynamic, discovery-based learning environment by aiming for a mix of undergraduate and graduate students typical of leading public universities.

Many leading public research universities have a 3:1 ratio of undergraduate-to-graduate students, a mix that helps to foster a dynamic, discovery-based learning environment. The University of Alberta has an undergraduate-to-graduate student ratio greater than that of top public four-year universities and must make a substantial investment in graduate students to reach its target. As has been mentioned in past report cards, the global competition to attract the best and brightest graduate students is intensifying and the U of A could be doing better. Over the last year, our undergraduate-to-graduate student ratio has remained steady at 3.6:1 (see Figure 2). Our aim going forward is to improve graduate student recruitment efforts and have greater success in attracting more of Canada's top students.

To that end, work has begun on a new, and vastly more efficient, online application system for graduate admissions. The system will allow for electronic submission of documents as well as web-based review of applications by programs, and should reduce departmental processing times by weeks. The target implementation for this system date is September 2012.

A new U of A Doctoral Recruitment Scholarship scheme, launched in December 2010, was also assessed and refined with the aim of improving the U of A's success rate in attracting top graduate students.

Due to dedicated efforts over the last five years, the Faculty of Pharmacy has increased graduate student enrolment from 38 in 2007 to 63 in 2011.

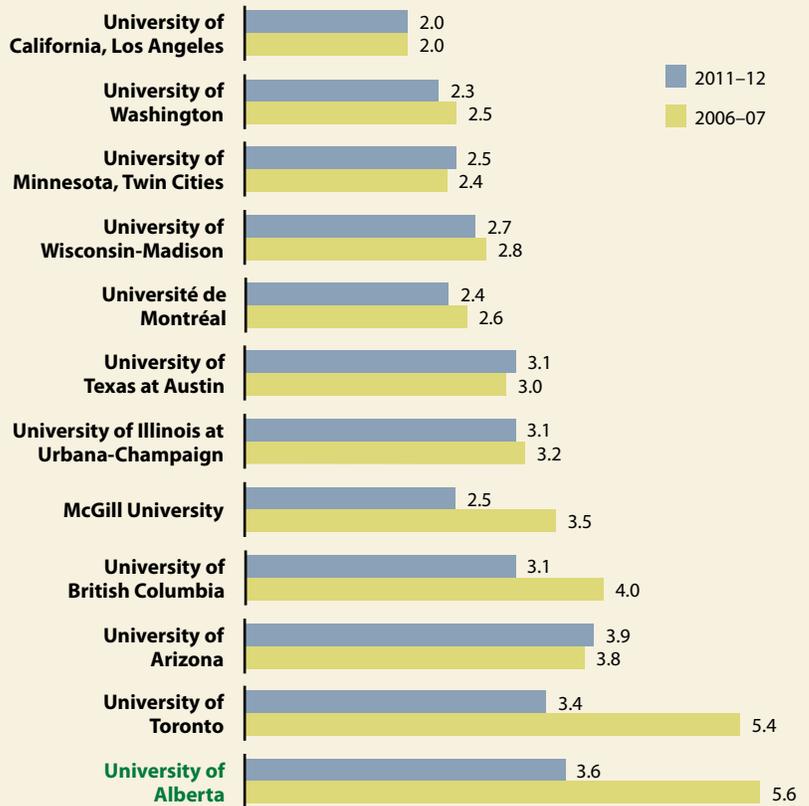
In the summer of 2011, UAI managed, administered, and evaluated 71 short-term internships for students from India and China, an effort which has had significant positive impact on graduate recruitment. In 2012, the Research Internship Program was expanded to include nine countries and 20 strategic partners. As of March 31, 2012, 628 applications for 78 summer 2012 positions have been received from student participants.

student ratios:

Most top-ranked institutions have relatively low undergraduate-to-graduate student and student-to-instructor ratios, which are indicative of a high-quality learning environment where students have ample access to instructors and the learning opportunities they offer.

FIGURE 2

FTE Undergraduate Students to FTE Graduate Students, University of Alberta and Selected Peers, 2006–07 and 2011–12



Notes: FTE (full-time equivalent) students are calculated by adding the count of all full-time students to one third the count of part-time students.

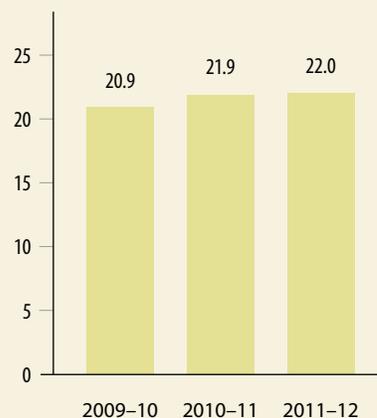
Post-graduate medical education residents are excluded.

First Professional students (i.e. students in the medical, dental, and law programs) are reflected in the graduate student counts, not the undergraduate student counts.

Source: U15 and G10 Data Exchange for 2011–12 and 2006–07, respectively, Canadian institutions' enrolment data Common data sets for respective US institutions' enrolment data

FIGURE 3

FTE Student to Faculty Ratio, University of Alberta, 2009–10 to 2011–12



Notes: Enrolments based on active fall enrolments. Post-graduate medical education students are excluded. FTE (full-time equivalent) represents the number of full-time students plus one-third the number of part-time students, and is based on the number of individual students within each reporting category.

Source: Student enrolments based on U of A RegStats Archive data as of December 1 of each respective academic year. Faculty counts based on U of A Human Resources data as of October 1 of each respective academic year.

THE STRATEGY: Attract post-doctoral fellows, researchers, and visiting faculty from around the world to join the academic community already in place.

In many areas of research conducted at the University of Alberta, advances depend heavily on the contributions of highly productive post-doctoral fellows. In 2011–2012, the U of A hosted 555 post-doctoral fellows, most from countries outside of Canada.

In addition to post-doctoral fellows, the U of A welcomed several international scholars in 2011–2012 through the Distinguished Visiting Scholar Program from institutions as diverse as Ludwig-Maximilians University in Germany, Osaka Prefecture University in Japan, Yale University and Pennsylvania State University in the United States, Nanyang Technological University in Singapore, and The Open University in the United Kingdom.

A number of faculties also brought in visiting scholars to share their knowledge and expertise with students. For example, the Faculty of Native Studies hosted renowned scholar Dr. Jacqueline Peterson from Washington State University; Maori scholar Alice Te Punga Somerville from the University of Victoria in Wellington, New Zealand; Native American activist, environmentalist, economist, and writer Winona LaDuke; and Richard Wagamese, Ojibway author, journalist, and storyteller.

The Faculty of Extension's City-Region Studies Centre welcomed Dr. Sérgio Benicio de Mello from Brazil's Federal University at Pernambuco, School of Business; Dr. Keli Pan, from the College of Law at Linyi University in China; and Dr. Hamid Abdollahyan from the Faculty of Social Sciences at University of Tehran.

THE STRATEGY: Improve access for rural, Aboriginal, and non-traditional students through partnerships with colleges and by linkages with high schools across the province, and improve affordability by enhancing bursaries and scholarships.

In fall 2011, a total of 262 new self-identified Aboriginal students began their studies at the University of Alberta, resulting in a total enrolment of 868 self-identified Aboriginal undergraduate students, an increase of 59 students since 2010. Aboriginal graduate enrolment also increased over the same period from 99 to 134 in fall 2011.

In the Faculty of Native Studies in particular, student enrolment increased 13 per cent over 2010, with an 18 per cent increase in course registrations overall. FNS also celebrated the convocation of its first graduate student, awarded an interdisciplinary PhD in Environmental Sociology and Native Studies.

In addition to delivering services to support Aboriginal students, the U of A's Aboriginal Student Services Centre (ASSC) took a lead role in ensuring that the university recognizes, celebrates, and benefits from its Aboriginal communities through several initiatives, including the annual Round Dance and Aboriginal Students' Conference.

As of June 2011, the Faculty of Medicine & Dentistry's Indigenous Health Initiatives Program graduated 73 physicians and continues to see a steady increase in Aboriginal applicants into medicine. Throughout 2011–2012, IHIP co-ordinated with several urban and rural schools as well as Aboriginal organizations to present at workshops aimed at exposing youth and undergraduates to the fields of medicine, dentistry, and medical laboratory sciences. Communities visited include Fort Vermilion, Fort Chipewyan, Beaver Lake, Woodland Reserve, Alexis Nakota Sioux Nation, Siksika and Alexander. Working in conjunction with Treaty 6, 7, and 8,

IHIP also hosted on campus 48 youth from remote Aboriginal communities for Health Horizon Days, a four-day program of hands-on workshops, lectures, and networking.

Professor Fay Fletcher in the Faculty of Extension is currently the principal investigator of a collaborative project between Health Canada, First Nations Inuit Health, Blue Quills First Nations College and the University of Alberta that has piloted an Aboriginal Health Promotion Accreditation program. Through this program, 17 health promotion students from several of Alberta's First Nations will receive accreditation by June 2012. Traditional and western skills and knowledge are integrated throughout the program with the goal of increasing relevant, appropriate, and effective health promotion strategies at the grassroots, community level.

THE STRATEGY: **Recruit and retain outstanding and diverse academic staff through endowed professorships, competitive start-up funding, and attractive career support, and by providing a vibrant intellectual climate that celebrates and rewards achievement.**

In 2011–2012, the University of Alberta hired 54 new operating funded full-time faculty (38 assistant professors, four associate professors, and 12 full professors) and reappointed and promoted 51 more. In addition, 12 trust funded faculty were appointed (10 assistant professors, one associate professor, and one full professor).

Balancing these gains is a nearly equal number of departures. Fifty-three operating funded full-time faculty left the U of A (26 resignations, 23 retirements, and four other terminations). Among trust funded faculty, there were 11 resignations and one retirement.

While faculty numbers have held steady, student enrolment has continued to increase. As a result, U of A's student-to-faculty ratio has also continued to increase in 2011–2012 to 22:1 (see Figure 3). Greater provincial investment in the university's operating budget will be needed to reverse this trend and bring us closer to our goal of 15:1.

Although achieving a competitive student-to-faculty ratio remains a challenge within current budget constraints, the U of A continues to achieve important success in attracting and retaining top scholars. Eight new Canada Research Chairs were awarded to the U of A during 2011–2012: five Tier 2s and three Tier 1s. Fourteen previous appointments were renewed and three CRC holders were promoted from Tier 2 to Tier 1. This brings the total number of CRCs active during 2011–2012 to 96. The total value for the year of these awards was \$13.7 million.

In July 2011, 16 new Campus Alberta Innovation Program (CAIP) Chairs were created by Advanced Education and Technology to attract and recruit top research talent to the province. The U of A received seven of these chairs. Six of the seven positions are expected to be filled by June 30 while discussions continue with potential candidates for the last one.

In the Faculty of Engineering, six new NSERC Industrial Research Chair programs were awarded funding during 2011–2012. With a new total of 16, Engineering, on its own, now has more NSERC-IRCs within its ranks than any other Canadian university as a whole.

THE STRATEGY: **Recruit and retain the best staff by fostering a culture of excellence within a healthy and safe workplace, by providing progressive career opportunities, and by rewarding leadership and outstanding accomplishments.**

The University of Alberta consistently attracts and retains outstanding staff members. In 2011–2012, University of Alberta filled 54 administrative officer positions. Twenty-seven of these positions were filled with individuals who were new to the university. Throughout

the administrative staff ranks, six faculty service officers and eight librarian positions were reappointed or filled. On the support staff side, a total of 285 positions were filled, 160 of which were filled by individuals new to the university.

THE STRATEGY: Enhance the global perspective and intercultural climate at the university by celebrating and drawing upon the diversity within it.

In February 2012, the University of Alberta's Global Education Program presented International Week 2012. Devoted to the theme "Living Democracy: Citizen Power in a Global Age," the annual event included 63 presentations, exhibits, and presentations, and attracted a total of 7,000 participants. A citizenship ceremony was hosted at which 85 new Canadians received their citizenship.

In addition to International Week, the Global Education Program co-ordinated over 30 events during 2011–2012, in partnership with community, faculty, and student groups. Distinguished guests included Hon. Anne McClellan, former deputy prime minister; Palagummi Sainath, U of A honorary degree recipient; Alan Whiteside, HIV/AIDS health economist from the University of KwaZulu-Natal, South Africa; and Brooklyn River from the National Assembly of Nicaragua.

At the faculty level, students from the Faculty of Arts claimed the top three places, plus three honorable mentions, in a Chinese writing contest sponsored by the Chinese Journal 光華報. This remarkable success led to a special agreement with the journal to publish U of A students' work regularly.

Lifetime Achievement

Among the gamut of major international research awards, there are some that truly stand out. One of those is the Gairdner Award for medical sciences, which, for a remarkable number of recipients, has been the precursor to the Nobel Prize. In March 2012, Vice-President (Research) Lorne Babiuk received the Canada Gairdner Wightman Award "for his extraordinary national and international leadership in vaccine development and research in human and veterinary infectious disease control." Because of work early in his career, the rotavirus is almost eliminated in North America and declining worldwide. Approximately one third of all human deaths are caused by the infectious diseases that claim Babiuk's attention. "I've always been interested in seeing how research can help society," says Babiuk. "Vaccines, in my opinion, are one of the most effective ways to improve economic activity and quality of life while reducing rates of sickness and death. I wanted to do something that has relevance to people and society."



