

THE KEY

LAURENTIAN UNIVERSITY'S RESEARCH MAGAZINE

WINTER 2008

BEYOND THE NUMBERS

Cutting-edge research on mathematical
development informs new curriculum

FROM ELEMENTARY TO SECONDARY SCHOOL

New study tracks how young
people handle the transition

YOUTH WORKERS AND WORKPLACE SAFETY

Subject of three-year study



Laurentian University
Université Laurentienne

THE FIRST WORD



In this second issue of *The Key*, I am pleased to present some of our many success stories from our researchers in various faculties and from both anglophone and francophone sectors. As you will discover, Laurentian links research to communities locally, regionally, and internationally.

In past years, Laurentian has built on excellence to become a prime location for research opportunities in the fields of natural resources, mining, environment, health, and the social sciences. The university maintains its commitment to support fundamental and applied research, often in collaboration with other institutions and universities.

Recently, RESEARCH Infosource, which evaluates Canada's top 50 research universities, ranked Laurentian University # 1 in Canada for its total research income growth, including private, sponsored, and public research funds. The university received \$38.6 million in total research funding in 2006, a 133 per cent growth from the \$16.6 million it received in 2005.

This issue illustrates the intensity and excellence of our research activities. I invite you to contact us for further information on our researchers and their accomplishments.

Cordially,

Dr. Liette Vasseur
Associate Vice-President, Research
Laurentian University



Growth in research activities

For the fifth year in a row, we have been ranked among the top 35 universities in Canada in terms of research activity. This is a significant achievement for a university of our size.

Areas of research

While research at the university encompasses many disciplines, Laurentian has identified five areas of strategic focus:

- Mineral resource science and engineering
- Environmental sciences
- Regional economic, political, social and cultural development
- Health issues
- Underground science

THE KEY

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SAFETY FOR YOUTH WORKERS INVESTIGATED

By Laura E. Young

Ten youth workers in Canada lost their lives on the job in 2006, according to Ministry of Labour statistics. To improve safety for youth in the workplace, Laurentian University is taking a close look at this critical issue.

Youth workers, aged 15-24, account for 17 per cent of all loss-time injuries in the workplace. "Young people are very vulnerable in the Ontario – and the North American – workplace," says John Lewko, director of Laurentian's Centre for Research in Human Development.

Lewko is leading investigation into this issue, along with Carol Runyan, director of the Injury Prevention Research Centre at the University of North Carolina. They have received over \$450,000 to conduct a three-year study.

In December 2007, the two universities held the first of four scheduled youth employment symposia. The symposia bring safety experts from across North America to address key issues in workplace safety.

According to the Ontario Safety Standards Association, about 70 per cent of youth will find employment in the service sector at some point during their high school careers, Lewko adds. Youth are learning a range of safety practices that will shape the way they conduct themselves in

the future. "We see a connection between what young people are experiencing and what they will carry with them – because safe practices stay with you."

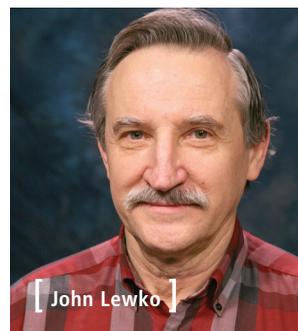
A more complex issue is the nature of supervision in the workplace. In many cases, teenagers are supervising teenagers, and sometimes even older adults, Lewko says. "What we have been able to decipher is that these individuals have very little supervisory training. Who is ensuring that sound supervisory practices have been used? In Ontario, this is really important because a supervisor is a supervisor, regardless of age."

Laurentian also has funding for a provincial survey of 500 teenage workers and 500 parents concerning a range of workplace safety issues. The survey is being led by Cindy-Lynne Tremblay, a research associate who is finishing her MA in human development at Laurentian.

"Laurentian is recognized as a leader in North America in the area of safety and injury prevention for youth workers," says Lewko.

