



College of Arts & Science annual report 2010/2011













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### Message from the **Dean**

Reflecting on the achievements and great strides the College of Arts & Science has made over the past year, I am struck by two features that make this college great—its diversity and its uniqueness. It contains a plurality of voices, of opinions, of disciplines, of ambitions, and of talents. And it is the only college in a Canadian medical-doctoral institution to house this diversity—the sciences, social sciences, humanities and fine arts—under one administrative roof. It is now time to build upon these strengths and to use them to respond to our changing post-secondary environment.



The value of BA, BSc and BFA degrees is under scrutiny by current students and prospective post-secondary students in the process of choosing their college and degree, their parents, Aboriginal communities, the city, the province, regional colleges, federal granting councils, donors, the Canadian public, employment sectors, and by alumni—in short, by all college stakeholders. There are mounting expectations from undergraduate and graduate students for the college to provide them with the knowledge and skills required for a potential career: the Aboriginal population is expected to rise significantly, 26 per cent of the college's in-scope faculty have been hired in the last five years, and a further 9 per cent are projected to be hired by 2016. This will create a young faculty complement with new professional ambitions, assumptions and needs.

The creation and transmission of knowledge is at the core of all college activity. It drives our research, scholarly and artistic work, our teaching, and our many forms of engagement. If answers are to be found to the most pressing global issues, we now know that those answers do not lie exclusively in vocational disciplines, in single disciplines, or even in singularly divisional ones. They lie in an interdisciplinary combination that brings the sciences, the social sciences, the humanities and the fine arts together in unique combinations. We also know that the answers will not be produced by applying exclusively technical or vocational methodologies to problems, but by thinking creatively, divergently, innovatively—attitudes promoted by curiosity-driven inquiry.

A successful future for both the university and the province will require that the college become more engaged with Aboriginal communities and that more Aboriginal people successfully complete a university education. We are focusing our efforts on improving Aboriginal students' academic outcomes in the critical first year. In order for Aboriginal students to feel that they belong in the university, it is important that they see Aboriginal faculty and staff working here.

Building on foundations laid under the Second Integrated Plan, over the next four years the college will introduce innovative academic programming, enhanced student services, and improved academic advising. These changes are all designed to provoke broad and deep learning, boost recruitment, raise the profile of the college, improve retention rates, enrich the student experience, and meet the evolving needs of 21st century society. The college will also endeavour to internationalize the curriculum to better prepare our students in this global economy.

A recent college-wide first-year curriculum advisory committee report contains recommendations that provide a template for faculty-driven and data-informed curricular renewal. Our objectives are to better align courses and programs with current and anticipated student demand, established program needs and faculty research activity. Individual departments and programs will continue to engage in curricular mapping to identify existing strengths, weaknesses, concentrations and gaps, as well as opportunities for innovative, collaborative, experiential and interdisciplinary courses and programs.

Through careful research and thoughtful consultation, together we have set eight priorities that are specific to our college: realizing interdisciplinarity; strengthening research, scholarly and artistic work capacity and success; designing our attractiveness to students; becoming the postsecondary destination of choice for Aboriginal students, faculty and staff; creating robust communication, development and alumni relations capacity; academic relationship-building; community-engaged scholarship; creating and sustaining a college environment that makes it the destination of choice for outstanding faculty.

Creatively working toward each of these priorities will strengthen the relationships and the bonds that we have with campus and off-campus communities. Diverse challenges and opportunities face our college, and these necessarily beckon a diversity of approaches, and of solutions.

Peter Stoicheff, Dean and Professor College of Arts & Science

### College leadership











### Peta Bonham-Smith, Acting Vice-Dean, Science

A professor with the Department of Biology, Peta Bonham-Smith heads a research lab that focuses on elucidating the role of ribosomal proteins in the function of the plant ribosome, and the plant cell in general. She is a highly respected teacher at both the undergraduate and graduate levels, and received a College of Arts & Science Teaching Excellence Award in 2008/09. Bonham-Smith previously served as director of the Virtual College of Biotechnology, a position to which she was appointed in 2000.

### Harley Dickinson, Vice-Dean, Social Sciences

Harley Dickinson joined the University of Saskatchewan in 1983. A respected and enthusiastic professor of sociology, he has also served as a leader in various administrative and research capacities, including five years as head of the Department of Sociology and several years as director of the Social Research Unit. He was appointed Vice-Dean, Division of Social Science in 2008 and has been an instrumental force behind the development of the Social Sciences Research Laboratory.

### David Parkinson, Vice-Dean, Humanities & Fine Arts

A professor in the Department of English, David Parkinson's research focuses on literary culture in medieval and early-modern Scotland. He was appointed Vice-Dean, Division of Humanities & Fine Arts, in 2010, bringing with him a wealth of experience and expertise on interdisciplinary research and programming. Parkinson joined the Department of English in 1983, and was awarded a Teaching Excellence Award by the University of Saskatchewan Students' Union in 1995.

### Kristina Fagan, Assistant Dean of Aboriginal Affairs

An associate professor in the Department of English, Kristina Fagan specializes in Aboriginal writing and storytelling in Canada. She has published articles on methodology in the study of Aboriginal literature and on the depiction of Aboriginal people in settler-Canadian literature. Her current research is on autobiography and storytelling among her people, the Labrador Métis. She is also increasingly interested in oral traditions and the ways in which the study of such traditions challenge our usual methods of literary analysis.

### Gordon DesBrisay, Associate Dean of Students

Gordon DesBrisay (associate professor) was appointed as the college's Associate Dean of Students in 2010, following 18 years in the Department of History. His main research interests involve authority, community and civic identity in 17th century Scottish towns. In a little more than a year, he has spearheaded efforts to greatly improve and streamline student advising throughout the college, and is also helping guide changes to the college's first-year curriculum. He is a firm believer and proponent that "students can get there—anywhere—from here."

### **Dean's Distinguished Staff Award**

The Dean's Distinguished Staff Award was established in 2007 to recognize the outstanding contributions by a staff member at the college, divisional or departmental level. The award winner each year receives a certificate and \$1,000 cash prize. Mary Jane Hanson, administrative assistant for the Department of Economics, received the award for 2011. Hanson has worked at the U of S for nearly 30 years and in the Department of Economics since 2001.