In response to the devastating earthquake in Japan in March 2011, a bursary support system known as "Hope for Japan," proposed by Mimi Hui, Executive Director of the Faculty of Extension's English Language Program, and coordinated by Languages Canada, offered scholarships to 150 Japanese students to study English in Canada at any one of 30 accredited language schools, including the U of A.

To acknowledge and celebrate its international student body, Campus St Jean integrated a new flag raising event this year. At the event, flags are raised for each country represented by students; the flags continue to be visible throughout the year at CSJ's main entrance.

cornerstone 2

learning **discovery** *and* **citizenship**

Great universities stimulate learning and discovery that is cutting-edge, generating new knowledge, innovations, and discoveries that transform everyday life. The world-class university of tomorrow—which the University of Alberta aspires to be—will contribute to scientific, social, and cultural structures of global society in ways that will allow them to change and grow, creating and sustaining prosperity and well-being for future generations.

Strategies and Achievements

THE STRATEGY: Create an exceptional and life-changing university experience for students through curricular and co-curricular offerings that integrate learning, discovery, and citizenship to develop the intellect and the imagination, educate leaders, and enhance a global perspective.

Faculties and units across the University of Alberta are in a constant state of evolution in response to the changing needs of students and society more broadly. Additions and changes to degree programming, increased opportunities for experiential learning and international study, and improved student services are all integral to the university's mission of educating citizens and leaders of the future.

Several new degree and certificate programs were approved or launched in 2011–2012:

- » PhD in Performance Studies (initiative of the Department of Drama began accepting applications winter 2012)
- » PhD in History of Art, Design and Visual Culture (initiative of the Department of Art and Design began accepting applications winter 2012)
- » MBA/BSc in Pharmacy (joint initiative of the faculties of Business and Pharmacy and Pharmaceutical Sciences approved in January 2012)
- » BA in Environmental Studies (joint initiative of the faculties of Arts and Agricultural, Life and Environmental Sciences launched Sept 2011)
- » BSc and BA degrees in planning (began accepting applications winter 2012)
- » Certificate in Aboriginal Sport and Recreation (joint initiative of the faculties of Native Studies and Physical Education and Recreation launched Sept 2011)
- » Certificate in Community Mental Health: Theory and Practice (initiative of Augustana Faculty approved in October 2011)
- » Certificate in Writing Studies (initiative of Augustana Faculty approved in March 2012)

With the aim of creating a more coherent and relevant undergraduate program for students, the Faculty of Education approved a revised bachelor of education program model.

In an effort to help students facing academic difficulties following their first midterms, a working group in the Office of the Dean of Students spearheaded two “Take Back the Term” conferences in October 2011 and February 2012. In total, the two conferences provided information and support to almost 200 undergraduate and graduate students.

Formed to give U of A students access to direct research experience at the undergraduate level, the Undergraduate Research Initiative (URI) continues to be a success. The first-ever competition for undergraduate summer research stipends attracted 140 applicants for 41 awards. The URI's “Researcher in Residence” information program has attracted more than 15 students to each of its three sessions since Feb 2012. In November 2011, the URI also supported the Students' Union's Undergraduate Research Symposium and will be providing similar support to the Kule Institute for Advanced Study (KIAS) conference in August 2012.

In another undergraduate research initiative, the Faculty of Engineering provided 74 undergraduate students with the opportunity to become involved in leading-edge projects through participation in the Dean's Research Award program.

The Office of the Vice-President (Research), in conjunction with the School of Energy and Environment, also established the Shell Enhanced Learning Fund, which provides funding

student experiences:

Students learn most effectively in innovative teaching and learning settings that challenge and reward them. The National Survey of Student Engagement shows high levels of student satisfaction are rooted not only in social activities, but also in the variety and quality of their learning and discovery activities. Students' satisfaction with their educational experience and outcomes can lead to a productive lifelong relationship with their university.

FIGURE 4

Percentage of Senior Students indicating they have done the following applied learning activities

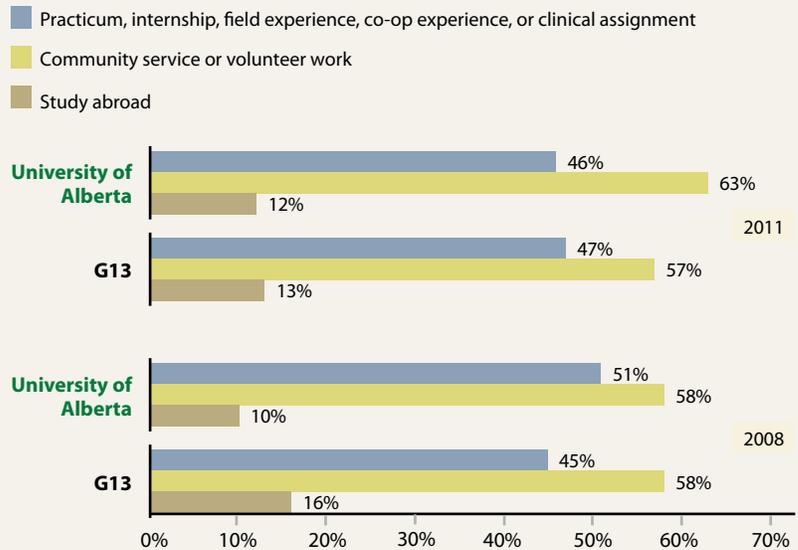


FIGURE 5

Percentage of Senior Students Rating Their Educational Experience as Good or Excellent



Source: U of A Frequency Distribution Report, NSSE (National Survey of Student Engagement), 2008 and 2011.

Aboriginal Teacher Education Program

The challenges are well-known: young people in Alberta's First Nations drop out of high school at a rate that far exceeds the rest of the population. The result? The potential of thousands of Alberta's young



people is in danger of being lost. In an effort to help reverse these trends, the University of Alberta's Faculty of Education is now working in partnership with colleges in central and Northern Alberta in a joint Aboriginal Teacher Education Program. Through the program, students working towards a bachelor of education in elementary education can complete their degrees close to home, where

they can maintain close ties to community, family, and cultural traditions and are able to take courses focussed on Aboriginal forms of knowledge and pedagogy. The objective is to create a uniquely prepared group of teachers, committed to providing high quality, consistent education throughout Alberta's rural Aboriginal communities.

to students in energy- and environment-related fields to facilitate engagement in experiential learning activities.

In terms of providing education abroad experiences (EAP), the university sent approximately 1,000 students to over 40 countries in 2011–2012. More than 300 students participated in EAP-managed programs (exchanges, summer and short term programs, and internships) and 490 students participated in faculty-managed EAPs, involving more than 100 post-secondary institutions.

To help facilitate these endeavours, U of A International overhauled the student financial support model for education abroad programs. Funding and adjudication processes were restructured and streamlined, bringing significant changes to how central funds are disbursed to

students seeking an education abroad experience. UAI awarded approximately 500 scholarships in 2012, up from less than 200 in 2011. Students now have a 50 per cent chance of receiving funding either through an Individual Study Abroad Award or the Group Study Abroad Program Award, a program in which faculty members lead a group experience abroad and disburse funds to participants.

Of note is the fact that in 2011–2012, 234 Arts students studied abroad (154 in faculty-led programs, 63 in formal exchanges and 17 in internships), more than any other faculty within the university.

THE STRATEGY: **Engage students through mentorship and peer-based activities such as clubs, athletics, and social events to inspire high achievement, improve retention, and enhance graduation rates.**

A wide variety of co-curricular activities, programs, and services continue to enrich student life at the University of Alberta and promote student success.

Through U of A's Campus Recreation programs, more than 26,600 students, staff, and community members participated in fitness classes, sport leagues, recreation activities, and special events. A few breakout statistics of note include the intramural program, which offered 72 activities involving 13,274 participants, and the sports club program, which registered 20 clubs with 877 active members.

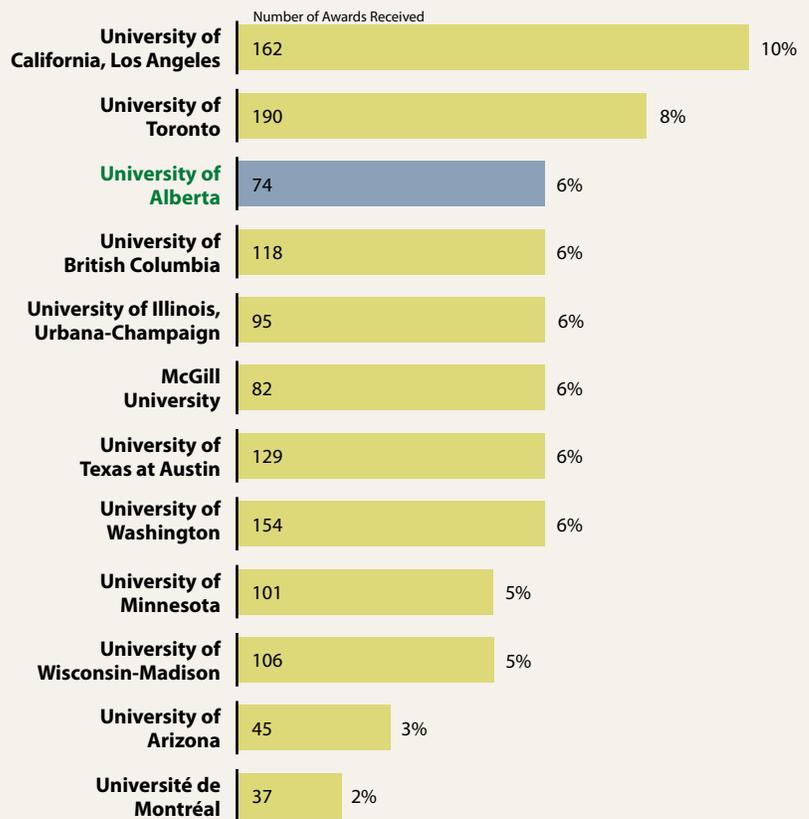
On February 3, 2012, the U of A successfully regained the Guinness World Record for the largest dodgeball game. The record was broken when nearly 5,000 students, staff, and alumni congregated at the Butterdome to play. This is the third time that U of A has broken the record,

faculty awards:

External recognition in the form of awards and honours validates excellence in the University of Alberta faculty in a way that makes sense to stakeholders, potential students, faculty recruits, and the general public. Most universities include such awards in their “brag points” and seek out such recognition in order to position themselves effectively among their peer institutions. It should be noted that not all US awards are open to Canadians, and there are not as many awards offered in Canada as in the US.

FIGURE 6

Percentage of Full-Time Faculty Receiving Selected Awards and Honours, University of Alberta and Selected Peers, 2001 to 2011



Awards include: 3M Teaching Awards (2001–2011), American Academy of Arts and Sciences (2001–2011), CIS Coach of the Year Award (2001–2011), Federal Tri-Council Highest Awards (2001–2011), Fulbright Scholars (2001–2011), Guggenheim Fellowship Awards (2001–2011), ISI Highly Cited Researchers (inception–2011), Killam Research Fellows (2001–2011), Molson Prize (2001–2011), National Academy of Engineering (2001–2011), National Academy of Sciences (2001–2011), Nobel Prize (inception–2011), Royal Society of Canada (2001–2011), Royal Society of Canada Awards (2001–2011), Royal Society of London (2001–2011), Sloan Research Fellowships (2001–2011), Steacie Fellows (2001–2011).

Sources: Award data from individual awarding organizations
Faculty counts based on Statistics Canada: Salaries and Salary Scales of Full-time Teaching Staff at Canadian Universities, 2001/2002 through 2010–2011: Final Reports

and to date, it remains ours. As in past years, Alumni Affairs and the Dean of Students Office provided major support to this Students' Union initiative.

The U of A's Golden Bears and Pandas continue to be highly competitive contenders in Canadian Inter-university Sports. This past season, our teams won one CIS national championship (men's curling), four Canada West conference championships (men's soccer and basketball, women's volleyball and wrestling), and two Western Regional titles (men's curling and tennis). Overall, 544 athletes from 15 faculties and open studies competed on 2011–2012 Golden Bears and Pandas varsity teams in 2011–2012. More than one million dollars in athletic scholarships were distributed to U of A athletes.

Many U of A athletes also excel academically. In the 2010–2012 season, the U of A finished second in the nation to Laval University by having 124 athletes named Academic All-Canadians, a title which denotes that the athlete has maintained an average of 80 per cent or better while competing on a varsity team. The U of A now boasts a total of 1,842 AACs, the second-highest total in the country. What separates the Golden Bears and Pandas from McGill, the historical AAC leader with 1,931, is the fact that U of A has won 61 Canadian championships in its history, while McGill has won four. U of A also runs away from the field in Canada West, with more all-time AACs than the universities of Calgary (1,365), British Columbia (893), Manitoba (940), Saskatchewan (796), and Victoria (509).

