

research

greater

than the sum of the parts



UNIVERSITY OF
REGINA



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university of regina

The University of Regina is one of Canada's leading mid-sized comprehensive universities – a dynamic institution with a strong national and international reputation for research and outstanding educational programs. Through its nine faculties, 19 centres / institutes, over 50 laboratories, and more than 400 faculty members, the University has seen its external research funding double since 2000, and graduate enrolment increase to more than 1,400 students (18% are international students). Specialized academic programs have long been offered in targeted research areas, and in recent years, the University has developed several innovative program offerings that provide unique research opportunities for faculty and students.

Innovative, quality research is the lifeblood of any university. It helps attract motivated students and faculty from all over the world, support graduate programs, invigorate teaching, and build an institution's overall reputation in an increasingly competitive university sector.

As an institution whose motto is "As One Who Serves," the University of Regina is infused at every level with a sense of social responsibility – something that is evident in much of the research that is undertaken on campus and shared with the larger community. At the same time, students and faculty are urged to live up to the motto in their own way, serving their academic discipline by conducting world-class research that is diverse, creative, and inspired.

There is a tremendous amount of primary and applied research taking place across all disciplines at the University of Regina, and to help bring this leading-edge work to the world, the University has identified five areas of strategic emphasis:

- Culture and Heritage
- Energy and Environment
- Health
- Informatics
- Public Safety, Security and Social Justice

These areas of focus are intended to facilitate the development of creative new research and academic programs and partnerships, both inside and outside the University.

Culture and heritage is a strong focus for research at the University. It builds on the University's traditional strengths in the applied arts and fosters a symbiotic relationship between applied and scholarly research in the arts, fine arts and humanities.

The University is a world leader in **energy and environment** research focused on carbon capture and storage, enhanced oil recovery, risk assessment of geological storage of CO₂, drought reconstruction, and climate change modeling and adaptation. Through the International Test Centre for CO₂ Capture, University of Regina researchers have developed CO₂ capture technologies that are being commercialized internationally.

Health research has become a major focus for the University with world-class researchers conducting leading-edge studies in aging, long-term care, pain assessment and management, cancer research, population health, rehabilitation and risk reduction, rural health, and northern health. In partnership with the First Nations University of Canada, our researchers are advancing Aboriginal health studies of chronic diseases, nutrition and lifestyle, Indigenous healing, health delivery and control and prevention and environmental health.

Informatics researchers are leading studies in Web search and retrieval systems, data mining, information retrieval and databases, parallel and distributed computing, computer graphics, artificial intelligence, expert systems, and scientific visualization.

The University shows national leadership in **public safety, security and social justice** research. The University has a close partnership with the Canadian Police Research Centre and is home to the Saskatchewan Police College providing unique public safety, security and justice research opportunities.

The University is also providing exciting opportunities through its business administration and public policy programs. The Kenneth Levene Graduate School of Business offers both MBA and Executive MBA programs, and the newly formed provincial Johnson-Shoyama Graduate School of Public Policy provides a

foundation of theory, practice and research to prepare students for careers in public management and public policy research.

The University's growth in its research has been matched by significant growth in infrastructure. In the past decade, the University has more than doubled its physical capacity, with notable research-related construction including:

- a \$60 million Research and Innovation Centre providing faculty and students with state-of-the-art teaching and research facilities; and
- a \$32 million Centre for Kinesiology, Health and Sport that is home to a health clinic and a variety of research laboratories.

The University's active partnerships with other organizations including industry, business and government make a strong contribution to the institution. Working with industry and government partners, the University helped to create:

- the Petroleum Technology Research Centre (PTRC), which manages the world's largest CO₂ Storage Project and CO₂ emissions project, and is also working towards the world's first zero emissions coal fired power plant. As well, University researchers work with PTRC to advance enhanced oil recovery technologies;
- Communities of Tomorrow, which fosters the development and commercialization of new infrastructure solutions for the global marketplace within the Regina regional sustainable infrastructure cluster; and

- SpringBoard West Innovations Inc. (SpringBoard), which provides another significant opportunity for University researchers interested in commercializing their work. Located adjacent to the University at Innovation Place, Springboard specializes in transferring research and technology from the University to the marketplace.

For more than 25 years, the University of Regina has developed its strength as an international university, with partnership agreements in more than 25 different countries. This focus on internationalization has helped attract students and faculty from around the world and facilitate major international research projects in many countries including China, Malawi and Chile, bringing global perspectives to a university that had its beginnings with only 27 students nearly a century ago.



bringing

cultures together



With approximately 2.4 million items as well as access to millions more through its electronic resources and worldwide interlibrary loan system, the Dr. John Archer Library provides University of Regina faculty, staff and students with the most up-to-date research material from around the globe.

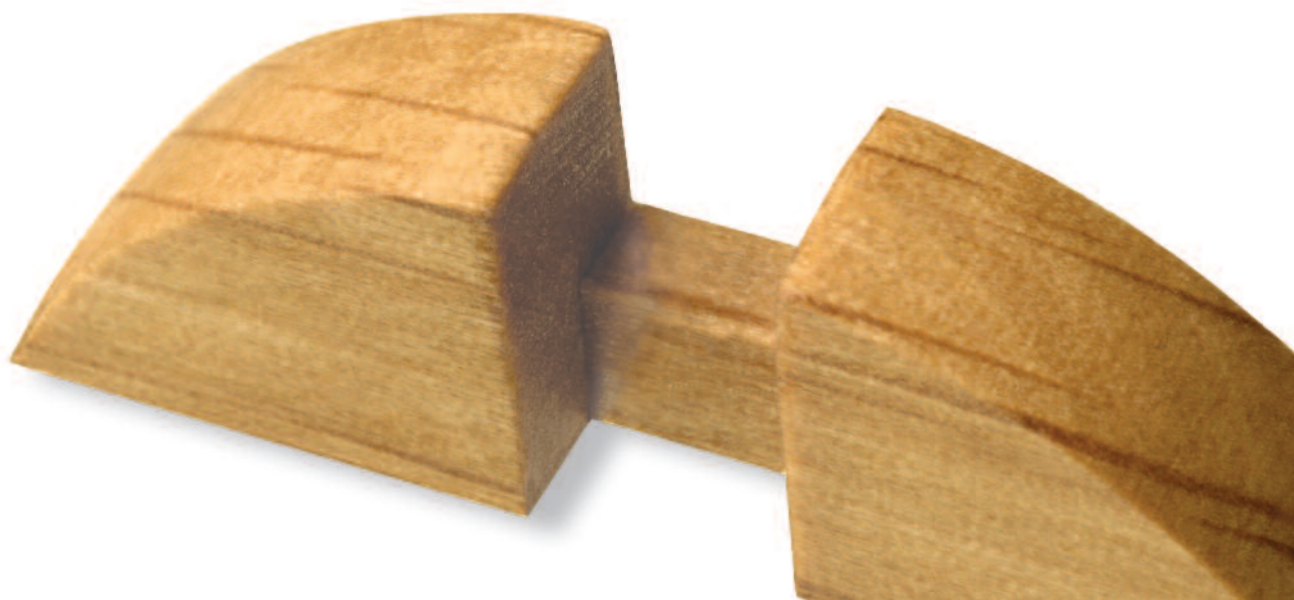
Photo provided by Bradbury Branding & Design