### Arts & Science by the numbers

### **Enrolment**

Fall/Winter 2010/11		Spring/Summer 2010		
Undergraduate	7854	Undergraduate	1852	
Graduate	781	Graduate	627	
Total	8635	Total	2479	

College Revenues (\$ thousands					
Operating	\$53,338				
Research	\$23,273				
Trust & Endowments	\$3,536				
Other	\$2,823				
Total revenues	\$82,970				

Faculty 2010/11	
Full-time equivalents (from all funds)	419
Tenured faculty	253
Staff 2010/11	
Full-time equivalents (from all funds)	283

### **Departments & Programs**

### **HUMANITIES & FINE ARTS**

Art & Art History Drama English History

Languages & Linguistics

Music Philosophy Religion & Culture Interdisciplinary Centre for Culture & Creativity

### **SCIENCES**

Biology Chemistry Computer Science Geological Sciences Mathematics & Statistics Physics & Engineering Physics

#### **SOCIAL SCIENCES**

Archaeology & Anthropology

Economics

Geography & Planning

Native Studies Political Studies Psychology Sociology

#### **DEPARTMENTAL PROGRAMS**

Aboriginal Justice & Criminology

Anatomy & Cell Biology

Anthropology Archaeology Art & Art History Biochemistry Biology

Biomolecular Structure Studies

Business Economics

Chemistry Computer Science

Drama Economics English

Environment and Society

French Geography Geology History

Indigenous Peoples and Justice

Linguistics Mathematics

Microbiology and Immunology

Music

Native Studies Philosophy Physics Political Studies Psychology Religious Studies Sociology Spanish Statistics

Modern Languages

#### INTERDISCIPLINARY PROGRAMS

Aboriginal Public Administration Biochemistry & Biotechnology

Bioinformatics

Biology & Biotechnology Cell Biology & Biotechnology

Classical and Near Eastern Archaeology Classical, Medieval and Renaissance Studies

Environmental Earth Studies

Food Science Geophysics International Studies

Land Use & Environmental Studies

Mathematical Physics

Microbiology & Biotechnology

Northern Studies Palaeobiology Prairie Studies Public Administration Regional & Urban Planning

Toxicology

Women's and Gender Studies

### Looking ahead



Loleen Berdahl, Associate Professor of Political Studies and Project Leader for the Social Responsibility Research Laboratory (SRRL), one of five labs that make up the Social Science Research Laboratories (SSRL). The SRRL was established with the help of a \$169,839 grant from the Canada Foundation for Innovation (CFI) and a matching contribution from the Government of Saskatchewan.

### **Third Integrated Plan**

Building upon the progress made by realizing the many goals and priorities set out in its Second Integrated Plan (2008-2012), the college has embarked on the third planning cycle. The plan is intended to be compelling, forward-looking and ambitious, allowing the college to thrive in response to current and impending changes within the post-secondary landscape. Four priority areas, reflecting the University of Saskatchewan's focal areas, inform the specific objectives outlined in the plan: knowledge creation; innovation and impact; Aboriginal engagement; innovation in academic programs and service; and culture and community: our global sense of place. The Third Integrated Plan will officially come into effect in April 2012.

### First-Year Curriculum Review

Responding to the changing landscape of Canadian post-secondary education, the College of Arts & Science completed the initial phase of its first-year curriculum review in 2011. The FYCR report provides many recommendations to address many recent and anticipated changes to our student population, including: an increase in Aboriginal and international students, a gender balance shift from male to female, and an increase in part-time students. Widespread curriculum renewal, an expansion of Learning Communities and increasing supports for Aboriginal students form the basis of this report. It is hoped that full implementation of a new curriculum for first-year students will occur in 2015/16.

### Social Science Research Laboratories (SSRL)

Community-based research, state-of-the-art research facilities and hands-on research training opportunities for students are keystones of the Social Science Research Laboratories (SSRL). Comprised of five separate, yet complimentary modules, the SSRL was originally identified as a priority in the Division of Social Sciences' Second Integrated Plan and quickly became a unique and unprecedented collaboration involving eight other academic units on campus with strong social science research traditions. With the third integrated planning cycle now on the immediate horizon, the SSRL will play a vital role in helping the seven departments in the Division of Social Sciences, and their cross campus partners, realize a wide range of research, engagement and recruitment/retention goals moving forward.

### **Aboriginal Student Recruiting and Engagement**

As the home College for nearly half of all Aboriginal students at the University of Saskatchewan, we play a central role in helping the institution, and province, bridge the Aboriginal educational gap that currently exists. Although Saskatchewan's population in the typical postsecondary age group (17 to 29) is projected to decrease over the next five years, the Aboriginal population within that cohort is expected to rise significantly. The College of Arts & Science has proactively responded by hiring an Assistant Dean of Aboriginal Affairs and establishing both the Aboriginal Student Achievement Office and Aboriginal First-Year Achievement Program. By providing our new and continuing Aboriginal students with effective advising, mentorship and financial supports throughout their arts and science education, we are helping make the U of S, and province as a whole, a more inclusive, attractive and prosperous destination.



History and political studies student Melissa Armstrong expanded on her academic interests by getting involved with Hands at Work, a non-profit organization that conducts humanitarian work throughout Africa. She spent the summer of 2011 based in rural Zambia, working in areas that have some of the world's highest proportions of HIV/AIDS, poverty and orphaned children. Armstrong is also an accomplished baseball pitcher; she has represented Team Canada at several international competitions and is slated to take the mound again at the 2012 Baseball World Cup in Edmonton.

### Competing for the **best**

### **Undergraduate Student Enrolment**

Undergraduate students comprise the majority of students in our college, and analyzing trends in their enrolment numbers allows us to plan effective resource allocations, facility needs and faculty requirements. While the overall number of undergraduate students in our college has stayed relatively consistent in recent years, an increasing number of students are enrolling on a part-time basis.