Inspiring students to be their best occurs off the playing field as well. The Emerging Leaders Program, a pilot program organized by the Dean of Students in conjunction with Residence Services and the SU, was designed to develop and enhance leadership and citizenship skills among student leaders. Upon completion in spring 2012, the first cohort of participants received a non-credit certificate and recognition through their co-curricular record.

Undergraduates in the Alberta School of Business hosted three major national competitions this year. In addition, 238 business undergraduates participated in 21 inter-university competitions, winning three and finishing in the top three in another seven. One of the three competitions hosted were the MBA games, the largest and most comprehensive MBA competition in Canada. U of A students participated in eight competitions at the MBA games, winning one and finishing in the top three in three others. The win came in the Financial Executives International Case Competition, the most prestigious in the country. The Alberta MBAs became the first team to successfully defend their championship.

Peer programming with and for international students also continues to be strong, with 120 students volunteering in 2011 as peer mentors to help ensure new international students were welcomed and settled on campus. Later in the year, eight students volunteered to help 105 international students file their first Canadian income tax return.

International students themselves also became involved in volunteer programming. Through the Bridges Student Speakers Program, they made 110 presentations to local schools and groups.

THE STRATEGY: Foster scholarship and discoveries that are transformative and at the cutting edge by rewarding quality and impact over quantity and by enhancing cross-disciplinary initiatives.

As a leading public research and teaching institution, the University of Alberta has a special role to play in contributing to and advancing research and public discourse related to major global challenges and opportunities. Water is one such area. Under the auspices of a new Water Initiative, researchers from across campus have met repeatedly over the past year to discuss how to marshal their collective capacity in new ways to increase their impact in addressing water

challenges. In early March 2012, the U of A mounted a dynamic public event in which three global leaders in water (Sunita Narain, Peter Brabeck-Letmathe, and Steve Hrudý) were awarded honorary degrees and participated in an enlightening panel discussion led by the CBC's Diana Swain. Following the event, a group of international leaders from academic, industrial, and non-governmental organizations working on water issues gathered at the university to give their advice on how the U of Alberta, a public teaching and research university, can engage and collaborate with the public and private sectors, as well as international partners, in the area of water research.

This past year also marked the launch of the Canadian Mountain Studies Initiative. The CMSI consists of 28 academic members from four faculties (Physical Education and Recreation; Agricultural, Life and Environmental Sciences; Arts; and Science), creating a team with a diverse, multidisciplinary view of one of Canada's strongest natural assets, the mountains.

THE STRATEGY: Foster national and international research collaborations that advance understanding and generate knowledge to address global challenges.

The University of Alberta is working with the universities of Toronto and British Columbia on a proposal to form and operate the new Canada-India Research Centre of Excellence. The

federal government announced in the 2011 budget that it would dedicate \$15 million over five years to the establishment of this centre. Our initial proposal was one of four selected to move forward into the full proposal process; a decision will be made in late fall 2012.

The Perfect Runner: The U of A in Motion

Niobe Thompson, a research associate with the U of A's Canadian Circumpolar Institute and local filmmaker, loves to run. When he began feeling pain in his knees, his pain inspired a film. The resulting documentary, *The Perfect Runner*, examines how the human body evolved to run perfectly and to what degree contemporary life may have compromised that evolution. Based on the work and research of Jim Denison and Larry Bell, both with the U of A's Canadian Athletics Coaching Centre, *The Perfect Runner* includes stunning slow-motion footage of U of A athletes, elite Ethiopian runners, and Artic reindeer herders. Sponsored in part by the U of A's university relations and research offices, the movie has screened at Edmonton's Garneau Theatre and aired on the CBC's *The Nature of Things*.



In March 2012, the U of A played the lead role in bringing together the presidents of Canada's U15 universities with the presidents of 28 peer institutions in Germany for a roundtable discussion in Berlin on the potential for future research collaborations between the two countries. A steering committee, which includes President Samarasekera, was struck to follow up on the outcomes of the discussion.

The Helmholtz-Alberta Initiative, founded at the U of A in 2009, continues to expand into new areas, including infectious diseases, and ecosystem and resource informatics. The Helmholtz

Association of Germany has earmarked €400,000 per year for up to three years for the first phase collaboration in infectious diseases. Planning is underway to apply for a second phase of funding, which would consist of €800,000 per year for up to five years.

U of A activities in China also continue to grow. With Prime Minister Stephen Harper looking on, U of A vice-president (research) Lorne Babiuk and Weihe Xie, vice-president of Tsinghua University, signed an historic agreement on February 9, 2012 in China. The five-year agreement will create the Sino-Canada Joint Energy Research Initiative, enabling research projects in energy

and environment technologies, as well as the development and commercialization of those technologies. It also provides opportunities for student and faculty exchanges between the two institutions.

China's Ministry of Science and Technology (MOST) approved a \$500,000 per year award to support virology collaboration between U of A and China. Discussions are also underway with Fudan University regarding a Fudan-Alberta Virus Institute.

Finally, the scope of UAlberta's relationship with the China Scholarship Council also expanded through the delivery of the first-ever University Management Program in March 2012. Twenty-five university administrators from top Chinese universities received 11 weeks of training in the key areas of managing and running a successful university.

THE STRATEGY: Demonstrate the contribution of university discovery and scholarship to public policy and enhance these social, cultural, and economic dividends by celebrating and rewarding achievements in knowledge translation and dissemination.

One measure of the University of Alberta's activity in transferring knowledge into the public sphere can be seen in the annual report of TEC Edmonton. In the year ending March 31, 2012, TEC Edmonton worked with eight U of A spinoff companies and four U of A pre-incorporated projects, developing 19 licenses or options to use technologies accumulating \$909,956 in total licensing revenue.

As Figures 7 and 8 show, U of A researchers are among North America's best at creating long-term, sustainable companies which bring associated societal benefits. The U of A ranks fourth among our peers in the number of continuing spin-offs created since 1991 (10th in all of North America). Given the current amount of our total institutional research expenditures, the U of A is highly successful in spawning and sustaining new companies when compared to other institutions with much greater total research expenditures (third among our peers).

Within the university, the Faculty of Agricultural, Life and Environmental Sciences has generated more royalties than any other faculty (\$1.3 million in commercialization revenue) since 2007. They continue to build on this record. In 2011–2012, ALES submitted 19 reports of invention were generated by ALES researchers, and 10 patents were issued.

A second measure of knowledge transfer is the number of times U of A faculty are cited by their peers in the vast body of scholarly literature. Since 2005, the average number of citations per U of A faculty in all fields has been steadily increasing (see Figure 9), which indicates that the research being conducted at the U of A is reaching a broad international scholarly audience and, more importantly, is having an increasing impact upon the advancement of human knowledge and scientific research.

A third indicator of knowledge transfer can be seen in various ways that research can influence public policy and social attitudes. Faculty, students, and alumni from Women's Studies, for example, were partners in a community-academic-police collaboration called SAVE (Sexual Assault Voices of Edmonton), which produced an internationally praised behavioural marketing campaign called "Don't be that guy." In the past year, this campaign ran across Canada, Australia, New Zealand, Scotland, and select cities in the United States. It was nominated for an Alberta Solicitor General Crime Prevention Award.

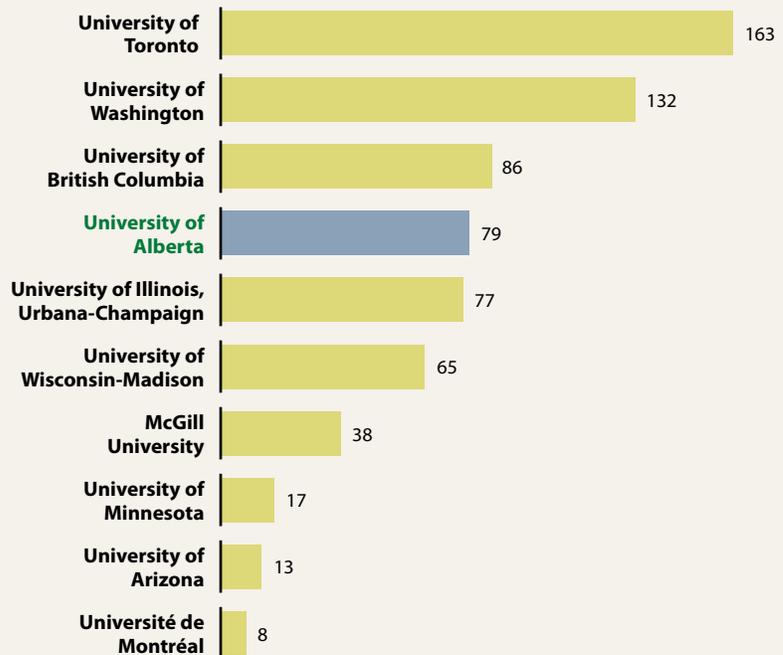
Research conducted by the Alliance for Canadian Health Outcomes Research in Diabetes (ACHORD) in the U of A's School of Public Health is providing international leadership in

bringing discoveries to market:

University-based research discoveries that have practical implications in modern society can have enormous positive impacts if successfully and sustainably brought to market. They can also have a marked effect on local, national, and international economies.

FIGURE 7

Continuing Spinoffs 1991–2010

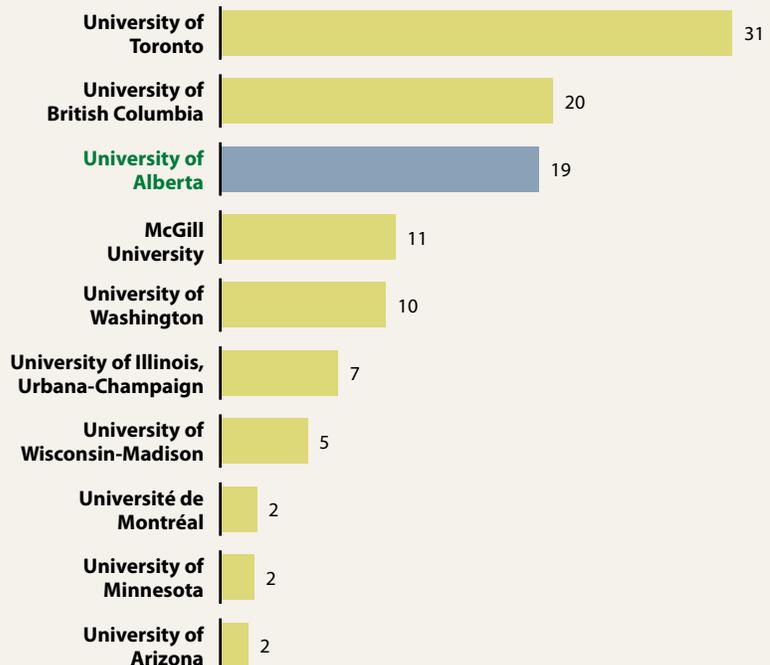


Notes: Startups still in operation reflect companies started at any time during the report period that are still in operation as of the most recent AUTM Licensing Survey.

Source: AUTM Licensing Surveys

FIGURE 8

Continuing Spinoffs per 1 Billion \$ of Total Research Expenditure 1991–2010



Notes: Startups still in operation reflect companies started at any time during the report period that are still in operation as of the most recent AUTM Licensing Survey.

Source: AUTM Licensing Surveys

translating research efforts to health policy, with a particular focus on diabetes management. Pharmacoepidemiologic research produced by ACHORD has influenced clinical practice and drug policy, and has improved the care of patients with diabetes in North America.

Joanna Harrington, professor in the Faculty of Law, was invited to deliver a course on international human rights to government officials in Suriname. The course was sponsored by the United Nations Development Program and the Surinamese Ministry of Justice and Police.

J.C. Cahill in the Department of Biological Sciences was selected as the lead scientist for a one-hour episode of the long-running CBC science series, *The Nature of Things*. The episode was titled “Smarty Plants: Uncovering the Secret World of Plant Behaviour.”

Finally, perhaps one of the most important vehicles for demonstrating the U of A’s impact in society is media coverage. Analytics that compare media coverage of the U of A with that received by the universities of Toronto, British Columbia, Calgary, and McGill show that we increased our overall media coverage in 2011–2012 from an 18.7 per cent share to a 20.4 per cent share of the total coverage received by all five institutions.

More important, the quality of that media coverage also improved over the last year. The U of A was mentioned more often in the headlines of stories and the U of A’s name featured more often among the first key 150 words of stories than in the last year, so that our average prominence in news coverage increased from 19.4 per cent to 21.2 per cent of total coverage received by the five institutions. Stories about the U of A also appeared more often in publications with the greatest credibility, reach, and impact.