Given the University of Regina's traditional **strength** and national **reputation** in the arts, it is natural that when the University identified its thematic areas in 2000, **Culture** and **Heritage** was highlighted.



**UNDERSTANDING HIP HOP
CULTURE**

Charity Marsh (Media Production and Studies) established the Interactive Media and Performance Studio labs to study DJ technologies, DJ music cultures and the social worlds within which they thrive. Marsh was awarded a Tier 2 Canada Research Chair (2007–2012) in Interactive Media and Performance.



MATERIAL CULTURE AND ART

Tobias Sperlich (Anthropology) is a cultural anthropologist who focuses on material culture and art from Samoa, New Zealand and other South Pacific societies. Sperlich is interested in the exchange of objects between different cultures and the dynamics in which they take place.

FRANCOPHONE IDENTITIES

Laurie Carlson Berg (Education) and **Nicole Côté** (French) are part of an interprovincial multidisciplinary team of researchers examining, together with numerous community partners, Francophone identities in Western Canada. Team funding included a \$1M grant from the Social Sciences and Humanities Research Council of Canada.

FAMILY LITERACY

University of Regina President **Vianne Timmons** (Education) leads a team of researchers working with immigrant families to develop and implement a literacy program that meets the families' specific needs and will increase the ability of service providers to help new immigrants both in Saskatchewan and across the country.



Culture and Heritage is perhaps the most wide-ranging thematic area at the University of Regina, incorporating scholarly and applied research from many disciplines, including the humanities, fine arts, social sciences, education, and even computer science and engineering. By promoting individual, collaborative and interdisciplinary work, the University plays an important role in helping Canada and the world understand and define our diverse artistic, literary and cultural heritage. In addition, the presence on campus of the First Nations University of Canada, the Gabriel Dumont Institute, and

the Institut français uniquely positions University of Regina faculty and students to pursue cultural research on three of the founding peoples of Canada.

Several of the University of Regina's centres / institutes are crucial to fostering Culture and Heritage research at the University. Since 2002, the Humanities Research Institute has developed and supported new creative and critical initiatives in humanities scholarship both on campus and in the community. And since the 1970s, the Canadian Plains Research Center has contributed to the

development of a broad community of scholars within the University and beyond, using interdisciplinary approaches that initiate and support scholarly research on all aspects of Prairie life.

In recent years, the Culture and Heritage theme has included a wide variety of initiatives and research projects at the University, such as:

- the **New Media Studio Laboratory**, a unique facility that incorporates interdisciplinary research in computer science, engineering and fine arts into

RETHINKING PRODUCTIVITY

Under the direction of faculty member **Garson Hunter** (Social Work), the **Social Policy Research Unit's** "Rethinking Productivity Speaker Series" explores various perspectives on productivity. The Series has included presenters such as Academy Award-winning director Oliver Stone, consumer advocate Ralph Nader and evolutionary biologist Robert Trivers.

FOR ALL WE HAVE AND ARE

Authored by **James Pitsula** (History), *For All We Have and Are: Regina and the Experience of the Great War* examines the experiences of one Canadian community during the First World War. Addressing issues such as class, politics, gender, national identity and anti-immigrant actions, his approach illustrates how Regina rebuilt its realities and myths in response to the "war to end all wars."

POPULAR MEDIA

Sheila Petty (Media Production and Studies) contributes to the debate surrounding the political, cultural and economic future of Africa through popular media. By understanding issues raised in aesthetic and narrative structures, insights are gained into the state of African cultures from African perspectives.

DRUG USE

Patricia Elliot (Journalism) articulates the reality of injection drug users through candid discussions on their life experiences and aspirations. Her research will produce a DVD to further discussions for social change within the community.



multimedia content, design and production;

- the **Centre canadien de recherche sur les francophonies en milieu minoritaire**, a research centre that fosters research situated at the intersection of academic inquiry, minority issues and francophone community experience, both in Saskatchewan and across Canada; and
- the **Encyclopedia of Saskatchewan**, a comprehensive print and online resource created by the Canadian

Plains Research Center to create a legacy of knowledge about Saskatchewan, its history, and its people.

shaping

a sustainable future



The International Test Centre for CO₂ Capture, located in the University of Regina's Greenhouse Gas Technology Centre, is world-renowned for its leading research in the area of carbon capture and storage.