#### **UNDERGRADUATE STUDENT ENROLMENT\***

Year	Total
2008/09	7652
2009/10	7576
2010/11	7574

<sup>\*</sup> Excludes students registered in other colleges/institutes who are taking Arts & Science courses.

### Undergraduate Student-to-Faculty Ratio

The College of Arts & Science prides itself on maintaining a low student-to-faculty ratio, an indicator that is used to reflect the intimacy of a student's educational experience. Our current ratio is particularly impressive when one considers the College of Arts & Science is responsible for teaching nearly all of the large first-year courses at the U of S, courses that are both prerequisites and electives for many students enrolled in other colleges.

### UNDERGRADUATE STUDENT-TO-FACULTY RATIO\*

Regular Session Year	UG Student FTE	Faculty FTE	Avg. Student-to- Faculty Ratio
2008/09	6,362	380.9	17:1
2009/10	6,279	353.2	18:1
2010/11	6,475	358.4	18:1

### **Undergraduate Degrees & Certificates**

As previously noted, we have witnessed a steady increase in students enrolling in part-time studies within the college. We therefore expect a corresponding increase in the number of undergraduate degrees and certificates granted in coming years.

#### UNDERGRADUATE DEGREES & CERTIFICATES GRANTED

Degree	2008	2009	2010
Advanced Certificate in Arts	5	2	8
Advanced Certificate in Science	1	2	0
Bachelor of Arts 4 Year	219	232	210
Bachelor of Arts Honours	184	180	164
Bachelor of Arts 3 Year	279	254	239
Bachelor of Fine Arts	29	22	28
Bachelor of Music	12	3	8
Bachelor of Science 4 Year	129	163	183
Bachelor of Science Honours	139	156	147
Bachelor of Science 3 Year	87	103	105
Honours Certificate in Arts	2	0	9
Honours Certificate in Science	1	1	0
Post Degree Specialization Certificate	3	0	1
Total	1090	1118	1102

### **Diversity** in the classroom





Left: Art student Jessica Rabbitskin. Right: South African study abroad course participants (back row) David Woods, Stephanie Shyluk, Nikita Rathwell, Melissa Armstrong, Gina Trapp, Jesse Greenwood, Shawn Buhler, (front row) Elizabeth Kachanoski, Alice Collins, Nancy Carlson and Simonne Horwitz (assistant professor, history) at the Ann van Dyk Cheetah Centre, a cheetah breeding and conservation facility.

As an interdisciplinary college spanning three distinct academic divisions—humanities and fine arts; social sciences; and sciences—diversity is inherent to our structure and identity. As such, one of our objectives is encouraging diversity in the college's student population. We have made progress on several recent initiatives in this regard, such as hiring an Assistant Dean of Aboriginal Affairs and conducting an ongoing review of our recruitment activity.

#### International Students

There were 358 international undergraduate students from 47 different countries enrolled in the college in 2010/2011, comprising 4.7 per cent of our total undergraduate student population.

#### INTERNATIONAL UNDERGRADUATE ENROLMENT (%)

Region	09/10	10/11	Region	09/10	10/11	Region	09/10	10/11
Africa	14.3	13.4	Caribbean	0.3		North America	5.6	4.7
Asia	67.9	71.5	Europe	6.9	5.3	South America	1.8	0.8
Australia / Oceania	0.5	0.8	Middle East	1.8	2.5	Unknown	1.0	0.8
Total #	392	358						

### **Aboriginal Students**

The College of Arts & Science is home to nearly half of all Aboriginal students at the U of S. We have witnessed a significant increase in Aboriginal student numbers over the past decade, and have taken significant steps recently to strengthen our status as the post-secondary destination of choice for Aboriginal students. Our newly-established Assistant Dean of Aboriginal Affairs has implemented a number of integral offices and programs to support our new and continuing Aboriginal students, and several other initiatives are currently being developed.

STUDENTS	2008/09	2009/10	2010/11
Self-Declared Aboriginal	661	643	698
Total Undergraduate Students	7652	7576	7574
% Self-Declared Aboriginal	9%	8%	9%

### **Study Abroad**

The college realizes that study abroad opportunities are important for students on a number of levels. In addition to representing a transformative moment in many students' lives, studying abroad also helps expand a student's worldview—something that is increasingly valued by employers in today's global workplace.

#### NUMBER OF PARTICIPANTS PER YEAR

Program	2008/09	2009/10	2010/11
Outbound Exchanges	40	48	26
Inbound Exchanges	N/A	28	22
Term Abroad	20	2	0
Faculty-Led Taught Abroad	105	90	76
Total	165	168	124



Award-winning trumpet player and composer Dean McNeill (music) is a fixture on the Canadian music scene. Recently honoured with the Saskatchewan Jazz Festival's Special Recognition Award, McNeill is in demand as a performer and guest artist of both jazz and classical music. He has composed and arranged music for symphony orchestra and jazz ensembles, and released two CDs of his music—*Prairie Fire* and *Mélange*—to critical acclaim. When he's not busy touring across Canada with one of his jazz combos, McNeill directs the Metro Jazz Ensemble of Saskatoon, teaches jazz and brass-related courses at the U of S and serves on many boards across the country.

### Enhancing student success





Left: Students in the Summer University Transition Program. Right: Student volunteers Alix Dick (centre) and Megan Clark (right) with Carol Courtney at the Student Wellness Initiative Toward Community Health (SWITCH)—one of the only student-managed primary health care centres in Canada.

"Enhancing the Student Experience" was listed as a top priority for the College of Arts & Science in its Second Integrated Plan (2008 to 2012), and we have advanced significantly in this regard. In particular, we have introduced several new initiatives that allow students to become involved in community service and outreach projects, opportunities that help students grow both personally and academically.

Moving forward, the college's Third Integrated Plan outlines a plan to build on past progress. We are increasing research opportunities for undergraduates, establishing innovative support programs for Aboriginal students and working with funding partners to help make our graduate programs more affordable and research intensive. While the confines of this report do not allow for a comprehensive listing of existing and planned initiatives in this regard, two of our most innovative and successful student programs are outlined below.