Below is a sampling of the top stories coming out of the U of A in 2011–2012 with regional, national, and international impact:

- » April 2011: Tom Peacocke recognized with lifetime achievement award at mayor’s arts gala, for his work in teaching and mentoring practically every theatre professional there is in Edmonton.
- » Sept 2011: MS breakthrough showing that increasing steroids in the brains of multiple sclerosis patients may regress attacks.
- » Oct 2011: Discovery that oxygen-breathing bugs thrived on land 100 million years earlier than estimated.
- » Nov 2011: Announcement that the U of A leads the country in federally funded industrial research chairs, with the unprecedented addition of six positions.
- » Feb 2012: Researchers move closer to finding hepatitis C vaccine that appears to work against all the major strains of the disease.

THE STRATEGY: Reward and recognize the excellence of individuals in teaching, groundbreaking scholarship and contributions to community and nation-building as public intellectuals and professionals.

The University of Alberta not only enables each individual’s pursuit of excellence, but also recognizes and celebrates the value of outstanding individual contributions. Providing such recognition and reward both enhances the university’s reputation and improves faculty and staff retention. As is shown in Figure 6, a dedicated drive to nominate worthy faculty members for prestigious awards has yielded significant results in recent years, bringing us in line with many of our peer institutions with six per cent of U of A faculty receiving major honours and awards.

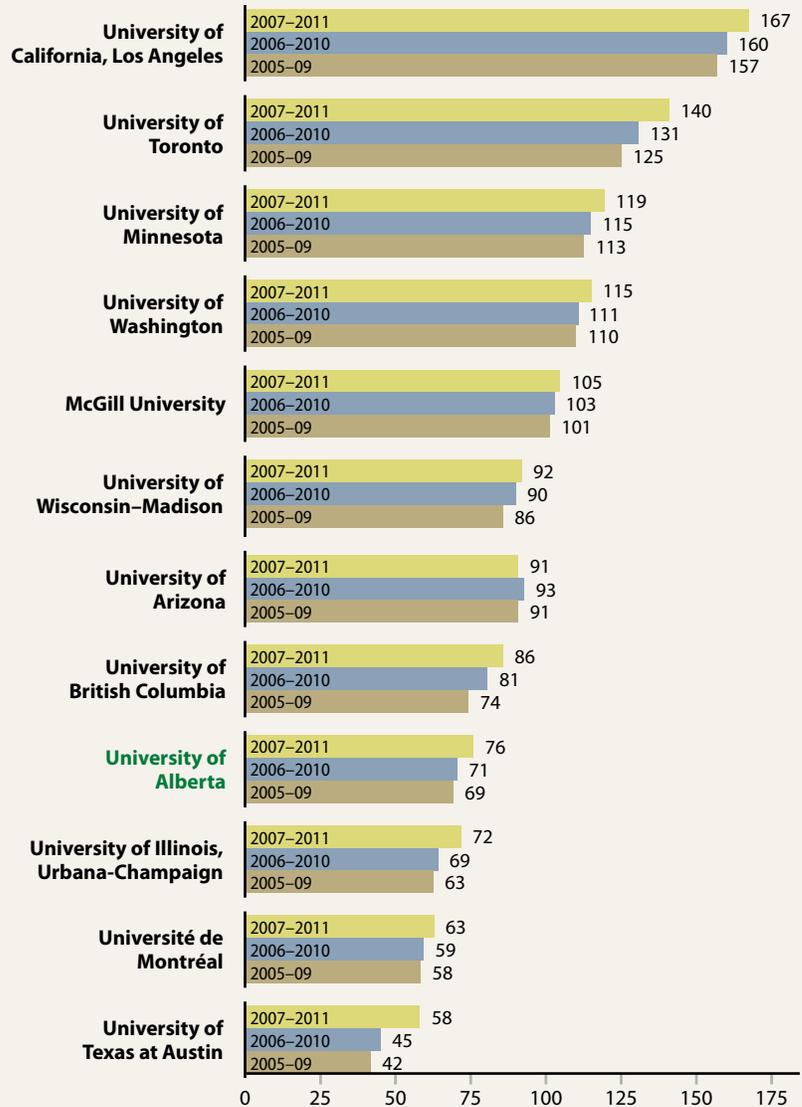
Highlights of the awards and honours received by U of A faculty in 2011–2012 include six elections to the Royal Society of Canada, two elections to the Canadian Academy of Health Sciences, and one election each to the Agricultural Institute of Canada and the American Academy of Nursing.

citations:

The number of times a faculty member's work is cited by peers is strong validation of excellence. Top universities use citations as a key indicator of productivity, relevance, and quality.

FIGURE 9

Citations in All Fields per Average Full-Time Faculty, University of Alberta and Selected Peers, 2005–2009, 2006–2010 and 2007–2011



Notes: Staff figures represent averages for the reported years. 2011–12 UCASS figures are not available.

Sources: InCites™, Thomson Reuters, (2012). Global Comparisons, 5-year trends.

Canadian university faculty counts based on Statistics Canada: Salaries and Salary Scale of full-time staff at Canadian Universities Reports
US university faculty counts based on their respective Common Data Sets for each respective year.

Other notable honours include the following:

- » Lorne Babiuk, vice-president (research), was awarded the prestigious Canada Gairdner Wightman Award for his achievements in immunology.
- » Professors emeritus Brian Evans (East Asian studies) and Thomas Peacocke (drama) were awarded the Queen Elizabeth II Diamond Jubilee Medal for their contributions to Canadian society.
- » Philip Currie (biological sciences) joined the ranks of Robert Peary, Edmund Hillary, and Neil Armstrong after being awarded the Explorers Club Medal in New York in March 2012.
- » Harald Baayen (linguistics) was awarded a \$6.5 million prize as the Alexander von Humboldt Professor (taken up at the University of Tübingen, Germany).
- » David Bundle, Todd Lowary, and John Klassen (chemistry) received the prestigious Brockhouse Canada Prize for Interdisciplinary Research in Science and Engineering from the Natural Sciences and Engineering Research Council of Canada.
- » Mark Lewis (mathematical sciences/biological sciences) was awarded the CRM-Fields Pacific Institute for Mathematical Science Prize, Canada's premier award for research achievements in the mathematical sciences.
- » Deepali Kumar (medicine) won the Royal College of Physicians and Surgeons of Canada Gold Medal in Medicine.
- » Hue Wang, a recent doctoral graduate in rehabilitation medicine, won the International Society for the Study of the Lumbar Spine Prize in Clinical Research, the highest international research honour in the area of common spinal disorders.

A proven leader in undergraduate teaching, the U of A also exceeded all expectations in this year's 3M National Teaching Awards competition. Four—out of only 10 new 3M fellows nationwide—call our university home: Sarah Forgie, associate professor of pediatrics; Charles Lucy, professor of chemistry; Toni Samek, professor of library and information studies; and Connie Varnhagen, professor of psychology.

THE STRATEGY: Inspire students, faculty, and staff alike to engage in activities that develop leadership, foster social and moral responsibility, and contribute to the further development of our society and its institutions.

Success by Failure

The professors in the U of A's industrial design program use an unusual approach to inspire their students to do their best work: they teach their students how to fail. "If you're not prepared to fail," says Robert Lederer, head of the program, "you'll never be creative." Counter-intuitive it may be but it is a teaching approach that regularly leads to extraordinary successes. In February, student Laila Steen was awarded the best student design award at the Interior Design Show, Canada's largest contemporary design fair. Robert Faulkner, another student, won the Grand Prize in *Avenue Magazine's* 2012 Design Contest for his "Chute" table. Where might all of this success end up? Just ask Erin Cochran a former design student now working at Nike. The athletics equipment giant first noticed of her talents in shoe design at the U of A, where, she says, "[they] were amazed with what we do here."



The University of Alberta's community service-learning program, which sends students into a variety of community organizations as part of their course requirements, continued to grow in 2011–2012. More than 750 undergraduate and graduate students actively engaged with community projects as part of 60 courses, primarily in the Faculty of Arts (up from 45). At Augustana Campus, an additional 350 students participated in CSL courses.

The Faculty of Law has established a program of Global Community Service Grants of \$5,000 each to provide financial assistance to students who

wish to become involved in summer projects that serve the larger community, either in Canada or abroad.

As part of the certificate in Aboriginal governance program offered by the Faculty of Native Studies, credit is given for active service with Aboriginal and non-Aboriginal community organizations. Ten students participated in this program in 2011.

Increased citizenship opportunities were also created for students in the Faculty of Nursing. For examples, first year students who completed their first clinical rotation at Boyle Street Community Services participated with community members and collaboratively planned BSCS's first ever community garden named "From the Ground Up." Several other nursing students participated in innovative, non-traditional placements in organizations such as the Candora Society of Edmonton and Michener Park Centre, where they helped to provide sustainable family programming.

In the first annual Heroes for Health challenge, six Faculty of Rehabilitation Medicine students took home the silver medal for developing a mental health website to help students experiencing depression, undue stress, and burnout.

connecting **communities**

Can one of the world's great universities be at once exclusive, yet inclusive? Exceptional, yet accessible? The University of Alberta's goal is to be recognized not only for being great, but also for being good: for effectively contributing to the communities that rely on us for solutions, for ensuring that our students understand the value of volunteering, and for building partnerships and networks that link Alberta to the world.

Strategies and Achievements

THE STRATEGY: Engage alumni in a mutually beneficial lifelong relationship with the University of Alberta, enlisting their support to achieve the university's vision and to assist us in connecting to communities around the world.

Signalling a shift in emphasis within the activities of alumni affairs, the Office of Alumni Affairs officially changed its name to the Office of Alumni Relations in 2012. This change highlights that the University of Alberta's vast body of alumni is conceived as a family, with each alumnae/alumna connected by shared experiences and shaped over time by a long-term relationship with the university. Building and sustaining that relationship are many initiatives and programs of Alumni Relations.

In 2011–2012, the Office of Alumni Relations facilitated nearly 557,000 connections with alumni and students, increasing participation rates across almost all programming activities.

Participation in alumni and student programming efforts grew an overall 36 per cent. Through the addition of festival-style events, programming in the Edmonton region drew 59 per cent

more alumni and family participants. Likewise, new offerings in the "Educated" series attracted 47 per cent more participants, and innovations in the regional branches resulted in a 35 per cent increase in attendance. All of this growth was achieved while maintaining high satisfaction ratings (96 per cent of participants rated alumni programs as good to excellent). Also of significance,

Where's the U of A?

Open up your window on the new Advancing Alberta website and you'll find a virtual pincushion map marked with the location of dozens of U of A research projects, partnerships, initiatives, and programs active across the province. The site uses the technology of Google maps to highlight a diverse selection of U of A activities, ranging from research documenting the Ukrainian churches that dot Alberta's rural communities to DiscoverE workshops aimed at cultivating high school students' interest in careers in engineering, science, and technology. Also "pinned" to the map are many fast facts about research stations, student enrolment and the location of alumni throughout Alberta. The U of A is Alberta's flagship university, visit www.advancingalberta.ualberta.ca to find out why.



these programs were successful in attracting a balance of new (51 per cent) and returning attendees (49 per cent).

Social media continued to be an increasingly effective outreach tool. Followers of the U of A Alumni Twitter account grew by 76 per cent; the number of views of the alumni YouTube channel increased by 173 per cent; and connections on LinkedIn expanded by 85 per cent.

Strategic focus was also placed on identifying notable alumni and engaging alumni volunteers. A new volunteer advisory group was formed in Toronto. An intensive research project helped identify 1,000 notable alumni living in Edmonton, Calgary, Vancouver, Toronto, San Francisco, and Hong Kong—an essential effort to support future relationship building. As well, the award-winning Alumni Ambassador program expanded to 259 members.

Alumni Association affinity programs, which are essential for funding alumni programs, continued to perform well. Total revenues of \$1.4 million represented a 10 per cent increase over the previous fiscal year.

The School of Public Health formed a new Alumni Chapter, appointed an executive committee, created an accountability centre for alumni relations, administered an alumni engagement survey and developed a three-year alumni relations plan.

Career and Placement Services also provides a number of programs and services that facilitate the transition from student to alumnus/alumnae, on the one hand, and encourage the engagement of alumni with students, on the other. Some of these include maintaining a database of professionals for students to consult on career information; running a Job Shadow Week during which alumni host students in the workplace; and offering an ongoing Career Mentoring Program. The current year's program involved 13 students and 14 alumni mentors.

THE STRATEGY: Build strong partnerships with the capital region, the cities of Edmonton and Camrose, other urban and rural Alberta communities, and all orders of government in order to fulfill our responsibility as Alberta's university, a leader on the national stage with global connections.

In partnership with the city's Edmonton Arts Council and Capital Power, the University of Alberta's Festival of Ideas presented "An Evening with Michael Ondaatje" in November 2011. The event drew an audience of more than 1,000 people, attracting potential partnership interest from some of Canada's other major literary events, such as Toronto's International Festival of Authors @ Harbourfront and Calgary's Wordfest.

The university signed a memorandum of understanding with the City of Camrose and Camrose County to build a performing arts complex at Augustana Campus that will serve a large number of local and regional groups. Various agreements and plans are being finalized, with an anticipated construction start date in summer 2012.