The three-year study will identify some of the major gaps and discrepancies in workplace safety. ▶

RESEARCH



[John Lewko]



[Cindy-Lynne Tremblay]

TRACKING TURTLES

How one biologist is determining the ecological cost of a species

RESEARCH



By Suzanne Charron-Violette

Can a turtle have an ecological price tag? Jacqueline Litzgus, assistant professor and herpetologist in Laurentian's biology department, intends to find out. Deeply interested in turtles and finding real-life applications for her research, she explains that her work is linked to "the protection and conservation of endangered species. All the turtle species that that my graduate students and I are working on, are considered at-risk. They're either of special concern, threatened, or endangered. My ultimate goal is to take the science I do, the data, the information I learn, and use it for the benefit of the species."

Litzgus believes that in order to protect a species – any species – extensive data should be gathered about its ecology, particularly how it lives in its environment. Studying turtles in their natural habitat, Litzgus tracks their activities with the use of a telemeter (radio transmitter). Her research is driven by several questions: How will changing environmental conditions affect the reproductive output of turtles? Or, during a longer than usual summer season, will females produce more clutches of eggs, and, in turn, would winter warming signal to reptiles to come out of hibernation?

She looks at the physiology of the turtle, particularly energetics. Based on changing factors in the turtle's environment, Litzgus is calculating the amount of time and energy it requires to reach maturity. She's also interested in how energy is distributed over the duration of a turtle's lifecycle, which determines the full "bank" of resources it requires to live. As Litzgus puts it: "How expensive is it to be a turtle?"

Answering these questions entails significant fieldwork, as turtles are not easy to keep in captivity for controlled laboratory studies. But

Litzgus is a field biologist at heart – in her youth, she scoured swamps with her brother – and she thoroughly enjoys studying turtles in their natural habitat. In light of what she has already learned about the species, she admits that "at some point, I'm going to have to hang my chest waders and take up a pipette to get to some of the questions. Some of the questions are going to have to be asked at the molecular level ... [and] at the genetics level," she says.



Over the years, Litzgus has collected extensive data on the spotted turtle; enough information, in fact, to write a lengthy report to the federal government recommending the species be listed as endangered. The government responded by doing just that in 2004. Results of this kind are

motivating, and make Litzgus feel that her research is worthwhile.

She further explains that such research provides decision-makers with the rich data they need to make informed choices, which may help protect wildlife, land, and natural resources.

To support her research, Litzgus has obtained more than \$500,000 in funding and grants over the past four years, including her operating grant from the National Sciences and Engineering Research Council (NSERC) Discovery Grant. Such funding is graciously accepted, but it adds a level of complexity to her job. Confronted with reporting duties typical of such funding requirements, Litzgus jokingly tells her students: "I didn't think I would have to be an accountant when I became a professor. But, it's part and parcel."

Whatever funding is secured, it could never exceed the value she places on turtles in our ecosystem. ◀

A room of their own

Celebrating the Centre for Humanities Research and Creativity

By Laura E. Young

Hoi Cheu found his inspiration for the new centre in the English author Virginia Woolf, and her classic, *A Room of One's Own*.

Cheu, the first director of Laurentian University's Centre for Humanities Research and Creativity (Centre for Humanities) celebrated its opening on November 29. Addressing a rapt audience during the interactive launch of the centre, he drew comparisons to Woolf's literary criticism, which helped revolutionize the world, he said. Now, there is "a room of our own for humanities," he explained.

The time has come at Laurentian to foster our own research for the community, "and, it's appropriate for the humanities to say for humanity," said Cheu.

The centre is housed in a former computer room on the seventh floor in the department of English. But its influence will carry far beyond that location, into virtual space. Plans are underway to build a website for the centre, for instance. Cheu intends to emphasize connections, so collaborative projects can be administered properly and foster networking. "We cannot work in isolation."

Laurentian president Judith Woodsworth, whose academic background is in the humanities, praised the multidisciplinary nature of the centre: "It's wonderful to have a community where scientists rub shoulders with artists," she said.

Already, the centre has made alliances with some local community groups – Cinéfest, Music and Film in Motion, Myths and Mirrors – and it has also received a donation from CTV.

There are plans to work internationally, with projects in China and South America. "We will emphasize the idea of cultural interaction in a global sense. I can see our future projects going that way," said Cheu.

Closer to home, the centre is already working locally, translating English plays into the French language. Laurentian's arts d'expression program recently performed *Le Projet Laramie*, a French version of playwright Moisés Kaufman's incisive look at prejudice in a small American town.