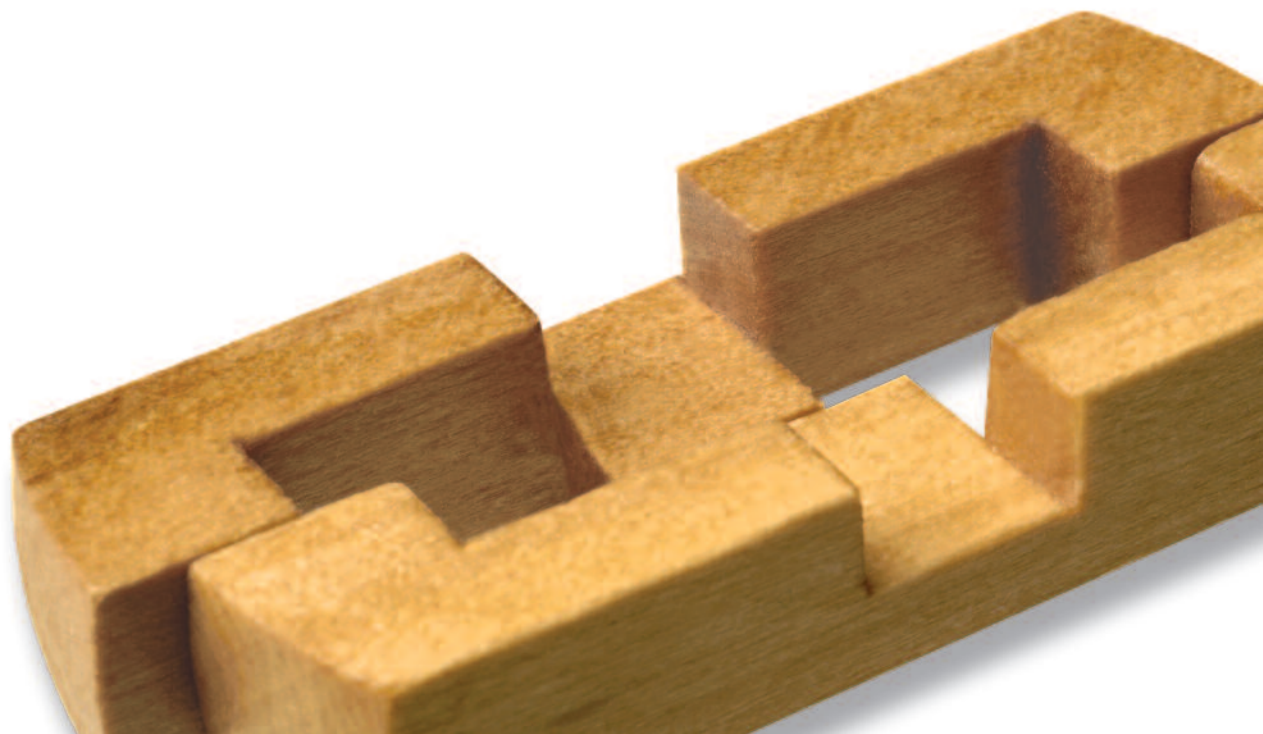
Photo provided by Bradbury Branding & Design

At the University of Regina, we have long understood that applied research is a driving force behind environmental, economic, and societal sustainability.



INCREASING FOOD SECURITY

Christopher Yost (Biology) focuses on protecting Canada's food supply against microbial threats from "farm to fork" in order to help prevent E.coli outbreaks and worldwide illnesses. Yost was named a Tier 2 Canada Research Chair in Microbes, the Environment and Food Safety (2007-2012).



ENVIRONMENTAL MUTATIONS

Christopher Somers (Biology), a Tier 2 Canada Research Chair in Environmental and Wildlife Mutagenesis (2008-2013), seeks to understand processes affecting heritable mutation induction, and relationships between environmental exposures and DNA damage. Somers' research will lead to better environmental protection for humans and wildlife.

CO₂ CAPTURE AND STORAGE

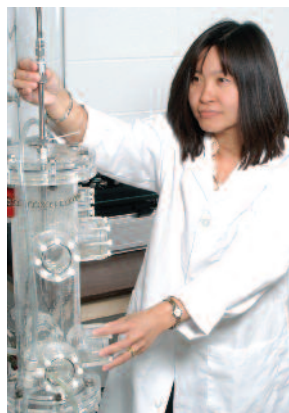
Malcolm Wilson, Director of the Office of Energy and Environment, was among the researchers recognized for their contribution to the 2007 Nobel Peace Prize shared by the Intergovernmental Panel on Climate Change and former U.S. Vice-President Al Gore.

A GREENER WORLD

A ground-breaking research project, led by **Amy Veawab** and **Andy Aroonwilas** (Engineering), produces bio-diesel from low-quality feedstocks such as cooking oil and animal fat. This research aims to develop a lower-cost bio-diesel that is not affected by crop-growing variables.

GEOGRAPHIC INFORMATION SYSTEMS

Joseph Piwowar (Geography) was awarded a Tier 2 Canada Research Chair in Geomatics and Sustainability (2006-2011) to understand how climate change is affecting the sustainable management of Prairie resources. Using remote sensing and geographic information systems, his research into the modeling of climate impacts is informing innovative management strategies that will ensure the sustainability of these resources for future generations.



In 2000, the University made Energy and Environment one of its thematic areas – a decision that is of significant benefit to all Canadians as interest in sustainable energy development and the environment continues to dominate.

Since that time, the University of Regina has become a world-renowned centre for interdisciplinary energy and environmental research. The combined activities of this thematic area support the development of alternative energy sources, CO₂ management technologies, energy- and environment-related policy options, and a

better understanding of climate change impacts on Prairie ecosystems.

Through its partnership with the Petroleum Technology Research Centre, for example, the University has established research expertise in petroleum and environmental engineering and is actively engaged in energy research relevant to Saskatchewan. To complement this strong focus on energy, the University is leading research in western Canada on critical issues around human and natural system adaptations to the impacts of climate change in the Prairie Provinces.

A number of other projects and facilities under the Energy and Environment thematic area are finding practical and effective solutions to environmental challenges facing our world. These include:

- the **International Test Centre for CO₂ Capture**, an award-winning international research centre that specializes in the development and commercialization of innovative greenhouse gas reduction technologies, particularly carbon capture options for industries that utilize fossil fuels;

CLIMATE CHANGE

Four University of Regina researchers – **David Sauchyn** (Geography), **Polo Diaz** (Sociology and Social Studies), **Elaine Barrow** and **Norm Henderson** (Prairie Adaptation Research Collaborative - University of Regina) – organized and co-authored the “Prairies” chapter in *From Impacts to Adaptation: Canada in a Changing Climate 2007*, Canada’s most comprehensive and authoritative national assessment of climate change.