The university is also working with the City of Edmonton to develop a partnership through which the vacated Art Gallery of Alberta space in Enterprise Square will be used as a showcase for our respective museum collections and the work of local and university artists.

THE STRATEGY: Foster partnerships with business and industry to advance mutual goals for supporting talented people by creating employment and internship opportunities for our students, by providing access to lifelong learning, by identifying research challenges, and by translating and disseminating our research outcomes.

The amount of external funding received through University of Alberta partnerships with industry and business increased significantly in the past year. In the fiscal year 2011–2012, \$59.4 million in research revenue was received from more than 300 national and international companies—an increase of nearly \$18 million, due mainly to growth in investment and support from Canadian partnerships.

In September 2011, the Faculty of Extension launched a new Citation in Entrepreneurship. In collaboration with the Ismaili Council of Edmonton, students from the pilot cohort had the opportunity to work with supportive mentors from Edmonton's business community. The program is designed to foster entrepreneurial spirit and empower participants to maximize individual and collective success.

In collaboration with Alberta Health Services, the Faculty of Medicine & Dentistry is developing a large-scale initiative in precision diagnostics, with the aim of garnering industry partnerships.

The Canadian Centre for Clean Coal/Carbon and Mineral Processing Technologies in the Faculty of Engineering secured new commitments totalling \$5.5 million from Xstrata, Vale, TransAlta, and Dr. G. Farquharson to support its operations, which involve faculty members and researchers from several universities, companies, and national laboratories.

THE STRATEGY: Foster excellent relationships (agreements) with Alberta Health Services and other provincial health organizations, the post-secondary sector, the public sector, and non-governmental organizations to further enhance the quality of life in our society.

The Faculty of Medicine & Dentistry has been collaborating closely with Alberta Health Services and other provincial partners on a variety of initiatives in the past year. In collaboration with AHS, the faculty launched six strategic clinical networks and will launch another six in 2013, each in core areas of clinical care. (e.g. children's health, primary care, mental health and addictions, obesity and diabetes, heart disease, etc). In addition, there are three ongoing operational clinical networks in emergency medicine, surgery, and critical care.

FOMD and the School of Public Health also collaborated closely with the University of Calgary's Faculty of Medicine, the University of Lethbridge's Faculty of Health Sciences, Alberta Innovates–Health Solutions, and AHS to create the Campus Alberta Health Outcomes and Public Health Initiative.

The U of A also worked with partners in the Alberta Academic Health Network to establish a Provincial Academic Alternative Relationship Plan. The plan compensates academic physicians for roles in education, research, clinical innovation, and leadership, and will allow the U of A to increase teaching capacity to meet expanding needs. The framework principles were approved by the provincial government in December 2011, with the transition mostly occurring during 2012. New disciplines are expected to be added in 2013–2014.

The Alberta Transplant Institute was established this year by FOMD to bring together transplant researchers, clinicians, and educators under a cohesive entity and mission.

Engaging Communities for 100 Years

With University of Alberta's first president Henry Marshall Tory at the helm, no professor could be a homebody. From the early days of the university, U of A professors were out on the road, delivering lectures on subjects as diverse as painting and soil retention. They talked to people and gathered information on



what Alberta's citizens most needed from the university. In 1912, Tory formed the Department of Extension and hired one of the university's top new graduates—a physical giant of a young man who later became a giant of life-long learning well-known across the province: A.E. Ottewell. Celebrating their 100th anniversary this year, the Faculty of Extension now reaches communities across Canada and the globe, with faculty members such as Cindy Blackstock, whose research focuses on active citizenship and rights of children in Canada's Aboriginal communities, and Gordon Gow, whose work in communications and technology is helping to improve early tsunami warning systems in Sri Lanka.

A first-of-its-kind faculty position, shared between the U of A's Faculty of Pharmacy and Pharmaceutical Sciences and the U of C's Department of Family Medicine, was created and filled to support interprofessional experiential education in Calgary.

A new inter-professional student clinic was also developed by the Faculty of Rehabilitation Medicine in conjunction with Edmonton's Glenrose Rehabilitation Hospital to promote and facilitate inter-professional learning.

THE STRATEGY: Enhance relationships with other nations to create learning opportunities for students, research collaborations to address global challenges, and initiatives that foster mutual understanding, global peace, and prosperity.

The University of Alberta continues to strengthen and extend our ties with international partners throughout the world. During 2011–2012, the university hosted more than 30 delegations of government and institutional dignitaries, supported 15 outgoing missions, and signed more than 100 agreements with approximately 88 distinct organizations and institutions in 31 countries.

The Alberta School of Business embarked on initiatives to enhance the internationalization of its programs, appointing academic champions for each of the four international majors in the undergraduate program, and providing financial support for all undergraduate students taking language courses beyond the 100 level. In the undergraduate program, two study tours to China and Europe occurred in spring 2012.

In the Faculty of Agricultural, Life and Environmental Sciences, a Land Reclamation International Graduate School was established with funding from the National Sciences and Engineering Research Council's CREATE program. The first of its kind in the world, LRIGS is dedicated to educating highly qualified land reclamation professionals with the skills, knowledge, and experience necessary to take on leadership roles in academia, government and industry.

Two centres in the Faculty of Education—the Canadian Centre for Research on Literacy and the Centre for Research on Youth, Science Teaching and Learning—are collaborating on a joint research initiative on the link between language, literacy, and science learning with the Weizmann Institute of Science, Rehovot, Israel.

Also in Education, Elaine Simmt is collaborating with colleagues at the U of A, Brock University, the Institute for Educational Development, Aga Khan University East Africa, Mzumbe University, the Tanzania Institute of Education, and non-governmental partners including the Tanbur African Aid Society and Partners for Health, Education and Environment in a series of international research and development projects in Tanzania, exploring possibilities for mathematics teacher development in rural and remote communities.

In 2011, Chorale Saint-Jean toured France to much acclaim.

THE STRATEGY: Promote community pride and participation in the University through its physical and intellectual openness and opportunities for ongoing dialogue and discussion.

During the spring and summer of 2011, the Faculty of Engineering's DiscoverE staff provided a record 758 workshops in 126 schools in 45 communities, with 18,498 students participating. This included 45 remote northern communities, involving 8,728 students in communities such as Inuvik, Aklavik, Tuktoyaktuk, Yellowknife, Dettah, Teslin, Watson Lake, Fort Chipewyan, Fort McKay, Fort McMurray, Beaverlodge, Cold Lake/Bonnyville, St. Paul, Grande Prairie, Grande Cache, and Kikino Métis settlement near Lac La Biche, etc.

Since the opening of the new observatory on the roof of the Centennial Centre for Interdisciplinary Science in late summer 2011, the facility has attracted more than 3,500 visitors, including elementary school groups, summer camp participants, other youth groups, and the public.

Campus Saint-Jean has been working closely with the Bonnie Doon Community League to build strong neighbourhood connections; together they organized the annual Bonnie Fest and found a solution to long-standing and contentious parking issues.

THE STRATEGY: Engage with, serve, and draw strength from the diversity of our external communities, in particular Aboriginal, Franco-Albertan, multicultural, rural, and northern communities.

The University of Alberta is strongly committed to playing an instrumental role in the preservation, development, and enhancement of Alberta's francophone, Aboriginal, and northern communities.

In September 2011, the Faculty of Arts filled a new Aboriginal advisor position to assist with Aboriginal student recruitment, retention, and community engagement.

Augustana Campus strengthened its Aboriginal community connections by inviting guest speakers such as Richard Van Camp, novelist, and Sharron Proulx-Turner, poet; increasing

Aboriginal enrolment to 53 (a doubling over three years); joining the Alberta Aboriginal Recruitment Network; and assigning a staff member to serve as Aboriginal recruitment specialist.

Faculty of Extension professor Fay Fletcher is currently collaborating with colleagues from the U of A and the Alexis Nakota Sioux First Nation in the adaptation, delivery, and evaluation of a school-based drug and alcohol prevention program. She is also working with the Enoch Cree Nation's Family Health Working Group,

exploring strategies for integrating health services. Most recently, she has partnered with Native Counselling Services of Edmonton in an examination of a formal education program that may positively affect the health of urban Aboriginal women.

Based in the Faculty of Native Studies, the Rupertsland Centre for Métis Research, an academic centre dedicated to research with and for Métis communities, was launched in May 2011. It is jointly funded by the Métis Nation of Alberta and the U of A.

To Kenya and Back

Drama professor Jan Selman, recently inducted into the Royal Society of Canada and the Edmonton Hall of Fame, is lending her expertise to the birth of a university nearly 14,000 km away from the University of Alberta's north campus. Working with a team from Aga Khan University, Selman spent several months over the last year and a half in Nairobi, Kenya, helping to shape and establish the AKU's first Faculty of Arts & Sciences in eastern Africa. Developing specific programming and research activity for the Digital Arts, Expressive Arts (performance, design, visual art, music and creative writing) and Business for the Arts streams, Selman has endeavoured to learn about the cultures, tone, and needs of the arts communities within eastern Africa. This work has, in turn, inspired Selman's work back at home, where she is now collaborating on a multi-faceted, multi-year story performance project with Tanzanian writer, Tololwa Mollel.



The Faculty of Nursing successfully piloted a student initiative in prenatal instruction on two reserves: Samson Healthy Family and Ermineskin Brighter Futures.

A unique Aboriginal Teacher Education Program was launched by the Faculty of Education in collaboration with Northern Lakes College and Northlands School Division. Through the program, students complete years 3 and 4 of their bachelor of education degree through blended delivery programming in 10 northern community sites.

The U of A's presence in rural Alberta also continues to grow. Outreach activities in the Faculty of Graduate Studies and Research sent nearly a thousand graduate students into both rural and urban communities, and this faculty aims to continue increasing these numbers. In the Faculty of Education, a total of 5,150 student teaching field placements were made during the 2010–2011 academic year, of which 451 were in rural schools.

Collaborative projects in Augustana's Alberta Centre for Sustainable Rural Communities involve more than 70 rural researchers, communities, and organizations, not only in Alberta, but also across Canada, and increasingly internationally (UK, USA, Ireland, Australia, New Zealand, China, and India).

transformative **organization**
and **support**

A great university is characterized by, and recognized for, effective governance, strong leadership, and a commitment to helping each member of the university community achieve his or her potential—as scholars, as employees, in their professions, and in their lives. Only by constantly reassessing ourselves and committing to new standards of excellence can the University of Alberta continue to grow and thrive.

Strategies and Achievements

THE STRATEGY: **Develop an endowment comparable to the best public research universities in the world.**

Elevating the role of chief advancement officer to vice-president (advancement) and appointing O'Neil Outar as the first VP in June 2012, the University of Alberta signalled its commitment to expand the role of philanthropy and alumni relations in its efforts to fulfill the vision, mission, and goals outlined in *Dare to Discover*. An all-time high of \$162.7 million in philanthropic support was recorded in 2011–2012 (see Figure 11), including \$42 million in gifts to endowed funds, which helped to increase the market value of the university's endowment to \$800 million.

Through the generosity of donors, the university created more than 100 awards for graduate and undergraduate students, established new chairs and professorships, and supported innovative programs that will further excellence in scholarship and research across our institution.

Streamlining U of A Email

Information technologies are now a vital component of learning and research, and the University of Alberta is constantly upgrading its systems to meet institutional needs. Over the last year, students, staff, and faculty migrated to Google's educational suite of products—a move facilitated by an agreement signed between the U of A and Google in late 2010. Now all members of the U of A community share one email and calendaring system, in addition to having access to other web-based tools such as Google docs. Such a massive, institution-wide change can be challenging and time-consuming, but the benefits outweigh the difficulties. The nine-month move to Google has reduced the number of email servers on campus from more than 80 to one, and enabled IT staff across U of A to devote their energies to other, emerging IT initiatives that will enhance classroom and online learning as well as administrative systems and practices.



Gifts also came from a record number of alumni, who are staying connected to the university through events, programs, email, and social media. There was a substantial increase in donations from the 12,800 alumni who gave, representing a five-year high. In total, some 21,700 individuals, foundations, and corporations donated to the university last year, including 5,700 first-time donors.

There were two especially notable gifts last year. The Go Community board gave the latest phase of the Saville Community Sports Centre to the university in Sept 2011, a value of \$35.3 million. Plus, the Royal Alexandra Hospital Foundation and the Stollery Children's Hospital Foundation made a

combined commitment of \$41 million to the university's Women and Children's Health Research Institute. The university also realized a one-time increase in planned giving of \$40 million due to adjustments in recording procedures that mitigate risk and more accurately reflect our financial position.