There is another project underway, a partnership with schools on Manitoulin Island, which draws on the power of storytelling to reinforce important messages to local youth. The project is being developed to encourage students to stay in school.

At the same time, the centre is also working on 20 short videos to help train doctors at the Northern Ontario School of Medicine.

The centre's involvement in various fields, such as translation, education, and health, is just the beginning. Though projects may differ in scope, they all serve higher goals in the humanities. "But you see, the humanities have no natural boundaries, no historical boundaries, so it's actually easier to join all international movements compared to other research projects that have to be local," said Cheu. They are great examples of social innovation.

"THE IDEA IS THAT WHAT IS LOCAL IS ALSO GLOBAL. I THINK IT'S VERY IMPORTANT THAT WE ENLARGE OUR HORIZONS FROM SUDBURY TO THE WORLD."

Cheu believes the world needs the humanities, now more than ever.

"This is the time for humanities in our stage of social economical and historical development. I believe we have been hiding for too long and people don't know what we do. So, it is our time to speak out, to get involved, and to give back to the community. It's our time to make humanities relevant to cultural and social development."

At Laurentian, the Centre for Humanities involves many departments and specializations, including the PhD in human studies, the MA in interpretation and values, fine arts, philosophy, modern languages, arts d'expression, sociology, English, French, as well as the Thornloe Theatre.

Madeleine Azzola, director of the arts d'expression program praised Cheu's enthusiasm and integrity. "May this project have a long life," she urged. ■



[Peter Kaiser (right) and student Rob Bewcik check out core samples.]

Deep rock unearths *deep* research through CEMI

By Shannon Katary

In finding new strategies to ensure safe mining practices, some of Peter Kaiser's research challenged ingrained practices in civil and mining engineering. Through his efforts, Ontario – and the world – is redefining standards for the design of rock support and tunneling, stop sequencing, and mine method selection.

Kaiser is the founding executive director and CEO of the Centre for Excellence in Mining Innovation (CEMI) and is responsible for its development as an internationally competitive mining research and innovation centre. CEMI is housed at Laurentian University, and is currently funding a number of research projects led by Laurentian researchers. Kaiser brings extensive international experience from both the industrial and academic sectors, having served as consultant to numerous civil engineering and mining projects.

In collaboration with his research team at Laurentian, Kaiser has pioneered the application of brittle rock mechanics in deep tunneling and mining, now commonly referred to as "Canadian rock mechanics," around the world. It has changed the way excavations are designed and engineered.

This is just one of many exciting innovations brought about by CEMI.

CEMI is developing mining research projects with other universities across Canada to link researchers with industry and meet growing demand for new and innovative mining techniques, especially those emphasizing safety and efficiency. "Developing excellence is the key for CEMI's success, and utilizing the enormous amount of experience and skills in Canada's largest mining camp can only strengthen the research efforts as CEMI further establishes itself as an asset to researchers and the mining industry," says Kaiser.

Also the founder and outgoing president of the Mining Innovation, Rehabilitation, and Applied Research Corporation (MIRARCO) at Laurentian University, Kaiser holds the chair for rock mechanics and ground control, and is an internationally recognized specialist in applied geomechanics research for mining and civil engineering.

Over the past few years, he has been involved in the development of advanced ground support techniques, which serve to increase the stability of underground openings of highly stressed rock and facilitate the safe and economical extraction of deep underground ore.



Having authored more than 200 technical publications, as well as books in the field of geomechanics, one of Kaiser's many groundbreaking publications is the *Canadian Rockburst Support Handbook*. The book contains five years of industry-supported research on rockburst-prone underground excavations. (Recently, Kaiser was invited to review and apply the methods outlined in his book to the highly publicized Beaconsfield Mine incident in Australia, in which two miners were trapped by a rockburst for over 14 days.)

The University of Queensland's E. T. Brown, distinguished in the field of rock mechanics, said that Kaiser "is probably the world's current leader in applied rock mechanics research. He has established one of the world's leading rock mechanics research groups at Laurentian University."

CEMI's vision is beginning to make a difference, and is now transferring made-in-Ontario environmental and geomechanics research to a global market. International partners include Australia, Brazil, China, France, Germany, India, Italy, Japan, Korea, South Africa, Switzerland, and the U.S. 