MINERALIZATION

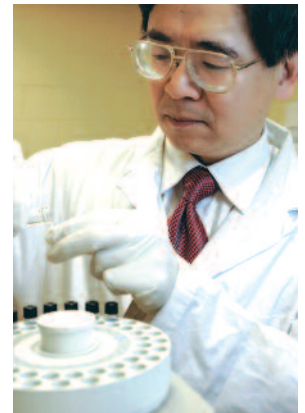
Guoxiang Chi (Geology) was awarded funding from the Natural Sciences and Engineering Research Council of Canada and the Canada Foundation for Innovation to conduct research on carbon dioxide-dominated fluids and their relationship with mineralization. His research contributes to mineralization theories and aids in further mineral exploration.

PALEOECOLOGY

One of the world’s leading specialists in paleoecology, **Peter Leavitt** (Biology) was awarded a Tier 1 Canada Research Chair in Environmental Change and Society (2003-2010) to advance the knowledge of and preparation for future droughts in western Canada to reduce their economic and environmental impacts.

ENVIRONMENTAL RESEARCH

Gordon Huang (Engineering) was one of the first researchers in Canada to be awarded two simultaneous Strategic Project Grants from the Natural Sciences and Engineering Research Council of Canada, one to develop a risk management system for natural and human-induced disasters, and one for watershed management under changing climatic conditions.



- community-based studies using **Geographic Information Systems** to identify inner-city homes that would benefit from an energy retrofit, both from a socio-economic and an environmental perspective; and
- the **Environmental Quality Analysis Laboratory**, a world-class research facility that measures the chemical fingerprint of pollutants and other substances to gauge their impact on the environment.

The background of the entire page is a photograph of a modern building's interior. It features a curved, white ceiling with several recessed circular lights. Large windows with dark frames are visible on the right side, allowing natural light to enter. The overall color palette is dominated by the orange of the top banner and the white and grey of the building's interior.

realizing

a healthier world

In addition to being one of the premier university sports facilities in the country, the Centre for Kinesiology and Health Studies is home to several laboratories devoted to the study of health-related issues.

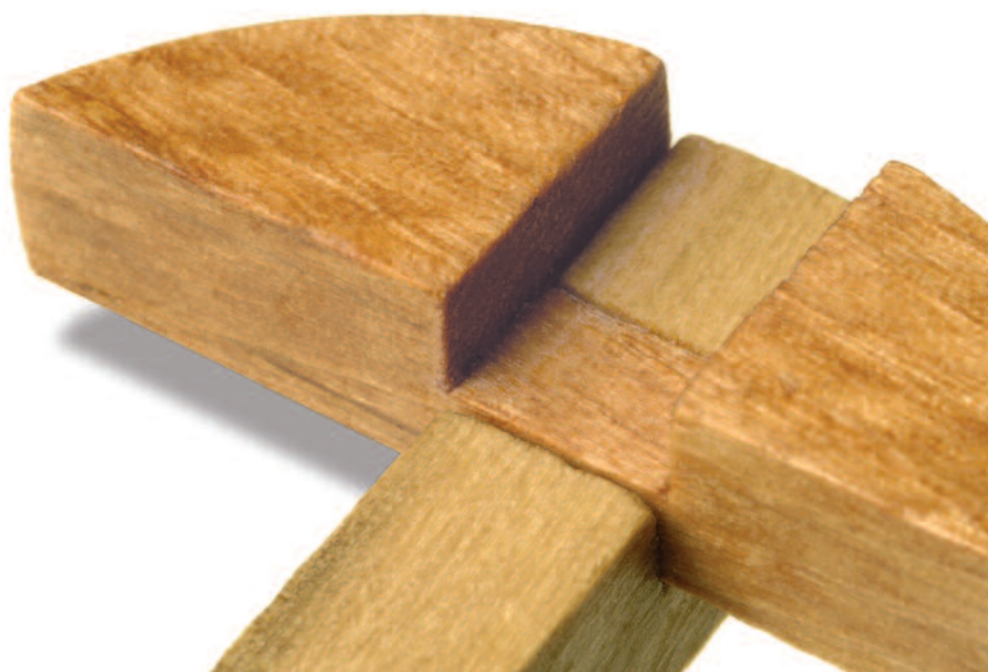
Photo provided by Bradbury Branding & Design

Considering that our province was the **birthplace** of Medicare, it's not surprising that **health** researchers at the University of Regina are continuing a long and **distinguished** Saskatchewan tradition of making a difference in the lives of **Canadians**.



MEDICARE

Health Care Systems in Transition: Canada – authored by **Gregory P. Marchildon** (Johnson-Shoyama Graduate School of Public Policy) – provides an analytical description of the health care system and of reform and policy initiatives in Canada. One of many country-based profiles prepared for the European Observatory of the World Health Organization, this report seeks to support policy-makers in their understanding of diverse health care systems.



CANCER RESEARCH BREAKTHROUGH

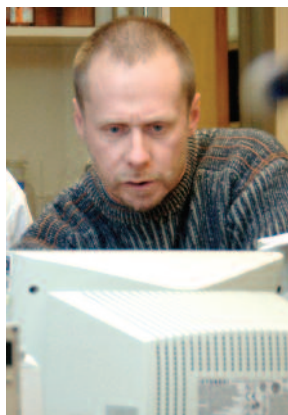
Andrew Freywald (Chemistry and Biochemistry) studies how cancer cells communicate with each other and surrounding tissues to spread in the human body. His work is gaining national and international attention, and provides students with the opportunity to participate in his exciting research projects.

IT'S ALL IN YOUR HEAD!

Laurie Sykes Tottenham (Psychology) strives to understand behaviours that demonstrate sex differences relating to brain structure and function. Her research helps to explain why some people are more “male-typical” or “female-typical” in their behaviours regardless of their biological sex.

MARKETING AND HEALTH

Four University of Regina researchers – **Magdalena Cismaru**, **Anne Lavack** (Business Administration), **Heather Hadjistavropoulos** (Psychology) and **Kim Dorsch** (Kinesiology and Health Studies) – lead ground-breaking research in the area of social marketing relating to a variety of health issues, including smoking, obesity and alcohol consumption.



With the designation of Health as one of the University's key areas, the diversity of health research at the University of Regina has increased substantially in recent years. The University of Regina's approach is a multi-disciplinary one, drawing on the expertise of researchers in different faculties to study the impact of health determinants on various populations. At the same time, research continues into the preventative aspects of health care, with the study and development of policy and program interventions designed to improve health determinants and equitable access to health services.