### **Arts & Science Transition Program**

The Arts & Science Transition Program was established in 2005/06 to provide specialized support and assistance for students who would like to attend university, but don't meet the College of Arts & Science entrance requirements. Housed at Royal West Campus on Saskatoon's west end, the program has thrived, growing from 40 students in its inaugural year to nearly 200 annually in recent years. Following a successful first-year of studies in the Transition Program, students can transfer to the main U of S campus and continue their studies in arts and science or apply for admission to another college.

#### ARTS & SCIENCE TRANSITION PROGRAM

# of Students	2008/09	2009/10	2010/2011
College of Arts & Science	186	200	197

### **Learning Communities**

The Learning Communities (LC) program at the U of S was developed in collaboration with the University Learning Centre and Student and Enrolment Services Division to help first-year students integrate into the University community. In 2007/08, a single LC was offered in the college, with 26 students registered in three common, term one courses. The program's success, as demonstrated by a significant increase in student retention rates, has prompted its expansion in successive years. In 2010/11, the program expanded to include 12 first-year LCs in the college, with 350 students enrolled in term one. LC course triples and dyads were composed of 40 class sections, taught by 33 instructors, from 14 different departments, all from the College of Arts & Science.

### Student research



Naila Kuhlmann, who is pursuing a double honours in psychology and biology, is an undergraduate member of John Howland's lab.

### **Undergraduate Students Employed in Research Activities**

Increasing opportunities for undergraduate student research is significant in myriad respects, and a top priority for our college. In our Third Integrated Plan, the college has developed several initiatives to address this area, including: adding fourth-year honours research courses in various departments, developing capstone divisional research courses, and creating more summer research positions for senior undergraduate students. College centres—such as the Interdisciplinary Centre for Culture and Creativity, Humanities and Digital Research Centre and the International Centre for Governance and Development—along with other facilities such as the Canadian Light Source Synchrotron (CLS), are also helping to ensure that our undergraduate students can conduct meaningful research in a diverse range of subject areas.

### 2010/11 UNDERGRADUATE RESEARCH GRANTS

Dept.	Successful Applicat	tions	Dept. Su	ccessful Applic	ations	Dept. Successful Applica		tions	
Biology		14	English		2	Museum	of Antiquities (Classics)	1	
Chemist	try	11	Geography ar	nd Planning	3	Native Stu	ıdies	1	
Comput	ter Science	10	Geological Sc	iences	2	Physics ar	nd Engineering Physics	9	
Dean's C	Office – Arts & Science	5	History		2	Psycholog	ЭУ	7	
Drama		1	Mathematics	& Statistics	4	Sociology	1	2	
						TOTAL		74	

Includes USTEP (U of S Summer Student Employment Program) and NSERC–USRA funding (does not include NSERC Industrial Undergraduate Research Grants).

### **Undergraduate Experiential Learning**

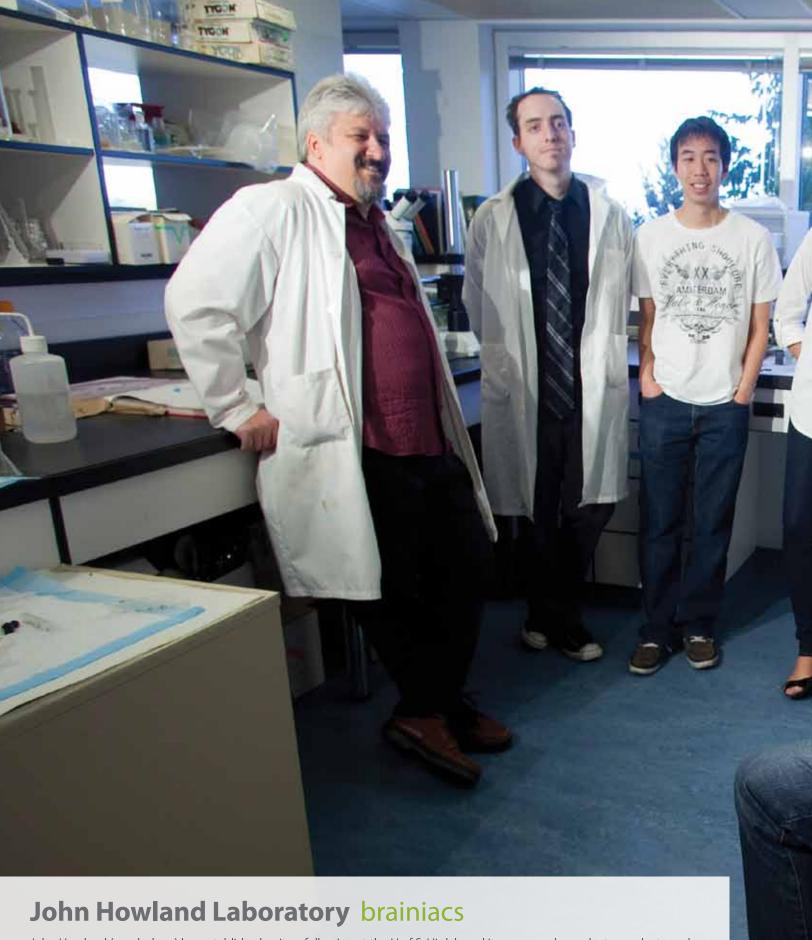
The College of Arts & Science is committed to embedding experiential research opportunities into the undergraduate student experience. From geography and biology field camps to examining Old English manuscripts and community-based examinations of Aboriginal historical issues, such opportunities are critically important for student learning, skill development and overall educational engagement.