We strive to manage the U of A's endowment pool to preserve the value of the assets in real terms over time, with an acceptable level of risk, so that future generations receive the same level of support as current beneficiaries. For the fiscal year ending March 31, 2012:

- » The market value of the endowments increased to \$800 million, up \$17 million from the end of fiscal 2011. This increase comprised investment earnings of \$23 million and \$27 million in new endowment contributions, minus \$33 million spent.
- » Although an investment return of three per cent was realized, the real value of endowments declined by four per cent through total expenditures of 5.1 per cent and inflation of

- 1.9 per cent. As a result, the shortfall between the value of the endowment fund and inflation adjusted contributions increased from \$13 million to \$40 million.
- » The U of A's spending allocation rate was restored to 4.25 per cent during the year. Subject to certain conditions, future spending allocation increases will be linked to inflation.
 - » The most recent endowment per student numbers improved significantly, increasing to \$23,251 in 2010–2011 from \$19,895 in 2009–2010 and also exceeding the 2007–2008 baseline figure of \$21,277 (see Figure 10).
 - » A full copy of the U of A Investment Committee's annual report to the Board of Governors is available online at www.financial.ualberta.ca under "Investment Reports."

THE STRATEGY: **Secure resources to provide the best education for our students, to support world-class research and creative activity and its dissemination and translation, and to foster citizenship.**

Funding provided by the Government of Alberta along with student tuition and fees provide 61 per cent of the University of Alberta's operating revenues. As a result, the amount of the government's operating grant has a significant impact on our capacity to deliver on our mission and mandate. For the 2012 fiscal year, the University did not receive an increase in the operating grant funding. The University has addressed this issue through a combination of revenue enhancements, cost containment measures, and operating efficiencies. In the February 2012 budget, the Government of Alberta committed to a two per cent increase in the operating grant for each of the next three years. Because increases of at least four per cent are required to maintain our current levels of service, the university will need to continue to find ways of restricting costs and increasing administrative efficiencies.

Given the current financial situation, the U of A's total operating and tuition fee revenue per student slightly decreased from \$23,587 in 2009–2010 per student to \$23,473 in 2010–2011. Among our peers, we now rank sixth (see Figure 12).

In spite of challenges relating to the operating budget, the university continues to attract an increasing number of research funding dollars. From 2009–2010 to 2010–2011 (the most recent available data), the U of A increased its total sponsored research funding from \$513.5 million to \$535.9 million. For the last several years, the university has alternated between second and third place amongst the U15 universities, with a minimal difference in total dollars separating our total research funding from our nearest competitor in any one year (see Figure 14). Total research funding depends, in part, the number of full-time faculty. The U of A's sponsored research income per full-time faculty member is currently second only to the University of Toronto (see Figure 13).

Research revenues from federal government sources, in particular, increased slightly to \$188 million in 2011–2012 from 186.2 million in 2010–2011. This amount includes Tri-Council funding as well as research revenue from other agencies.

Two smaller faculties have experienced a notable increase in research grant funding in recent years. The Faculty of Pharmacy and Pharmaceutical Sciences has increased its funding from \$2.15 million in 2009–2010 to \$3.87 million in 2010–2011. The School of Public Health has also seen a sharp increase in Tri-Council funding from \$930,000 in 2007 to \$2,765,000 in 2012.

THE STRATEGY: **Provide needs-based and merit-based financial assistance to increase affordability for all students and offer competitive fellowships to attract outstanding graduate students.**

Overall, the University of Alberta offers \$91 million in student support in the form of scholarships and bursaries. In 2011–2012, 90 new scholarships and awards were created with a total value

endowment:

Endowments are essentially measures of a university's wealth. They are valued, in part, because of their enormous potential for return on investment. Their greatest value, however, lies in the support they provide to students and faculty in the form of research chairs, centres and institutes; scholarships and bursaries; as well as programs and co-curricular activities.

FIGURE 10

Endowment per FTE Student (USD), University of Alberta and Selected Public University Peers, Fiscal Years 2007–08 and 2010–11



Notes: UCLA Foundation, University of Washington, and University of Wisconsin Foundation did not provide endowment per FTE information for 2010–2011. Université de Montréal is not included in the NACUBO reports.

Source: NACUBO Endowment Reports FY 2008 Endowment and Fall 2007 Enrolment, FY 2011 Endowment and Fall 2010 Enrolment.

FIGURE 11

University of Alberta Fundraising Achievement, Latest 5 Years



Note: Fundraising totals consist of new pledges, grants, and gifts (including matching gifts); pledge payments and write offs are not included. In fiscal year 2012, newly adopted donation counting guidelines resulted in the one-time recording of \$39 million in bequests that were confirmed in writing in prior fiscal year.

Source: Board of Governors' Reports, University of Alberta.

of more than \$250,000. Support for graduate students continue provide support that is well-above the average (see Figures 15 and 16). However, we must focus efforts on improving federal doctoral scholarship success rates, an area where we have seen no overall improvement in recent years (see Figure 17).

THE STRATEGY: Build, enhance, and maintain classrooms, laboratories, libraries, and museums, as well as athletic, social, and residential facilities to provide a transformative university experience.

The ultimate goal of the University of Alberta's capital planning is to create, renew, and preserve buildings that work and make sense now and in the future. Although past capital funding has provided formal learning and research space, increased student demand for innovative programs

that attract a variety of types of learners, including those who are part-time, continues to result in an increasing strain on existing academic support space such as fitness facilities, formal and informal collaboration and social spaces, libraries, collection and storage, housing, and daycares. These facilities are critical to attracting and retaining students, faculty, and staff, and provide an environment that promotes a successful academic experience.

The following capital projects were completed and opened in fiscal year 2011–2012:

- » Centennial Centre for Interdisciplinary Science
- » Edmonton Clinic Health Academy
- » Biological Sciences/Chemistry Centre West/Chemical Materials Engineering Building Upgrade
- » Li Ka Shing Centre for Health Research Innovation and Katz Group Centre for Pharmacy and Health Research
- » East Campus Village graduate housing project

- » Chemical & Materials Engineering Building renewal project
- » Utility Expansion, Phase 3 to service both buildings associated with the Edmonton Clinic projects

The office of the vice-president (research) developed and launched Canada's only academic-based Phase 1 clinical research centre within the Northern Alberta Clinical Trials and Research Centre. This centre opens the door to new international industry collaborations in medical and health sciences research.

In the Faculty of Agricultural, Life and Environmental Sciences, major infrastructure development included the following:

- » \$5.2 million BioActive Oils Laboratory to pursue development of fatty acids in oilseeds beneficial for human and animal nutrition

Cool Stuff

From dinosaurs and dog sleds to hibernating butterflies and whalebone sculpture, University of Alberta's Museums and Collections gave visitors to Enterprise Square a reason to come in from the cold last winter.

"Cool Stuff" was the first exhibit to occupy

Enterprise Square's museum space since

the Art Gallery of Alberta left at the

end of 2009. The exhibit featured

more than 350 "cool" museum

objects, selected from among

the university's 19 outstanding

museum collections. Among the

unique objects on display were

mammoth bones, meteorites, ancient

Egyptian textiles, a Chinese imperial

robe, a narwhal tusk, and exceptional artwork,

including Inuit prints and Group of Seven paintings. Complementing

the exhibits, "Cool Stuff" featured noon-hour talks by U of A researchers

and curators sharing their knowledge and stories about the artifacts

on show.

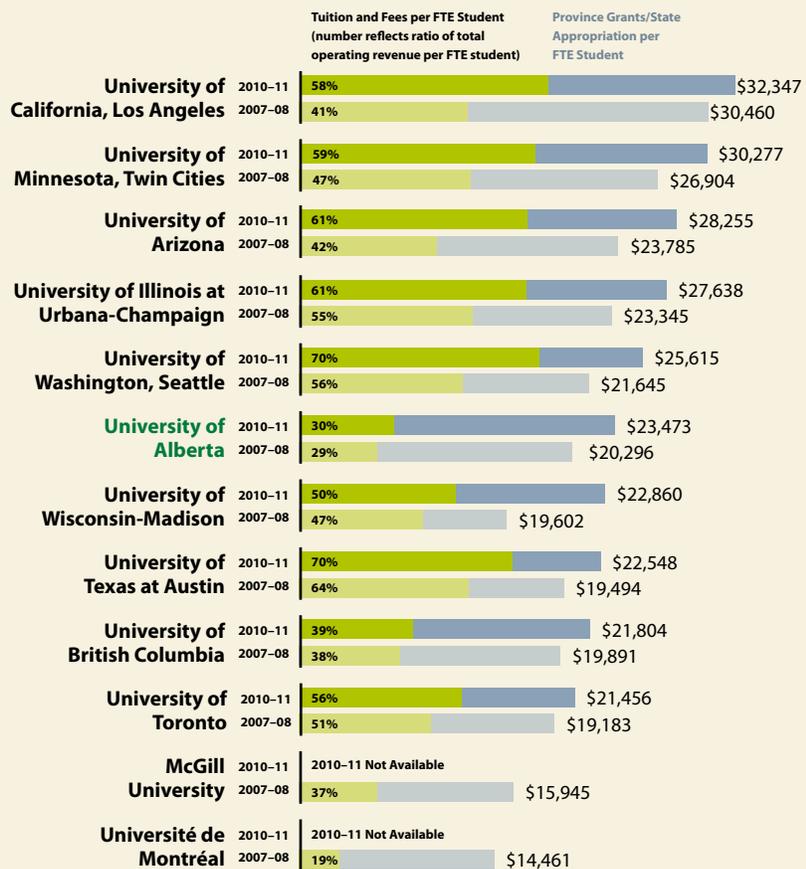


operating revenue:

Top universities typically have among the highest levels of per-student funding from government and tuition fee sources. Per-student funding from these sources is directly related to the university's capacity to create the needed number of faculty positions and provide the level of academic support that characterize the best universities.

FIGURE 12

Operating Revenue from Province or State Sources per FTE Student and Tuition, University of Alberta and Selected Peers, 2007-08 and 2010-11



Notes: FTE (full-time equivalent) students represent the count of full-time students plus one-third of the count of part-time students. Post-graduate medical education residents are excluded.

Dollar values are presented in CAD. American universities' financial figures have been converted with Bank of Canada average exchange rates for September 2010 = 1.03 CAD per USD, and for September 2007 = 1.02 CAD per USD, respectively.

Sources: For Canadian universities: CAUBO Financial Information and respective university enrollment reports. For US universities: respective university financial statements and their respective Common Data Set.

- » \$5 million SWAMP clean lab for the Bockock Chair in Agriculture and the Environment
- » \$4 million provincial funding in 2011–2012 to develop the research infrastructure of the St. Albert and Kinsella Research Stations, part of a three-year, \$12 million commitment
- » \$1.03 million whole body calorimetry research suite, the largest in North America

The Faculty of Medicine & Dentistry's Facility Planning and Projects group facilitated numerous lab relocations into the recently completed 20,000 square metres of interior space within the Katz Group Centre for Pharmacy and Health Research and the Li Ka Shing Centre for Health Research Innovation. They also managed lab renovations and relocations within the Medical Sciences Building.

Extensive work was completed at Campus Saint-Jean to develop a “cafeteria” style café and redecorate student lounges. CSJ has also been expanding its digital learning environment with:

- » QR codes posted at the door of each professor's office
- » Creation of a mobile-friendly website using browser detection and multiple themes
- » Digital displays installed at all classroom doors of the Centre collégial de l'Alberta and select rooms at the main CSJ campus
- » Web-based system developed for managing all digital displays
- » Website template developed using new, more dynamic responsive web design

In the Faculty of Education, a Learning Commons focused on technology in education was created for both students and faculty on the third floor of Education North. The faculty also developed a Safe Spaces Strategic Plan for the whole university based on input from a variety of participants, including youth volunteers from campus groups and various individuals representing student services, departments, and faculties.

THE STRATEGY: Continue to set priorities and invest in leading-edge teaching and research infrastructure.