Provincially and nationally funded researchers at the University of Regina explore many aspects of health and health care delivery in Canada. The physiology of pain is a major focus, for example, as are the living and working conditions of rural Canadian women. Research in a number of faculties looks at early childhood development, and other studies examine varying issues such as the role of food banks in today's society. In addition, University of Regina faculty affiliated with the Johnson-Shoyama Graduate School of Public Policy work to develop creative and practical policy solutions for the challenges

facing Saskatchewan's health care system.

The Health thematic area encompasses many diverse initiatives, including:

- the **Research and Community Alliance for Quality of Life in Long Term Care**, which is developing methods designed to slow down the mental and physical decline that comes with old age and enhance the quality of life for seniors living in long-term care facilities;

POST-TRAUMATIC STRESS DISORDER

A world-renowned specialist in anxiety and post-traumatic stress disorders, **Gordon Asmundson** (Psychology) received the 2008 Achievement Award from the Saskatchewan Health Research Foundation for career achievement and groundbreaking research in management of co-occurring chronic pain and anxiety disorders.

COMPLETING THE CIRCLE

Mary Hampton (Psychology) is among the several researchers contributing to the understanding of end of life and bereavement needs of Aboriginal families in Canada. This interdisciplinary team will propose a model of bereavement healing that will be culturally appropriate for Aboriginal families in Canada and Indigenous cultures globally.

PAIN ASSESSMENT

Thomas Hadjistavropoulos (Psychology) is one of Canada's leading experts on pain assessment and management in older adults. He is the Director of the Centre on Aging and Health and President of the Canadian Psychological Association Foundation.

FALLS PREVENTION AMONG SENIORS

Shanthy Johnson (Kinesiology and Health Studies) explores the role of nutrition and exercise in improving seniors' functional capacity and reducing the number and severity of falls. Funding provided by the Canada Foundation for Innovation will establish the Falls Prevention Research Laboratory at the University of Regina.



- the examination of ice hockey officials' stress factors and coping strategies in order to develop psychological skills training programs that will enhance referee performance; and
- participation in the **Research and Education for Solutions to Violence and Abuse (RESOLVE)**, a prairie-based research network committed to supporting research aimed at ending violence, especially violence involving girls and women. RESOLVE is one of five research centres dedicated to

creating a national voice on the issue of violence and abuse in Canada.



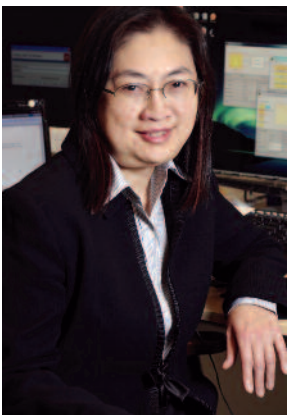
connecting

through information

The newly constructed Research and Innovation Centre is home to a large number of state-of-the-art research facilities, including the Regina Integrative Cognitive Experimentation Laboratory, a laboratory where researchers conduct interdisciplinary studies in experimental psychology and human-computer interaction.

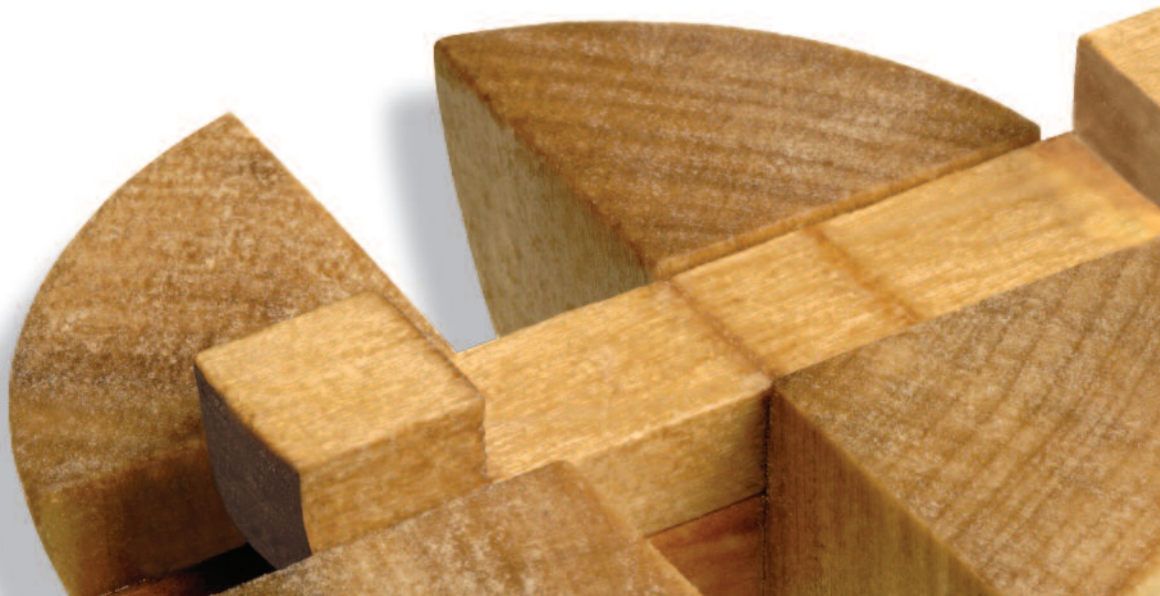
Photo provided by Bradbury Branding & Design

Of the **thematic** areas at the University of Regina, none is more closely **intertwined** with all the rest than **Informatics** - the development and application of computer technologies for **managing** information.



ARTIFICIAL INTELLIGENCE

Christine Chan (Engineering), a Tier 1 Canada Research Chair in Energy and Environmental Informatics (2006-2013), is creating the first-ever artificial intelligence systems to boost performance in the oil and gas industry for the purpose of knowledge sharing and retention. Funding for this project has been provided by the Canada Foundation for Innovation.