### 2010/11 UNDERGRADUATE EXPERIENTIAL LEARNING

Course Type	Subject Area	Enrolments
Со-ор	Geography and Planning	9
Field	Archaeology, Biology, Drama, Geography, Geology, History, Interdisciplinary Studies, Land Use & Environmental Studies, Native Studies, Sociology, Women's and Gender Studies	134
Internship	Computer Science, Economics, English, Political Studies	86
Practicum	Archaeology, Astronomy, Biomolecular Structures, Classical, Medieval and Renaissance Studies, Drama, French, Interdisciplinary Studies, International Studies, Music, Music Applied, Physics, Regional & Urban Planning, Sociology, Special Studies	376
Research	Biology, Chemistry, Geography, Geology, International Studies, Native Studies, Physics, Toxicology	53
TOTAL		658



In between honing her skills on the soccer pitch and studying for her honours degree in anthropology in 2010, Andrea Cessna spent four months in India delving into the effects of urbanization on a small village outside Dehli. A four-year member of the Huskies women's soccer team, Cessna used her camera to document this long-term research project led by professor Satya Sharma (religion and culture). After finishing her honours degree in 2012, Cessna plans to complete a masters degree in visual anthropology.



John Howland (psychology) has established quite a following at the U of S. His lab and its many undergraduate, graduate and postdoctoral members are engaged in a number of innovative behavioural neuroscience research projects related to the neurobiology of stress and the developmental factors that may precipitate psychiatric illness. Howland's work is supported by numerous grants, including funding from NSERC and CIHR. In 2010/11, lab members were either lead or co-authors on seven published articles, and the lab is also instrumental in putting on the annual Brain Blast event at Saskatoon's City Hospital to help celebrate the internationally-recognized Brain Awareness Week in mid-March.

Pictured (from left): Quentin Greba, Matthew MacDougall, Chester Thai, Stephanie Ballendine, Naila Kuhlmann, John Howland.





Since arriving at the U of S, Julita Vassileva (computer science) has made opening doors for women in the sciences a primary objective. She held the Cameco/NSERC Prairie Chair for Women in Science & Engineering until August 2011, during which time she helped establish two integral programs. One, myWISEmentor (WISE being an acronym for Women in Science and Engineering), is a free mentoring program for young women interested in science, math, technology and engineering. The other, Science Ambassadors, sends graduate students to remote northern communities to help support teachers and increase Aboriginal youth's interest in science.

### Research chairs













The College of Arts & Science has 13 Canada Research Chairs in its faculty ranks. These positions receive funding from the federal government and are intended to position Canada as one of the world's top countries for research and discovery in various disciplines. The college is also home to an additional seven faculty members who hold chair positions funded through government, industry and/or privately.

#### **Canada Research Chairs**

- · Sylvia Abonyi (archaeology, associate member), Tier 2, Aboriginal Health
- Erika Dyck (history), Tier 2, History of Medicine
- Graham George (geological sciences), Tier 1, X-Ray Absorbtion Spectroscopy
- · Carl Gutwin (computer science), Tier 2, Next-Generation Groupware
- Akira Hirose (physics and engineering physics), Tier 1, Plasma Science
- Lisa Kalynchuk (psychology), Tier 2, Unravelling the Biology of Anxiety and Depression
- James Miller (history), Tier 1, Native-Newcomer Relations
- · Alexander Moewes (physics and engineering physics), Tier 2, Materials Science with Synchrotron Radiation
- Soledade Pedras (chemistry), Tier 1, Bioorganic and Agricultural Chemistry
- Ingrid Pickering (geological sciences), Tier 2, Molecular Environmental Science
- John Pomeroy (geography and planning), Tier 1, Water Resources and Climate Change
- Jean Pierre St. Maurice (physics and engineering physics), Tier 1, Environmental Sciences
- John Tse (physics and engineering physics), Tier 1, Materials Science

### **Other Research Chairs**

- Colleen Dell (sociology), Research Chair in Substance Abuse
- Jim Hendry (geological sciences), Cameco/NSERC Chair in Environmental and Aqueous Geochemistry
- Rob Kerrich (geological sciences), George McLeod Research Chair in Geological Sciences
- Julita Vassileva (computer science), Cameco/NSERC Chair for Women in Science and Engineering—Prairies
- · Ryan Walker (geography and planning), CP Chair in Aboriginal Community Development
- Dale Ward (chemistry), Thorvaldson Professor in Chemistry
- · Bill Waiser (history), A.S. Morton Chair in History

### Research centres and institutes

The College of Arts & Science is home to numerous research centres and institutes. Such facilities encompass, but are not limited to, supporting collaborative research of various magnitudes, including multi-university initiatives. The centres are non-departmental academic and administrative units that assist with collaborative research mainly within the college. The institutes perform a similar function but with a broader effect; facilitating multi-disciplinary collaborative research between different colleges, universities and even the community.

### Interdisciplinary Centre for Culture and Creativity (ICCC)

Director: Keith Carlson

The ICCC promotes creative communities, research collaboration, and graduate and undergraduate programming across departmental boundaries.

### International Centre for Northern Governance and Development (ICNGD)

Director: Greg Poelzer

The ICNGD's mission and mandate focuses on the circumpolar north and its relationship to northern Saskatchewan. With an emphasis on innovation, its goal is to further research, graduate training, and capacity building around: governance and development, economy, environment, social issues and health. The ICNGD works in partnership with northern and Aboriginal communities, industry, and government.

### Humanities and Fine Arts Digital Research Centre (DRC)

Director: Jon Bath

The DRC fosters multidisciplinary research using leading-edge technologies and new media.

### Institute for Computer and Information Technology (ICIT)

Contact: Kevin Schneider, Department of Computer Science

ICIT is a vehicle to bring together university and industry researchers and developers in the information technology research and development sector.

### Institute of Space and Atmospheric Studies (ISAS)

Chair: Alan Manson, Department of Physics & Engineering Physics

ISAS offers career opportunities for post-doctoral fellows, research associates, research engineers, visiting research scientists and graduate students. Research activities are based upon a diverse set of systems, including ground-based radar and optical devices, and satellite-systems. These systems and related software are developed in the institute.

#### **Subatomic Physics Institute (SPIN)**

Spokesperson: Tom Steele, Department of Physics & Engineering Physics

The mandate of SPIN is the promotion and facilitation of research in pure and applied subatomic physics.