BOOSTING WOMEN'S LIFE EXPECTANCY RATES IN **MADAGASCAR**

By Shannon Dennie

Thanks to Annyck Ratiarson, a professor and microbiologist at Laurentian University, the fight against cervical cancer and HIV/AIDS in Africa, and, to be more specific, in Madagascar, is getting a much-needed boost. Ratiarson, originally from Madagascar, has always been interested in women's health issues, and wants to help raise women's life expectancy rates in this region.

Africa faces a new health epidemic: cancer. In 2002, there were half a million deaths from cancer. In fewer than 20 years, that number could double to one million deaths per year, as growing tobacco usage and chronic viral infection inflict more harm on a continent already dealing with the ravages of HIV/AIDS. Each year in Africa, about 2.5 million people die from HIV/AIDS, and half a million people are dying from cancer as well.

ALMOST HALF OF THE CANCER CASES ARE WOMEN WHO DEVELOP CERVICAL CANCER; MORE THAN HALF OF THEM DIE OF THE DISEASE.

Ratiarson began her studies at the University of Sherbrooke, where she completed a PhD studying carcinogenics. She then spent time at the AIDS laboratory at the University of Toronto studying the HIV/AIDS virus.

After coming to Laurentian University 18 years ago, she continued research on the *Human Papillomavirus* (HPV). HPV has several different viruses, one of which causes cervical cancer in women. "Once diagnosed with cervical cancer, a woman's life expectancy is 10 years," says Ratiarson. "If you have the HPVs Type-16 or Type-18, your life expectancy drops drastically."

In rich countries such as Canada, a woman has a 70 per cent chance of surviving cervical cancer, due to the relatively easy access to tests created for early detection (such as Pap smears), as well as follow-up treatments. This level of health care is not the case in Madagascar, where knowledge of, and access to, these tests is almost virtually unknown.

With a \$1-million contribution from the University Partnerships in Cooperation and Development Program through CIDA, Ratiarson is leading a six-year development project with the University of



Annyck Ratiarson (centre) meeting with women in Madagascar

DEVELOPMENT

Fianarantsoa to assist the country in its battle against HIV/AIDS and cervical cancer. She is collaborating with the Sudbury Regional Hospital.

Ratiarson believes the spread of cervical cancer and the HIV/AIDS virus could be curbed by educating the people of Madagascar. "For women, I think it is a lack of education, because most of them can't read or write," says Ratiarson. "Many don't even know that they can have gynecological exams, or that a man can infect them with HPV through sexual intercourse."

Until now, the only way to treat cervical cancer was to remove the woman's uterus, but, thanks to diagnostic tests and the new HPV vaccine, there is hope for alternative treatments. "If we could find tests that could diagnose cervical cancer early and quickly, maybe we wouldn't have to tell women that they have cancer, and that they have to have their reproductive organs removed," says Ratiarson. "To a woman, especially one who has yet to have had children, that news can be devastating."

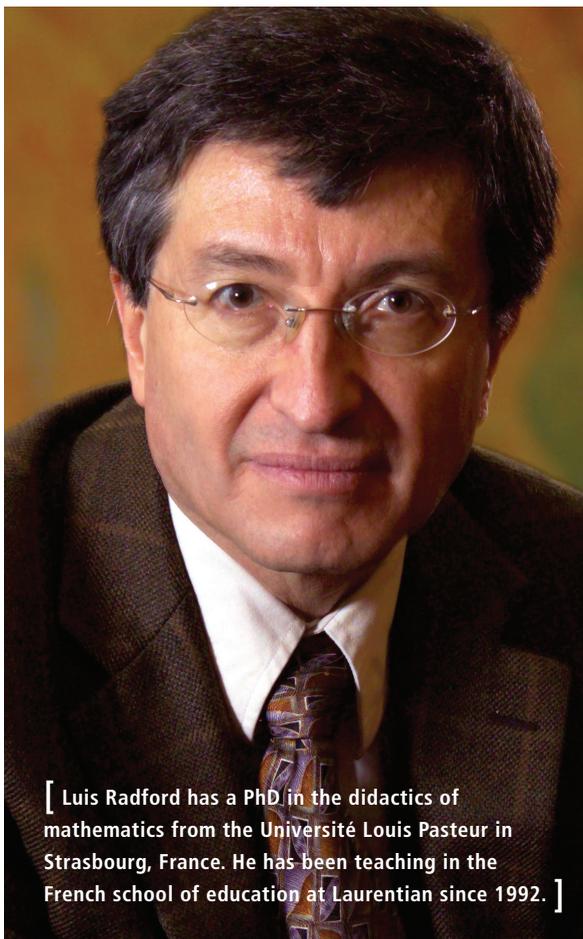
The study with the University of Fianarantsoa is made up of four different components: capacity building, education, research, and strengthening the relationship of the university with outlying communities. "We are educating the university about the new science," says Ratiarson. "As well, we are bringing equipment to its laboratory."