TESTING SYSTEMS

Finding more efficient ways to test circuits, software and networks with designs, such as covering arrays, is a central goal in **Karen Meaghers'** (Mathematics and Statistics) research. Her approach to this difficult problem focuses on using methods from algebraic combinatorics. Meagher holds a Discovery Grant from the Natural Sciences and Engineering Research Council of Canada.

MAY I HAVE SOME PRIVACY PLEASE?

Have you ever experienced identity theft or been unknowingly videotaped? **David Elliott** and **Eldon Soifer** (Philosophy and Classics) are advancing discussions of privacy through philosophical eyes. Their research seeks to understand the notion of privacy and the ethics that surround it.



Centred around information technology, software engineering and computer science, applied informatics at the University of Regina is highly versatile, lending itself to countless projects in a research atmosphere that is rich and varied. Medical research, cognitive science, environmental assessment, data interpretation for the energy industry, digital media, data mining, even electronic entertainment – these are just some of the research streams that rely heavily on collaboration with the University of Regina's applied informatics researchers.

Yet Informatics is more than simply a support area for the University's other research initiatives. With proven expertise in mathematical software and modelling, artificial intelligence, information retrieval and multimedia computing, individual University of Regina faculty members and students as well as research teams are constantly exploring new directions for applied informatics research. This is an important step in driving the creation and commercialization of new technology – a process that is of increasing importance both to the University and to the province.

Notable developments in the Informatics thematic area at the University include:

- the **Regina Integrative Cognitive Experimentation Laboratory**, an interdisciplinary facility conducting research in experimental psychology and human-computer interaction to address challenges in eyewitness testimony and the effectiveness of training materials for privacy and security software;

MEASURING THE BODY IN MOTION

A team of researchers – **David Gerhard** (Computer Science) and **John Barden** (Kinesiology and Health Studies) – use motion capture technology to measure bodily movements. Applied to a range of areas including physical therapy and music education, this knowledge will help people re-learn and improve motor patterns.

SOFTWARE PROCESSES

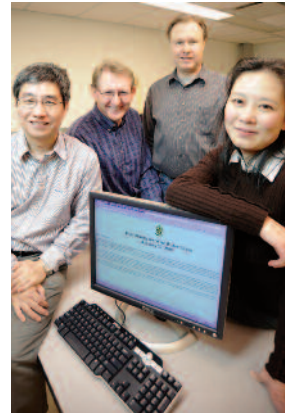
Luigi Benedicenti's (Engineering) research involves creating computer programs that detect and document patterns in how people develop software. By creating programs that allow processes to be documented and re-used automatically, Benedicenti helps process similarities and patterns become best practices that can be widely adopted in software development.

SUSTAINABLE COMMUNITIES

Yiyu Yao, Howard Hamilton, Robert Hilderman, (Computer Science) and **Thiruvengkatachari Viraraghavan** (Engineering) apply data mining techniques to data concerning water transport and usage. Their research will develop sustainable communities by reducing the environmental degradation of these precious resources.

PROMOTING SUCCESS

Warren Wessel (Education) leads research about the dynamics of risk and protective factors in promoting success in science and mathematics. His team was one of five new university-based Centres for Research in Youth, Science Training and Learning to receive funding from the Natural Sciences and Engineering Research Council of Canada.



- the **Rough Music and Audio Digital Interaction Laboratory**, an acoustical analysis facility that supports research in applications of rough sets, data mining, and artificial intelligence for the purpose of sound and speech recognition and modelling; and
- studies on the interaction, effects and consequences of the adoption and employment of information and communication technologies on societal relationships, expectations and norms such as privacy.



building

positive change

The historic College Avenue campus is home to the Johnson-Shoyama Graduate School of Public Policy, a provincial school that carries on the University of Regina's longstanding tradition of social policy research.

Photo provided by Bradbury Branding & Design

As one would expect of an institution whose motto is "As One Who Serves," the [University of Regina](#) has a strong and [wide-ranging research](#) program in the area of Public Safety, Security and Social Justice.



SOCIAL JUSTICE

Awarded a Tier 1 Canada Research Chair in Social Justice (2003-2010), **Shadia Drury** (Political Science / Philosophy and Classics) uses philosophical and literary approaches to address questions of justice. Drury has published several books, including *Aquinas and Modernity*, *Terror and Civilization*, *The Political Ideas of Leo Strauss* and *Alexandre Kojève: The Roots of Postmodern Politics*. Drury is a Fellow of the Royal Society of Canada.



THE HEALING JOURNEY

Bonnie Jeffery (Social Work), Mary Hampton (Psychology), Wendee Kubik, Darlene Juschka (Women's Studies) and Carrie Bourassa (First Nations University of Canada) are part of a multi-disciplinary team examining the experience and repercussions of women emerging from abusive relationships.

CHANGING THE DISCOURSE

Carol Schick (Education) Tier 2 Canada Research Chair in Social Justice and Aboriginal Education (2004-2008), examines the effectiveness of critical anti-oppressive discourses and their potential for use in challenging systemic inequality, especially in Canadian schools. Schick has published several books, including *The University as Text: Women and the University Context*.

A COMMON GROUND

Doctors recruited from other countries bring more than medical expertise. They also bring cultural, ethical and religious views that might affect medical decision making. An international study, led by **David Malloy** (Kinesiology and Health Studies), examines these views to contribute to curriculum modifications to Canadian medical schools.

FEEDING THE NATION

Charlie Fox (Media Production and Studies) develops a deeper understanding of the rural experience, specifically the woman's hidden role, in central Sudan. His research will produce a documentary entitled "Feeding the Nation" that focuses on the essential role of women in an effort to keep their community stable.



In keeping with the founders' desire to bring about major social change, the University has remained focused on public service in a province long regarded as a leader in social policy innovation.

Drawing on both the liberal arts and the social sciences, the Public Safety, Security and Social Justice thematic area is concerned in large part with analyzing the systems we have devised to organize our societies, our economies, our cultures, and our interpersonal relationships.

Researchers in this area examine how these systems work, how they fail, and how they might be improved for the benefit of our province and country. University of Regina researchers are especially concerned with systemic exclusions of and injustices to women, visible minorities, children, the poor, and those marginalized through circumstances such as illness or addiction. Through its relationship with First Nations University of Canada, the University of Regina also plays an important role in promoting a social justice agenda for Aboriginal communities.