Jeff Sereda sees freshwater through a different lens than most. A doctoral candidate in biology, Sereda studies lake ecosystems and, in particular, how ultraviolet radiation affects phosphorous cycles in lakes. Because unstable phosphorus levels can lead to excessive bacterial and algal growth, Sereda's research will ultimately help lake managers achieve better water quality for drinking and recreation. His work is supported by numerous scholarships and awards, including an NSERC Discovery Grant.

# Advancing research



Randy Duncan, who received a two-year \$100,000 post-doctoral fellowship from the Saskatchewan Health Research Foundation (SHRF) with project supervisor Colleen Dell, research chair in substance abuse and associate professor of sociology. (Photo courtesy of SHRF)

### Research Revenue

The college improved its total research revenue by 20 per cent compared to 2009/2010. The majority of this growth was due to an increase in non-government grants and contracts. The rise in research revenue in 2010/2011 can also be attributed to increases in other federal (i.e., non-tri-agency) and provincial funding.

### COLLEGE OF ARTS & SCIENCE 2010/11 RESEARCH REVENUE

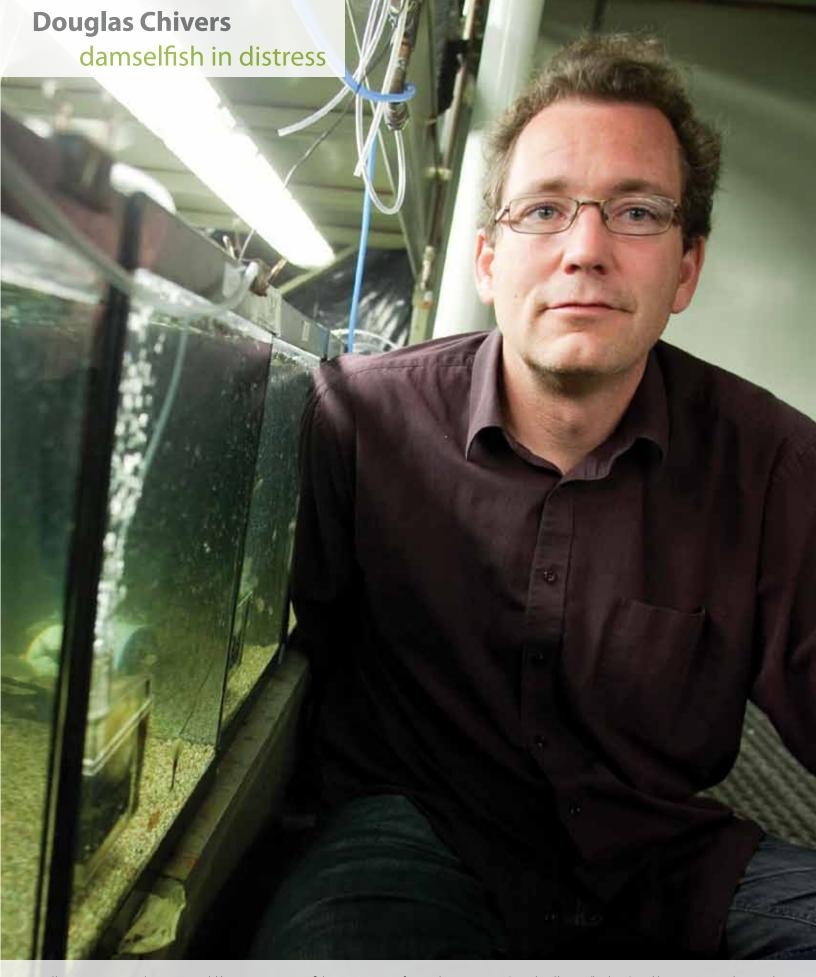
Grants & Contracts	Humanities &				
Reveue Category/Source	Fine Arts	Sciences	Social Sciences	*Other	College Total
Tri-Agency					
NSERC		\$5,901,173	\$321,182		\$6,222,355
SSHRC	\$657,673		\$727,546		\$1,385,219
CIHR	\$5,400	\$424,302	\$573,092		\$1,002,794
NCE		\$448,036	\$57,602	\$46,667	\$552,305
Tri-Agency Total	\$663,073	\$6,773,511	\$1,679,422	\$46,667	\$9,162,673
Other					
CFI	\$26,306	\$576,204	\$239,723		\$842,233
CRC	\$300,000	\$1,300,000	\$300,000		\$1,900,000
Donations (including Bequests)	\$1,750	\$802,381	\$55,083		\$859,214
Investment	\$12,493	\$85,028			\$97,521
Non-Government Grants and Contrac	ts \$93,263	\$3,188,874	\$708,941	\$46,667	\$4,037,745
Other	\$130	\$9,986			\$10,116
Other Federal		\$1,388,334	\$174,872	\$80,000	\$1,643,206
Other Government		\$9,382	\$77,833		\$87,215
Provincial	\$2,419	\$3,693,944	\$1,118,521	\$98,125	\$4,913,009
Other Total	\$463,361	\$11,054,133	\$2,674,973	\$224,792	\$14,390,259
TOTAL	\$1,099,434	\$17,827,644	\$4,354,395	\$271,459	\$23,552,932

<sup>\*&</sup>quot;Other" category includes the Dean's Office, Kenderdine Gallery, and centres that do not fall under the other divisions.

### ARTS & SCIENCE GRADUATE STUDENT RESEARCH FUNDING

Number of Successful Applicants					
Funding	<b>Granting Agency</b>	Graduate Level	2008/09	2009/10	2010/11
Canada Graduate Scholarships	SSHRC	Masters	90%	73%	77%
		Doctoral	91%	83%	91%
	NSERC	Masters	33%	53%	42%
		Doctoral	70%	47%	40%
Doctoral Fellowships	SSHRC	Doctoral	100%	89%	67%

<sup>\*</sup>Graduate students registered at the U of S at time of application.



Changes in ocean chemistry could be turning certain fish into easy prey for predators, so says Douglas Chivers (biology) and his international research team. According to Chivers, ocean acidity is expected to increase substantially by the turn of the century—due to higher levels of carbon dioxide—and this will cause some fish species, such as damselfish, to become disoriented and vulnerable. Experiments showed that fish raised in highly acidic environments, similar to those expected by the year 2100, were up to nine times more likely to die than those raised in low and mid-level acidity groups.