Several major capital planning initiatives and priorities were launched by the Office of the Vice-President (Facilities and Operations) in 2011–2012 including, but not limited to, the following:

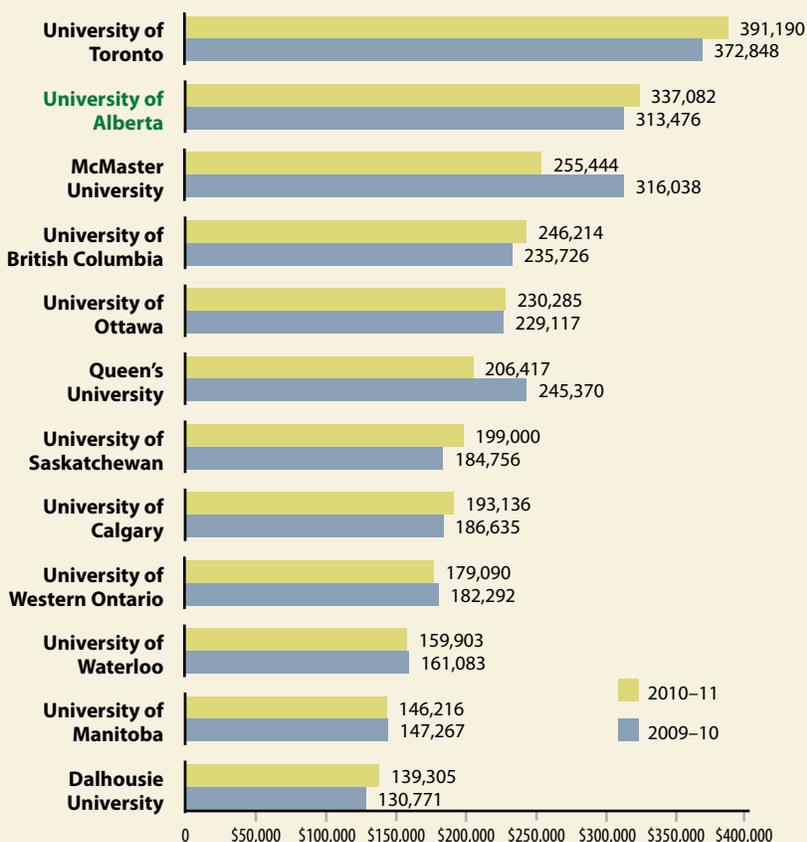
- » **10-Year Strategic Preservation Plan for Maintenance and Functional Renewal:** The University of Alberta and government continue to refine data, reporting, and collection tools to assess priorities, understand the scope of condition and functional problems in older buildings, and identify potential funds for remediation.
- » **Ecological Learning Centre:** Located at the Devonian Botanic Garden, this project addresses several current needs of the facility: renewal of existing infrastructure that has reached the end of its serviceable life; improvement in the ability of the garden to operate year round; growth of outreach programs; and support for additional research activities.
- » **Energy Management Program:** Given its success in generating savings of \$25 million in its first phase, the university has initiated a second generation EMP.
- » **Innovation Centre for Engineering:** As a result of an aggressive and successful fundraising campaign by the Faculty of Engineering, the university is proceeding to build the shell and core of the new infill project. This facility will provide a contiguous home for the administrative offices of the faculty, as well as necessary research and collaborative space for the faculty's graduate students.
- » **Physical Activity and Wellness (PAW) Centre:** In response to the growing demand for additional recreation and fitness space on campus, and space required for growing research within the Faculty of Physical Education and Recreation for programming associated with the Steadward Centre, the university has partnered with the Students' Union and the Graduate Students' Association in the programming, planning, and schematic design of the PAW Centre.

sponsored research funding:

The amount of sponsored research funding a university receives is one measure of its scholarship excellence because most external funding is won through peer-reviewed competition. Universities receiving ample federal funding are better able to undertake and sustain relevant, groundbreaking research.

FIGURE 13

Sponsored Research Income per Full-time Teaching Faculty for U15 Universities, 2009–10 and 2010–11 (in \$000's)



Notes: Data is not available for Québec institutions due to the province's accounting changes.

Full-time teaching faculty (Including Medical/Dental) are Professors, Associate Professors and Assistant Professors.

Source: CAUBO Financial Information of Universities and Colleges, 2009–10 and 2010–11. Financial information is not available for Université de Montréal, McGill University and Université Laval.

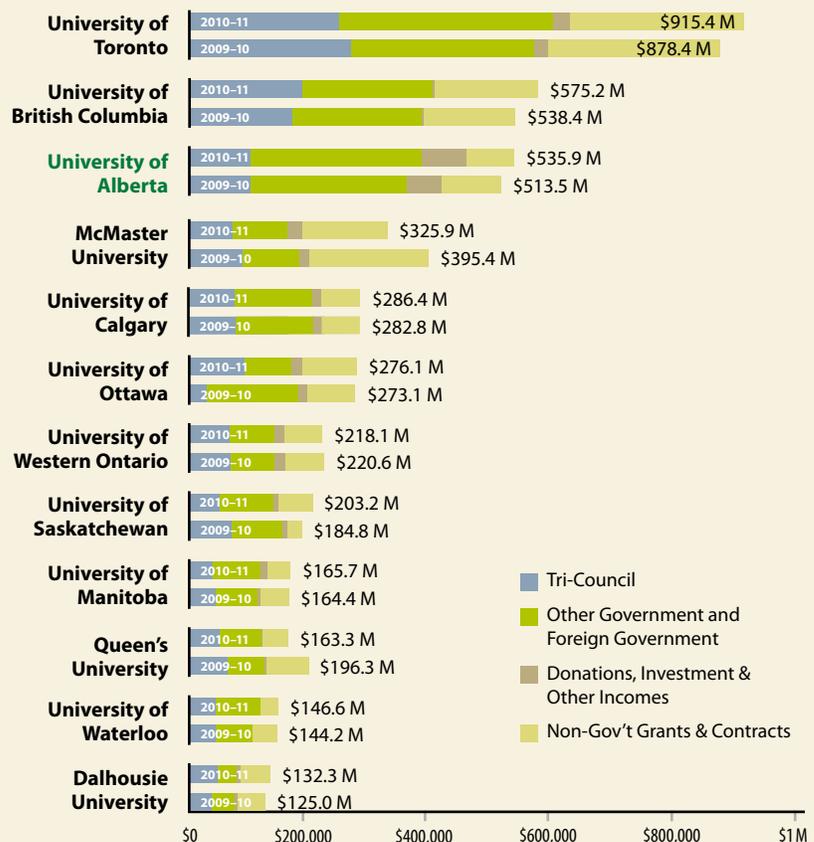
Statistics Canada Salaries and Salary Scales of Full-time Teaching Staff at Canadian Universities, 2009–10 and 2010–11.

sponsored research funding:

Federal funding through the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council, and the Social Sciences and Humanities Research Council—typically referred to as Tri-Council funding—supports both basic and applied research. In addition, the university attracts substantial research funding support from other international, regional, and private sector partners. This measure demonstrates the University of Alberta's success in attracting all types of research funding relative to Canada's other U15 universities.

FIGURE 14

U15 Sponsored Research Income by Type, 2009–10 and 2010–11



Notes: Data is not available for Québec institutions due to the province's accounting changes.

Income from Tri-Council includes: Social Sciences and Humanities Research Council, Natural Sciences and Research Council, and Canadian Institute of Health Research (CIHR).

Other government income reflects income from all government departments, agencies, grants, and contracts, less Tri-Council and foreign government income.

Sources: Statistics Canada, Canadian Association of University Business Officers (CAUBO): Financial Information of Universities and Colleges 2009–2010 and 2010–11, Report 3.1

THE STRATEGY: Establish high standards of service based on best practices to achieve and maintain good stewardship of financial resources and capital assets.

The University of Alberta continually strives to improve and enhance services, procedures, policies, and best practices throughout administrative and faculty units. In March 2012, a new committee, named The Umbrella Committee (TUC), was struck by the provost and vice-president (academic) to solicit, collect, and review ideas and suggestions from all faculty, staff, and students with the aim of finding new ways of maximizing our talents and resources.

TUC will include representatives from all major constituencies on campus and will include three subcommittees focused on 1) the U of A's academic activities, 2) its administrative

practices, and 3) its pension plan and benefits. The committees will review all suggestions and make recommendations for change in the coming months.

As a charter member of the Sustainability Tracking, Assessment & Rating System (STARS™), the U of A received a silver rating in terms of sustainability. We are currently ranked second among Canadian institutions. We also received the highest marks of all Canadian institutions in the area of planning, administration, and engagement.

The Faculty of Agricultural, Life and Environmental Sciences reorganized its Student Services Office to provide a one-stop shop to advise and assist students on all aspects of their undergraduate programs.

Augustana undertook a complete redesign of its website, with a focus

on consistency with the University of Alberta brand, quality of prospective student experience, ease of navigation, and promotion of undergraduate research and community service-learning.

The Office of Learner Advocacy and Wellness, which opened within the Faculty of Medicine & Dentistry in January 2011, had a very successful first year, garnering more than 1,800 visits. This office offers academic and non-academic support to students in all four undergraduate professional programs, and all residents and fellows in post-graduate medical training.

U of A International initiated and collaborated with Risk Management Services to create a comprehensive risk management model for study abroad and international education programming. An International Orientation and Risk Management Coordinator was hired in fall 2011 to provide risk management consultation and services to faculty members, program leaders, and all outgoing students.

Green Stories

The number one job of the University of Alberta's Office of Sustainability is to showcase our commitment to sustainability. Signs have cropped up on campus with quick facts seeding the sustainability story. For those individuals interested in knowing more, there is the full Campus Sustainability Tour, which tells the story hidden beneath the surface and behind the walls of our buildings. What is that story? The university has been recycling since 1975. We're leaders in providing composting and waste stations. "Sustain SU" is a student-run organization that engages students in campus sustainability, and buildings, such as the Centennial Centre for Interdisciplinary Studies, the East Campus Village and Triffo Hall, all carry LEED (Leadership in Energy and Environmental Design) standards certification. Putting in place sustainable practices is about more than saving money—it's about showing the leadership that our students and other stakeholders increasing expect from the institutions they choose to call home.



The Registrar's Office worked in partnership with Administrative Information Systems to implement electronic submission of student grades in March 2012. Moving from a paper-based to an electronic system streamlines the grade entry process with the expectation that transcription errors will be eliminated and students may see earlier availability of grades. Our offices have already received strong positive feedback on the results of this project.

The Faculty of Graduate Studies and Research is one of the first units on campus to participate in the project to become fully electronic. Electronic records will allow FGSR to become more efficient, and by allowing electronic access to the departments, will allow much greater uniformity and efficiency in the administration of graduate records.

THE STRATEGY: Promote administrative effectiveness and good governance by improving communication among units, enhancing collaboration, implementing transformative ideas, and revising organizational structures.

The University of Alberta, in its commitment to ensure quality in all activities in its mandate, regularly conducts peer reviews to examine elements related to the quality of teaching, research, and administration. In 2011–2012, academic reviews were completed for the Faculty of Education, the School of Public Health, and the Registrar's Office.

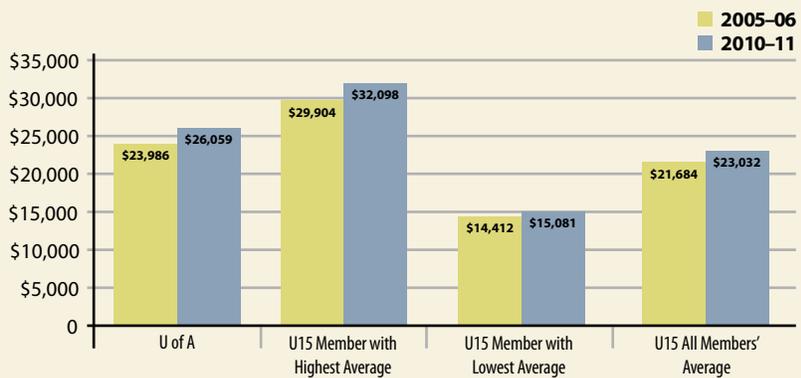
In addition, the Counselling Psychology doctoral program in the Faculty of Education has been re-accredited for a five-year period by the Canadian Psychological Association, and the Teaching English as a Second Language program has been re-accredited by the National Association of Teachers of English as a Second Language (Canada) until 2014–2015.

graduate scholarships:

These three charts compare average graduate student support at the University of Alberta to that of U15 Canadian universities. U15 universities include: University of Alberta, University of British Columbia, University of Calgary, Dalhousie University, Université Laval, McGill University, McMaster University, University of Manitoba, Université de Montréal, University of Ottawa, Queen's University, University of Saskatchewan, University of Toronto, University of Waterloo, and Western University.

FIGURE 15

Average Financial Support per Doctoral Student, University of Alberta and U15 Universities, 2005–06 and 2010–11

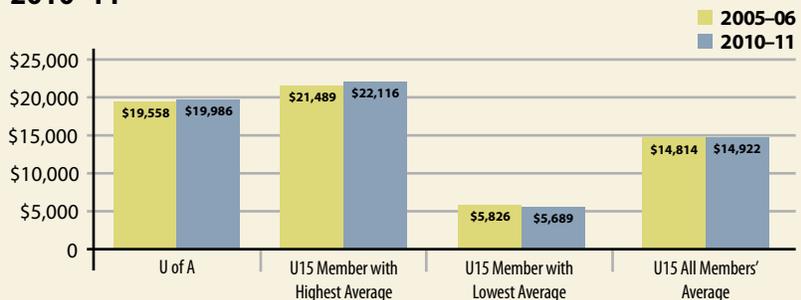


Notes: The statistical results are based on 10 universities for year 2005–06 and 14 universities for year 2010–11.