Ratiarson believes that by reinforcing academic capacities at the University of Fianarantsoa, future health professionals will be better equipped in the fight against HIV/AIDS and cervical cancer. "Why do these diseases scare people?" she asks. "We will go into the villages and educate them on these two diseases and their prevention. The future of the coming generations depends on educating them by sending them to school, promoting good health, and participating on a socio-economic level." ■

Beyond the NUMBE

Promoting a sense of community enhances mathematical thinking and development in the classroom

By Crystal Bresson



[Luis Radford has a PhD in the didactics of mathematics from the Université Louis Pasteur in Strasbourg, France. He has been teaching in the French school of education at Laurentian since 1992.]

Luis Radford is working to make both the teaching and learning of mathematics less process-oriented and more experiential. Conducting much of his research at Laurentian University's Laboratory of Cultural Semiotics and Mathematical Thinking, Radford's efforts are improving not only how students learn mathematics, but also the way in which the subject is taught.

Over the past few years, Radford and his research team – comprised of several teachers, from kindergarten to Grade 12; university professors; and graduate students – has been conducting classroom-based research on mathematical thinking and development. Intent on identifying best practices to enhance learning, they are designing learning situations that promote a sense of community in the classroom.

Radford is guided by the principle that thinking and expressing oneself mathematically can happen in a variety of ways, and his team has been developing innovative pedagogical strategies to meet a broad spectrum of cognitive styles and needs.

RADFORD CONSIDERS KNOWLEDGE TO BE CULTURALLY BOUND AND LINKED TO SOCIAL SETTINGS.

RS

“Mathematics should not be reduced to the confrontation between a student and a mathematical piece of knowledge.”

– Luis Radford

According to his research, by designing learning situations that allow students to debate the scientific and aesthetic dimensions of their mathematical findings, they become more actively involved in their own learning – more than mere repositories of knowledge. Radford says by fully considering students’ actions and attitudes, they become a “communitarian self,” meaning more attentive and sensitive to other students’ ideas and feelings.

The research stresses the fundamental role of communities and social ties in creating social spaces in the classroom and beyond.

Radford considers knowledge to be culturally bound and linked to social settings, and he further suggests that knowledge and our relationship to it is framed by cultural codes and values. “The way in which we use mathematics is mediated by cultural values and ideas,” says Radford.

Inspired by watching students struggle to grasp the material, Radford and his team are addressing their concerns.

He feels that for some, frustration over mathematical complexities may lead to the decision to avoid mathematics altogether, leaving students with fewer options when they go on to pursue higher education.

“The problem is much more complex than just trying to make mathematical concepts more accessible to the students. This, of course, is important, but in learning mathematics, other things are just as important as the mere mathematical content,” he says.

Through workshops with teachers and educational policymakers, Radford’s work has influenced the way in which math is being taught



across Ontario. His book, *Communication et Apprentissage* (co-authored with Serge Demers), as well as a series of other publications, research reports, and workshops, are widely received among academic and professional audiences. Some of the findings and best practices have been incorporated in the recently revised version of Ontario’s mathematics curriculum.

Radford’s research suggests that learning mathematics is not only about learning how to get the right answer or how to prove a theorem, but is also about learning why we find a certain problem interesting (and the mathematical methods used to solve it). “In other words, learning mathematics becomes a means to better understand our present world and our place in it,” says Radford. ◀



CREATIVITY

[Kate Tilleczek, pictured on Brackley Beach in P.E.I.]