Rita Orji (PhD candidate, computer science) is working to develop innovative computer apps that help people choose what to eat based on individual health objectives. Her work in this area netted the Nigeria native a \$150,000 Vanier Canada Scholarship in 2011, one of this country's most prestigious graduate student awards. Orji's research is unique in that it extends beyond computing and into areas such as psychology, as understanding human behaviour is paramount to her apps ultimately proving effective.

### **Graduate** studies



Jake Pushie, post-doctoral fellow in geological sciences, was awarded one of seven \$100,000 post-doctoral research fellowhips from the Saskatchewan Health Research Foundation (SHRF).

### **Graduate Enrolment**

Having a vibrant and diverse graduate student base ensures the College of Arts & Science significantly contributes to a global economy that is increasingly knowledge-based. As evidenced by the table below, we have increased our graduate student enrolment over the past three years. Moving forward into the third integrated planning cycle (2012 to 2016), the college has identified the following as focal areas to help ensure this trend continues:

- Creating a task force to develop strategies that will substantially increase graduate student research funding, specifically in relation to tri-council competitions.
- Building upon the college's interdisciplinary strengths, design and implement strategically-placed interdisciplinary courses and programs across graduate levels.
- Participating in initiatives from the Office of the Vice-President Research while ensuring the continuation and support of curiosity-driven research programs and the academic agendas of departments and units

### 2010/11 GRADUATE STUDENT ENROLMENT

Graduate Program	PhD	Masters	Total	% PhDs
Anthropology	_	4	4	_
Archaeology	1	25	26	4%
Biology	43	30	73	59%
Chemistry	45	23	68	66%
Computer Science	28	79	107	26%
Economics	1	26	27	4%
English	11	22	33	33%
Geography	15	24	39	38%
Geology	18	20	38	47%
History	35	35	70	50%
Mathematics	10	11	21	48%
Music	_	9	9	_
Native Studies	_	9	9	_
Philosophy	_	11	11	_
Physics	21	26	47	45%
Political Studies	_	28	28	_
Psychology	57	22	79	72%
Religious Studies	_	1	1	_
Sociology	28	16	44	64%
Studies Art	_	10	10	_
Other*	_	9	9	_
TOTAL	313	440	753	42%

### \*Includes masters programs special cases in art history, drama, linguistics, and Spanish

### **GRADUATE ENROLMENT BY DIVISION**

2008/09	Masters	PhD	Total	
Humanities & Fine Arts	110	42	152	
Sciences	165	135	300	
Social Sciences	172	96	268	
COLLEGE TOTAL	447	273	720	
2009/10				
Humanities & Fine Arts	108	45	153	
Sciences	167	139	306	
Social Sciences	152	107	259	
COLLEGE TOTAL	427	291	718	
2010/11				
Humanities & Fine Arts	95	46	141	
Sciences	189	165	354	
Social Sciences	156	102	258	
COLLEGE TOTAL	440	313	753	

# **Graduate** studies



Devon Anderson, a doctoral student in clinical psychology with supervisor Ulrich Teucher (assistant professor, psychology). Anderson received a \$22,000 Doctoral Award from the Saskatchewan Health Research Foundation (SHRF).

### **Graduate Degrees**

Since the university's first strategic planning period beginning in 2004, our college has witnessed significant growth in both graduate student enrolment and the number of graduate degrees granted. With enrolment on a steady incline over the last six years, we expect to witness corresponding increases in graduate degrees granted moving forward.

### 2010/11 GRADUATE DEGREE AREAS OF STUDY

Program	PhDs	Masters	Total
Archaeology and Anthropology	1	7	8
Art and Art History*	_	6	6
Biology	2	7	9
Chemistry	7	10	17
Computer Science	5	19	24
Economics*	_	9	9
English	3	14	17
Geography and Planning	5	10	15
Geological Sciences	2	2	4
History	1	10	11
Languages and Linguistics	_	0	0
Mathematics and Statistics	2	1	3
Music	_	1	1
Native Studies	_	1	1
Philosophy*	_	3	3
Physics & Engineering Physics	2	10	12
Political Studies*		9	9
Psychology	8	4	12
Sociology		5	5
Total	38	128	166

<sup>\*</sup> No doctoral program

### GRADUATE DEGREES GRANTED

Degree	2008	2009	2010
Doctor of Philosophy	31	36	38
Master of Arts	66	60	66
Master of Fine Arts	3	3	5
Master of Music	0	1	1
Master of Science	44	53	55
Post Graduate Diploma	1	0	0
Total	145	153	166

# **Robert Hudson** are we in the dark?



Throughout the vast reaches of outer spaces, some hypothesize there exists a force dubbed "dark energy," which could be causing the universe's rapid expansion. Robert Hudson (philosophy) is currently examining the philosophical significance of such arguments, work that is supported by a nearly \$20,000 grant he received from SSHRC in 2010. Hudson is assessing arguments that support the existence of dark energy and making recommendations on how astrophysicists can improve the accuracy of observational data.

### Teaching excellence













### 2010/11 College of Arts & Science Teaching Excellence Awards

Science—Michel Gravel (chemistry)

Humanities & Fine Arts—Alison Norlen (studio art)

### 2011 Provost's Awards for Outstanding Teaching

College of Arts & Science, Science—Mark Eramian (computer science)

College of Arts & Science, Social Science—Ron Borowsky (psychology)

College of Arts & Science, Humanities & Fine Arts—Garry Gable (music)

2011 Provost's Award for Excellence in International Teaching—James Mullens (religion & culture)

2011 Provost's Outstanding New Teacher Award—Simonne Horwitz (history)

2011 Provost's Prize for Innovative Practice—Megan O'Connell (psychology)

### **U** of S Distinguished Graduate Supervisor Awards

Fall 2010: Gordon McCalla (computer science)

Fall 2011: Robert (Bob) G. Clark (biology)

### 2010 Learning Communities Teaching Award

Michael P.J. Kennedy (english)