Source: U15 Data Exchange

FIGURE 16

Average Financial Support per Research Masters Student, University of Alberta and U15 Universities, 2005–06 and 2010–11

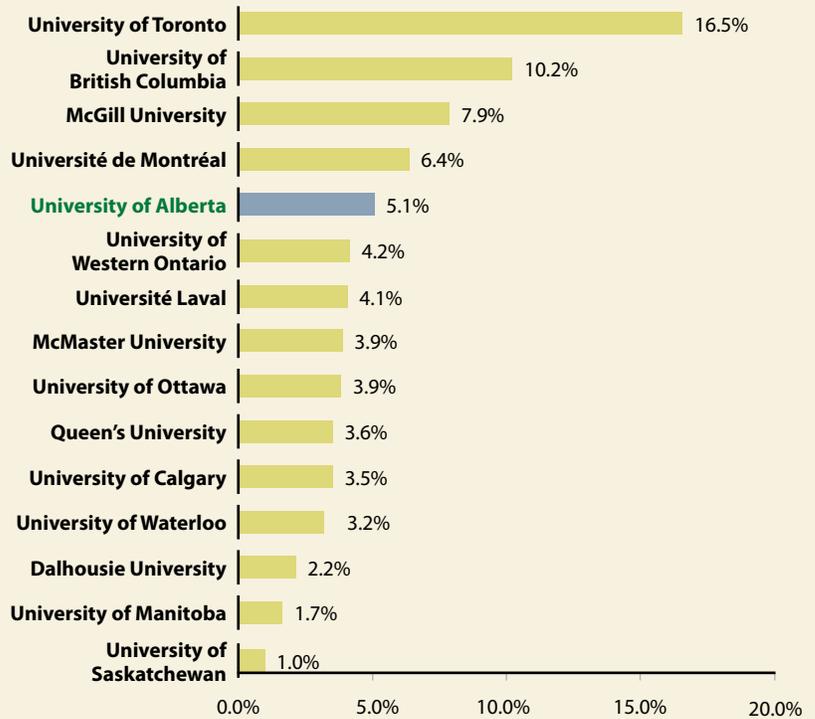


Notes: Results are based on 10 universities in 2005–06 and 14 universities in 2010–11.

Source: U15 Data Exchange.

FIGURE 17

Percentage Share of Canadian Doctoral Scholarships from Federal Granting Councils, University of Alberta and U15 Peers, 1996 to 2011



Notes: Percentage share based on the total cumulative counts from 1996 to 2011, inclusive.

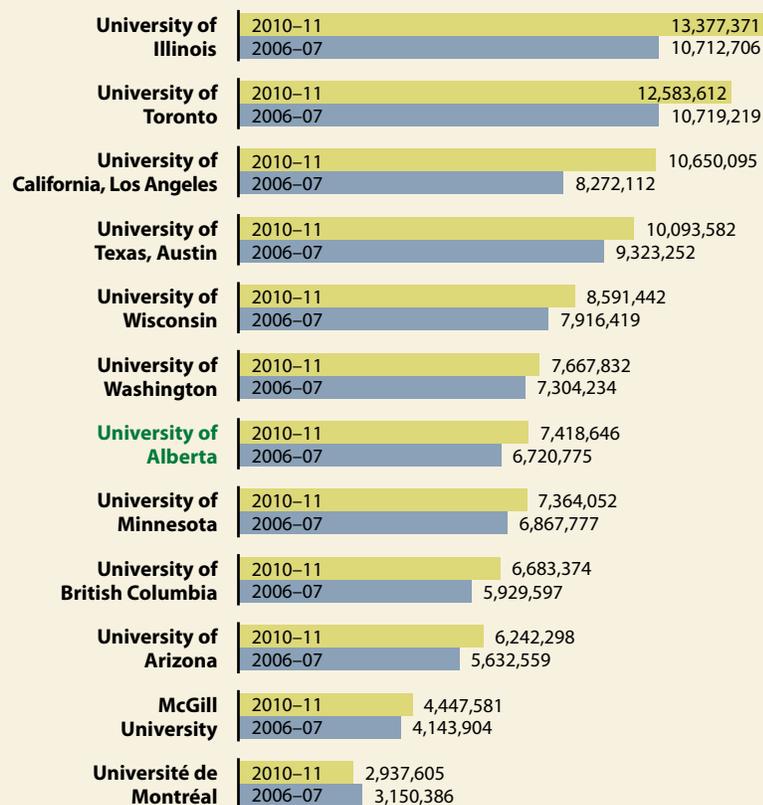
Source: University of Toronto's 2011 Performance Indicators for Governance

libraries:

At research-intensive universities, the quality of library services and the quantity of resources available are important indicators of excellence. Libraries are at the centre of the scholarly communication that characterizes excellence in research, drawing in top students and faculty members. Vibrant libraries also enhance teaching and learning. University of Alberta Libraries consistently rank second in Canada and are among the top 15 in North America.

FIGURE 18

Total Library Volumes Held, University of Alberta and Selected Peers, 2006–07 and 2010–11



Notes: "Volumes" exclude microforms, maps, nonprint materials, and uncataloged items.

Source: Association of Research Libraries, ARL Statistics 2006–07 and 2010–11.

Appendix A

Comparator Institutions

Quantitative Measures

As a record of our progress, the *Dare to Discover Report Card*, now in its fifth iteration, uses a number of measures and benchmarks that indicate how the University of Alberta compares with 11 peer Canadian and US post-secondary institutions. This group includes four Canadian universities with profiles similar to ours:

- University of Toronto
- University of British Columbia
- McGill University
- Université de Montréal

As well, the comparator group includes seven US public research universities that are members of the prestigious American Association of Universities, a consortium of the top 62 US public and private research universities. Each of the US universities selected is similar in mandate and breadth of programming to the University of Alberta, but all currently enjoy a stronger international reputation:

- University of California at Los Angeles (UCLA)
- University of Illinois at Urbana-Champaign
- University of Washington
- University of Arizona
- University of Texas at Austin
- University of Wisconsin at Madison
- University of Minnesota at Minneapolis-St. Paul

Like the U of A, each of these universities has a medical school (with the exception of University of Texas at Austin) and an agricultural school (with the exception of UCLA). Although the University of Texas at Austin lacks a medical school, it mirrors the U of A's expertise and strength in energy research, and so comparing the U of A with it remains a valuable exercise.

Using peer comparators with similar mandates and financial structures is critical, because both factors deeply affect how each institution determines its definition of a "great" university. Our list of benchmark institutions, for instance, does not include any private universities because their mandates are not linked to advancing the social mobility of citizens in their regions, nor do they have an obligation to advance the local public good. Furthermore, their financial support comes not from public funds but is primarily dependent on high tuition fees and large endowments.

By contrast, public universities, such as the U of A and the others in our list, share a responsibility to be accountable to local populations on the one hand, and to be globally engaged on the other. Achieving a balance between these demands presents challenges to public universities that private universities do not face.

University	Fall 2011 Total FTE*
University of Toronto	70,400
University of Texas at Austin	48,600
Université de Montréal (includes Haute Études Commerciales and École Polytechnique)	50,500
University of Minnesota, Twin Cities	55,600
University of British Columbia	44,700
University of Illinois at Urbana-Champaign	41,000
University of Washington, Seattle	38,500
University of California, Los Angeles	40,000
University of Wisconsin-Madison	39,300
University of Arizona	35,800
University of Alberta	35,500
McGill University	31,200

*total full-time equivalent undergraduate and graduate students.

Within our group of 11 Canadian and US peer comparators, each defines its vision and mission differently, depending upon the specific needs of the region it serves. As a result, unanticipated differences may be noted on specific measures that reflect the institutions' differences in vision, mission, and emphasis.

It is also important to keep in mind that differences in size among the institutions can affect the relative size of inputs and outcomes; for example, an institution with a much larger student body and correspondingly greater number of faculty may show a greater total number of faculty awards than the smaller institutions, yet the proportional outcome may be approximately the same.

The quantitative measures in this report provide a quick and informative view of our standing among this set of leading public universities. Our aim is not to create a new ranking system to contest or rival media rankings, but to develop a method of measuring our performance in key areas that we believe are fundamental to advancing the national and international reputation of the U of A.

As the U of A evolves and advances, it may become apparent that a particular measure does not accurately or fully capture the changes that we see happening or desire to make happen at the U of A. In that sense, this document is itself a work-in-progress, subject to change. There are two significant changes to the 18 measures including in this year's report card.

First, figures 4 and 5, both indicators of an enriched student experience, have been modified. In past versions, the chart has simply shown the percentage of U of graduates who had a practical learning experience over the last three years. Now, figure 4 details the kinds of practical learning students experience and compares our participation rates to those at Canada's G13 universities. The new version of figure 5, which indicates the percentage of senior students that rate their overall educational experience as good or excellent, compares U of A with G13 data. The data source for both figures is the National Survey of Student Engagement, North America's most highly regarded and reliable survey of student experience and engagement. The U of A and Canada's G13 universities all participate in this survey on a biannual basis.

The second major change to our measures relates to the commercialization of university research discoveries. In past reports, figures 7 and 8 focused only on the number new start-ups, licenses, and options executed that occurred within a rolling five-year time period. Now, figures 7 and 8 capture information around the U of A's capacity to develop spin-offs that have longevity and to do so in an economically efficient manner. In these terms, the U of A is one among the best in North America at translating university research into viable companies and marketable products of benefit to society.

Qualitative Evidence

Although quantitative measures, similar to international rankings, may provide a quick view of the U of A's standing, they do not, by themselves, represent the totality of the work being done on our campus every day to advance progress toward our goals. The variety and magnitude of that work cannot be fully captured in quantitative measures—and if we were to limit our focus to the advancement of the measures we use in the preceding pages, we would fail in showing how we are delivering on many of the core strategies of *Dare to Discover*.

To complete the picture of our progress toward our goals, this report supplements the quantitative measures with substantial qualitative evidence of initiatives undertaken and achievements reached between April 1, 2011, and March 31, 2012. This report also includes a sampling of vignettes that powerfully illustrate the impact these initiatives and achievements have upon faculty, students, alumni, staff, and the wider community.

Appendix B

Academic Rankings of World Universities (ARWU)

University of Alberta and Peer Universities, 2011 and 2012

The Academic Rankings of World Universities, conducted by the Center for World-Class Universities and the Institute of Higher Education of Shanghai Jiao Tong University, China, is based on the following six indicators (with weighting):

- Number of alumni winning Nobel Prizes and Fields Medals (10%)
- Number of staff winning Nobel Prizes and Fields Medals (20%)
- Number of highly cited researchers selected by Thomson Scientific (20%)
- Number of articles published in the journals *Nature* and *Science* (20%)
- Number of articles indexed in Science Citation Index - Expanded and Social Sciences Citation Index (20%)
- Per capita performance on all of the above with respect to the size of an institution (10%)

The following tables show the University of Alberta and our peer institutions' ranking in five main academic fields in both 2011 and 2012. Because ARWU does not include a survey component and relies solely on fixed data, the rankings remain fairly stable from year to year. The U of A, however, improved its ranking in two fields (natural sciences and mathematics, as well as social sciences) because of an increase in our publications score. Please note: Although more than 1000 universities are ranked every year, in 2011, countries ranked higher than 100 were not publicly ranked, and in 2012, countries were not publicly ranked at scores greater than 200 (denoted in tables by NR).

Natural Sciences and Mathematics		
	2012	2011
University of California, Los Angeles	10	12
University of Wisconsin-Madison	19	20
University of Washington, Seattle	23	23
University of Illinois at Urbana-Champaign	28	28
University of Texas at Austin	32	31
University of Toronto	34	34
University of Minnesota, Twin Cities	36	39
University of Arizona	41	51–75
University of British Columbia	51–75	51–75
McGill University	101–150	NR
University of Alberta	151–200	NR
Université de Montréal	NR	NR

Engineering / Technology and Computer Sciences		
	2012	2011
University of Illinois at Urbana-Champaign	4	4
University of Texas at Austin	5	6
University of Toronto	13	21
University of Minnesota, Twin Cities	25	27
University of California, Los Angeles	28	26
University of Washington, Seattle	30	31
University of Wisconsin-Madison	31	28
McGill University	51–75	52–75
University of Alberta	76–100	76–100
University of British Columbia	101–150	NR
Université de Montréal	101–150	NR
University of Arizona	101–150	NR

Life and Agricultural Sciences		
	2012	2011
University of Washington, Seattle	5	5
University of Wisconsin-Madison	13	11
University of Illinois at Urbana-Champaign	17	19
University of California, Los Angeles	21	22
McGill University	22	24
University of Minnesota, Twin Cities	34	35
University of British Columbia	35	36
University of Toronto	47	49
University of Alberta	76–100	76–100
Université de Montréal	101–150	NR
University of Arizona	101–150	76–100
University of Texas at Austin	101–150	NR

Clinical Medicine and Pharmacy		
	2012	2011
University of Washington, Seattle	3	3
University of California, Los Angeles	7	7
University of Minnesota, Twin Cities	13	14
University of Toronto	25	27
University of Wisconsin-Madison	27	22
McGill University	31	34
University of Arizona	51–75	51–75
University of Alberta	76–100	76–100
University of British Columbia	101–150	NR
University of Texas at Austin	101–150	NR
Université de Montréal	151–200	NR
University of Illinois at Urbana-Champaign	NR	NR

Social Sciences		
	2012	2011
University of Minnesota, Twin Cities	13	14
University of California, Los Angeles	14	13
University of Texas at Austin	15	18
University of Wisconsin-Madison	23	24
University of Washington, Seattle	26	28
University of British Columbia	30	32
University of Illinois at Urbana-Champaign	37	38
University of Toronto	46	48
University of Arizona	50	52–75
University of Alberta	51–75	76–100
McGill University	51–75	52–75
Université de Montréal	76–100	76–100



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