The University's close partnership with the Canadian Police Research Centre and the Saskatchewan Police College shows national presence in policing public safety, security and social justice. These national and provincial training and research centres provide unique opportunities with police agencies and private sector entrepreneurs to remain at the forefront of social justice research in Canada.

University of Regina researchers in a wide variety of disciplines – Justice Studies, Women's Studies, Sociology and Social Studies, Political Science and Social Work,

INCARCERATION RATES

A provincial study, led by **Ailsa Watkinson** (Social Work), examines the sentencing of individuals during a 2006-2007 provincial government strike that included Correctional Service workers. Her research is designed to determine if anecdotal evidence, that suggests fewer people were incarcerated during this period, can be verified.

PRIVACY PARADOX

Bill Bonner (Business Administration) investigates the sources of the privacy paradox to understand how efforts to protect privacy have the opposite consequence; privacy and related rights are reduced rather than enhanced. Bonner's project is funded by the Social Sciences and Humanities Research Council of Canada.

THIRD WORLD

Nick Jones (Justice Studies) strives to understand how justice is being used to facilitate peace and reconciliation after the infamous 1994 genocide in Rwanda. Jones is researching the intersection of three "levels" of judicial response, assessing their impact on rebuilding a nation ravaged by genocide.

GUARANTEED INCOME FOR ALL

James Mulvale (Justice Studies) revisits a simple but powerful idea - guaranteed or basic income for all. This approach has the potential to eliminate poverty, give us real choices about the work that we do, and help to shape a green economic future based on equitable distribution of wealth rather than unsustainable growth.



for example – focus their work on public safety, security and social justice issues, such as:

- the **National Summer Institute for Statistical and Geographical Information Systems (GIS) Analysis of Statistics Canada Data**, that teaches participants from across Canada how to use advanced quantitative analyses on Statistics Canada data-sets, using both statistical and GIS analyses. Past sessions have addressed crime analysis, health and epidemiology, and business and economics;

- the **Community Research Unit** in the Faculty of Arts, designed to function as a partnership in which University faculty and students provide independent, participatory research support in response to needs expressed by community-based organizations; and
- the **Prairie Child Welfare Consortium**, a unique Canadian partnership of university, government, Aboriginal and mainstream agencies serving vulnerable children and their families. The University of Regina, through the leadership provided by the

Faculty of Social Work, is a founding member of this initiative.

research laboratories and centres / institutes

Research laboratories and centres / institutes enhance the research and training opportunities available at the University of Regina. Spanning the arts and humanities to the natural and social sciences, they provide collaborative and vital support to facilitate research, develop partnerships and train highly qualified personnel. University of Regina laboratories and centres / institutes include:

- Anxiety and Illness Behaviours Laboratory
- Canadian Plains Research Center
- Centre canadien de recherche sur les francophonies en milieu minoritaire
- Centre for International Education and Training
- Centre for Studies in Energy and Environment
- Centre for Sustainable Communities
- Centre on Aging and Health
- Community Research Unit
- Dr. Paul Schwann Applied Health and Research Centre
- Energy Informatics Laboratory
- Environmental Quality Analysis Laboratory
- Humanities Research Institute
- Indigenous Peoples' Health Research Centre
- Interactive Media and Performance Studio Laboratories
- International Test Centre for CO₂ Capture
- Johnson-Shoyama Graduate School of Public Policy - Outreach and Training Unit
- New Media Studio Laboratory
- Prairie Adaptation Research Collaborative - University of Regina
- Prairie Particle Physics Institute
- Regina Integrative Cognitive Experimentation Laboratory
- Research and Education for Solutions to Violence and Abuse
- Rough Music and Audio Digital Interaction Laboratory
- Saskatchewan Instructional Development and Research Unit
- Saskatchewan Population Health and Evaluation Research Unit
- Social Policy Research Unit
- Survey Research Unit
- The Environmental Research and Response Applications Laboratory
- Trace Analysis Facility
- Traumatic Stress Group

canada research chairs

The University of Regina's Canada Research Chairs conduct research in areas that enhance the five strategic and interconnected themes: Culture and Heritage, Energy and Environment, Health, Informatics, and Public Safety, Security and Social Justice. The support provided by the Canada Research Chair program and the Canada Foundation for Innovation augments the University's capacity to foster and develop world-class centres of research excellence.

CHAIRS:

Computer Science – TBD

An emphasis in artificial intelligence, digital media and software systems.

Energy and Environment – Guo (Gordon) Huang (2003-2010)

Researches systems analysis for energy and environmental systems based on a variety of modeling and experimental studies.

Energy and Environmental Informatics – Christine Chan (2006-2013)

Develops and applies artificial intelligence and knowledge-based system technologies for analysis and decision support in energy and environmental systems.

Environmental Change and Society – Peter Leavitt (2003-2010)

Focuses on reconstructing the last 1,000 years of climate change and drought occurrence in western Canada to forecast future occurrences.

Environmental and Wildlife Mutagenesis – Christopher Somers (2008-2013)

Uses a novel combination of eco-toxicology, animal behavior, and molecular genetics to investigate germline mutation induction in animals and other wildlife.

Geomatics and Sustainability – Joseph Piwowar (2006-2011)

Seeks to understand how climate change affects the sustainable management of Prairie resources.

Interactive Media and Performance – Charity Marsh (2007-2012)

Studies how interactive media and performance cultures, especially DJ cultures and Canadian Indigenous hip hop, contribute to discussions of regionalism, cultural identity, community, and decolonization on the prairies and in western and northern Canada.

Microbes, the Environment and Food Safety – Christopher Yost (2007-2012)

Develops strategies to track sources of fecal contamination in irrigation water as well as identifies genetic factors that can increase the efficacy of bio-preservation of foods.

Public Policy and Business History – Gregory P. Marchildon (2003-2009)

Focuses on multi-disciplinary collaborative research regarding the influence of path dependency on social and economic public policy innovation in Canada.

Social Justice – Shadia Drury (2003-2010)

Examines the interdisciplinary study of social justice through the use of philosophical, literary and psychoanalytical approaches.

Social Justice and Aboriginal Education – Carol Schick (2004-2009)

Examines the effectiveness of critical anti-oppressive discourses and their potential for use in challenging systemic inequality, especially in Canadian schools.