### 20010/11 Faculty Honours & Awards

#### Research

Jim Miller (history)—Gold Medal for Achievement in Research, Social Sciences and Humanities Research Council (SSHRC)

Ron Steer (chemistry)—U of S Distinguished Chair

John Tse (physics & engineering physics)—U of S Distinguished Researcher Award

Bill Waiser (history)—U of S Distinguished Chair

### **Earned Degrees**

Len Findlay (english)—Earned Doctor of Letters

Soledade Pedras (chemistry)—Earned Doctor of Science

#### Other

Keith Carlson (history, associate member native studies)—2010 CLIO Prize (British Columbia)

Pamela Downe (archaeology & Anthropology)—Weaver-Tremblay Award in Canadian Anthropology

Len Findlay (english)—U of S Faculty Association Academic Freedom Award

Brenda Macdougall (native studies)—2010 CLIO Prize (Prairies)

Dean McNeill (music)—Saskatchewan Jazz Festival Special Recognition Award

Megan O'Connell (psychology, member of U of S project team): Allan Blizzard Collaborative Projects Award

Robin Renaut, (geological sciences)—Fellow of the Geological Society of America

Li Zong (sociology)—J.W. George Ivany Internationalization Award

Photos (I to r): Michel Gravel, Alison Norlen, Mark Eramian, James Mullens, Megan O'Connell, Garry Gable.



Simonne Horwitz (history) has made quite the impression in only three years teaching in the College of Arts & Science. The South African native won the U of S Provost's Award for Outstanding New Teacher in 2011, an honour due largely to her personable approach in the classroom and passion for teaching students about African history. She strives to challenge stereotypical perceptions of African as a poor, dysfunctional and diseased region, and, to this end, organized a month-long study abroad course in her home country for 10 students in 2010.



Priscillia Settee's first edited book, *The Strength of Women: Âhkamêyimowak* (Coteau Books, 2011) is a collection of stories that document womens' experiences with injustice, racism, genocide and hope. *Âhkamêyimowak* is a Cree word that embodies the strength that drives women to persevere, flourish and work for change within their communities—all of which aptly describes Settee. An associate professor in the Department of Native Studies and member of the Cumberland House Cree First Nations, Settee is a leading advocate for Indigenous rights and food sovereignty in Canada and internationally. She won a 2008 Saskatchewan Global Citizens Award and is actively involved with many boards and organizations, including Iskwewak, a group that focuses on disappeared and missing Indigenous women; the Canadian Centre for Policy Alternatives; the Centre for Global Citizenship Education and Research; and the Indigenous Women's Network.

### publications, events & conferences





Department of Music alumni Bob Xiaoping Xu and Ling Chen established the David L. Kaplan Music Scholarship with a \$1 million gift that will fund numerous new scholarships for future music students, both undergraduates and graduates. The gift was formally announced during a ceremony in Convocation Hall on October 7, 2010.

A limited scope was used in the collection of scholarly and artistic works for inclusion in the 2010/2011 College of Arts & Science Annual Report. Only books, chapters in books, expository and review articles, papers in refereed and non-refereed journals, invited and contributed papers/abstracts in published conference proceedings, and artistic exhibitions or performances published between July 2008 and June 2009 have been included in this year's list of publications. Only published or in-press publications were included. Accepted and forthcoming publications were not included.

2009/2010 FACULTY SCHOLARLY & ARTISTIC WORKS			
Division # of publications %			
Humanities & Fine Arts	261	31	
Science	391	46	
Social Sciences 195		23	
TOTAL 847			

Events include annual meetings, book launches, camps, career fairs, colloquia, community programs, competitions, conferences, exhibitions, festivals, films, forums, lectures, performances, receptions, reunions, seminars, symposiums and workshops. Event year is from July 1 to June 30.

2010/2011 EVENTS				
Division	08/09	09/10	10/11	
Humanities & Fine Arts	132	221	186	
Science	161	172	246	
Social Sciences	112	156	127	
*Other Offices & Centres	8			
Total	412	549	559	

<sup>\*</sup>Reported within divisions as of 09/10

# Financial **highlights**

### Revenue

Arts & Science revenue increased by \$7.1 million (9%) to \$82.9 million compared to 2009/10. The majority of revenue increase was in the areas of research revenue (\$3.4 million) and donations (\$2.6 million). The largest reduction in revenue was due to a decline of \$0.5 million in income from investments.

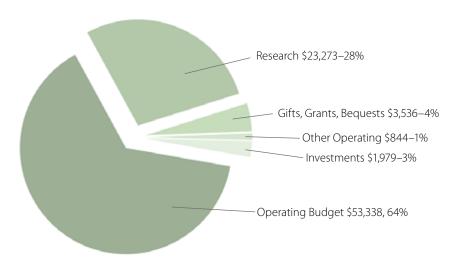
2010/2011 REVENUES (\$ thousands)	
Operating Budget	\$ 53,338
Research	\$ 23,273
Gifts, Grants and Bequests	\$ 3,536
Other Operating	\$ 844
Investments	\$ 1,979
TOTAL	\$ 82,970

### **Expenses**

Total expenses rose by \$4.8 million (6%) to \$78.7 million compared to 2009/10. The major increases were in salaries (\$2.2 million) and operational supplies & expenses (\$1.1 million).

2010/2011 EXPENSES (\$ thousands)	
Salaries and Employee Benefits	\$ 61,888
Operational Supplies and Expenses	\$ 5,806
Scholarships, Bursaries and Prizes	\$ 7,973
Travel	\$ 2,793
Maintenance, Rental and Renovations	\$ 226
Capital Assets	\$ 42
Cost of Goods Sold	\$ 7
Bad Debt Expense	\$ 3
TOTAL	\$ 78,738

Arts & Science Revenue 2010/11



Arts & Science Expenses 2010/11



(Source: university or захкаиспежал 2009/2010 Annual кероп, эспецие 3, Statement of Operations and Changes in Fund Balances)

For more information on our events, conferences and faculty publications can be found on the College website at:

### http://artsandscience.usask.ca

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