For more information, please see: <http://www.chairs.gc.ca>

graduate studies

The Faculty of Graduate Studies and Research (FGSR) is responsible for ensuring the academic quality and integrity of graduate programs and for providing a supportive and equitable environment for students and faculty alike. To achieve these objectives, the FGSR provides administrative services for graduate students and graduate programs across all academic units (departments and faculties). These services include admissions, student records, financial support to students, thesis and other types of formal defenses, and graduation. An equally important role is the promotion of graduate education and graduate research, including fostering the development of interdisciplinary graduate programs.

The FGSR aims to ensure that each student is instilled with an understanding of, and capacity for, scholarship, independent judgment, academic rigor and intellectual honesty. Graduate program coordinators, academic administrators, supervisors and graduate students have complementary responsibilities in the creation and maintenance of high quality graduate programs and their corresponding academic standards. Accordingly, the FGSR strives to work closely with academic units to enhance the overall quality of graduate education and consolidate graduate education as a major focus of the University.

At the University of Regina, a wide range of academic and professional postgraduate programs are offered, including 14 doctoral programs and more than 50 master's programs. The goal is to provide graduate students with an opportunity to pursue advanced study in state-of-the-art facilities in an environment of intellectual excitement and leading-edge research, all of which are hallmarks of the graduate experience.

For more information, or to view current graduate studies programs or scholarship opportunities, please visit:
<http://www.uregina.ca/gradstudies>

GRADUATE DEVELOPMENTS IN REVIEW...

- Graduate enrolment has increased from 940 students in 1999 to the current enrolment of more than 1,400 students, of which approximately 18% are international students.
- Financial support is available through numerous programs including the Dean's Scholarships, Centennial Merit Scholarships, International Student Scholarships, Graduate Teaching Fellowships and Graduate Teaching Assistantships. Please visit <http://www.uregina.ca/gradstudies/scholarships/index.shtml> for detailed information on the awards offered.
- Student Travel Awards are available to help students present their research at conferences or other forums.
- The Graduate Students' Association sponsors an annual research conference, "Putting Theory into Practice: Transferring Creativity into Community Wisdom," which is open to all graduate and senior undergraduate students.

international research

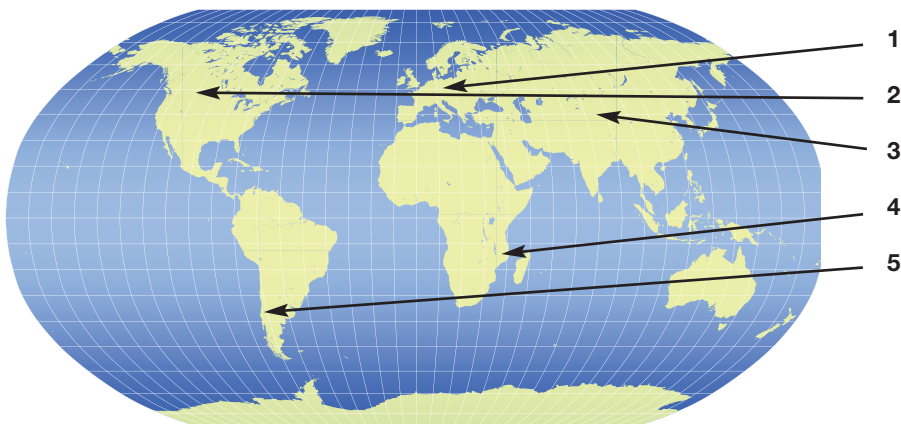
To help the University community meet the challenges and opportunities of an increasingly globalized academic environment, the University of Regina integrates an international perspective into its three-fold mission of teaching, research, and service. The University is dedicated to supporting collaborative and innovative research to establish a strong community and build on the institution's thematic areas and strengths.

The University liaises with international development agencies and government offices to assist in the coordination of international projects, such as:

1. ATLAS, an international particle physics project based at the CERN laboratory in Switzerland;
2. Research on international food safety that benchmarks Canada's performance relative to that of other Organization for

Economic Co-operation and Development countries in four major areas: consumer affairs, bio-security and trades, governance and recalls, and traceability and management;

3. An in-depth analysis of trilingual education in China and its impact on cultural assimilation and economic necessity among minority people;
4. A CIDA-funded Tier 1 project in Malawi that concentrates on several areas, including strategic planning and management, program and curriculum renewal, technical teacher education, and academic and technical skill enhancement; and
5. An international comparative study of dry land River Basins with Chile to understand how climate change may affect the adaptive capacity of regional institutions to continue to manage natural resources.



linking ideas to innovation

The University of Regina is committed to commercializing a broad spectrum of academic initiatives through the transfer of technology from the University to the marketplace. The University-Industry Liaison Office plays a significant role in protecting and preserving the University's intellectual property assets, and evaluates the technical aspects and market potential of research projects. Commercializing research provides an alternative source of funds for essential research and development within our University community, and also provides a practical measure of accountability to the public.

A major element of the University's commercialization strategy - SpringBoard West Innovations Inc. (SpringBoard) - was formed in 2007 to become a model for transforming technology and entrepreneurial innovation into commercially viable products distributed both provincially and globally. In addition, many indirect outcomes are expected, including: increased interaction among the University, business and the community; a more creative, innovative and entrepreneurial culture at the University and in the larger community; more applied

research activity at the University; and increased economic development in the community and the province. The University works closely with SpringBoard to expand and develop its programming.

INNOVATION PLACE - REGINA

Established in 2000, Innovation Place in Regina is one of Canada's newest university-related research parks. Adjacent to the University of Regina, it acts as a host to innovative knowledge clusters and leading-edge petroleum and environmental sciences research, including the Petroleum Technology Research Centre and Communities of Tomorrow.

For more information, please see:
<http://www.innovationplace.com>

contact information

To find out more about:

- Research programs and activities
- Government, industry and community partnerships
- International partnerships and collaborations
- Undergraduate and Graduate programs
- Available academic positions
- Annual reports
- Facts and figures
- News and awards

Please visit the University of Regina website at <http://www.uregina.ca> or contact:

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research **g**reater than the sum of the parts





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