Making the leap

New research delves into the transition from elementary to secondary school

By Crystal Bresson

Transitions are not always easy to make. One of the first, most poignant, transitions involves switching from elementary to secondary school during adolescence. “Early adolescence is a time of great complexity – socially, physically, and emotionally – and young people are expected to negotiate and bridge institutions at the same time,” says Kate Tilleczek, an associate professor of sociology whose specialties include the sociology of education. She is collaborating with a group from Laurentian University and the Hospital for Sick Children to examine how young people make the all-important transition from elementary to secondary school.

“I HAVE BEEN RESEARCHING CHILD AND YOUTH CULTURES FOR MORE THAN 15 YEARS, AND HAVE FOUND A REAL NEED FOR BETTER QUALITATIVE WORK TO DESCRIBE THIS PRECISE TRANSITIONAL POINT.”

Building on the work and findings of their study, *Early School Leavers: Examining the Lived Reality of Disengagement from Secondary School*, Tilleczek has teamed up again with Bruce Ferguson of the Hospital for Sick Children for this investigative analysis.

Following 25 groups of schools from a broad range of Ontario regions – from the Greater Toronto region, Ottawa, Windsor, Sudbury, Manitoulin, Hearst, and Thunder Bay areas – the research team has selected school groups that include both elementary and secondary schools. They are consulting with young people, their parents, and educators. Surveys are conducted during the transition process, with focus groups and in-depth interviews spanning a three-year period. The research team is collecting a range of data to map out the processes, experiences, and problems associated with this educational transition.

For young students, moving from elementary to secondary school presents many challenges. Differences in school cultures, shifts in social groups, and an increase in academic demands are just some of the situations that young people encounter. Studies have indicated that this transition is often associated with lower grades, social isolation, and increased anxiety. This turning point has been recognized as a stumbling point for many.

“I want to see what young people themselves are doing when they actively move between institutions; how do these institutions organize their daily lives in the classroom and community? Next, I want to know, how do they cope, act, and find their way, and how do others help or hinder them?” wonders Tilleczek.

Funded by the Ontario Ministry of Education, this three-phase study will conclude in 2010. It has been designed to shed light on young people’s development during this time of transition and will further inform the Ontario Ministry of Education and School Board initiative: “Student Success, Pathways, and Transitions.”

“This work will inform some of the ways in which young people negotiate the challenges set up for them by modern society within schools and communities. It will allow for a very deep description of the cultures of elementary and secondary school from the perspectives of young people, their parents, and educators,” says Tilleczek.

The team has met with a wide range of young people that include anglophone, francophone, and Native youth across rural and urban communities and cities. Tilleczek says she is delighted to be working with a skilled research team which includes Dara Roth Edney, Dana Cudney, Melanie Girard, Simon Laflamme, Siobhan Cardoso, and Moira Ferguson. ■

The absentee landlord takes up permanent residence

By Suzanne Charron-Violette

A pervasive image connected to the seigneurial system of New France is that of the privileged, wealthy landowner, the colonizing feudal lord. Notoriously absent from the estate, landowners were often estranged from feudal society and the peasants who worked the land. In Canadian history, the feudal lord has been viewed as someone who exploited his domain, treating it simply as a business. Until recently, little was known about the few landowners who chose, instead, to live on their estate. New research suggests that landowners in New France who occupied the same space as the peasantry formed quite different social bonds, and were of a greater influence to the regional development.

The resident feudal lord is the subject of a book entitled *Seigneurs campagnards de la Nouvelle-France. Présence seigneuriale et sociabilité rurale dans la vallée du Saint-Laurent à l'époque préindustrielle* (Presses universitaires de Rennes, 2007). Author Benoît Grenier, a Quebec native and assistant professor in Laurentian's history department, has recently been honoured for this title, winning the prestigious Michel-Brunet Award (2007), which is given each year to a historian (under the age of 35) by the Institut d'histoire de l'Amérique française.

Grenier focuses his study on 10 feudal lords in his book, landowners who, between the 17th and 19th centuries, chose to live on their estate with their families. As a result, they had a lasting impact on the socio-economic development of the entire St. Lawrence Valley region. Their presence among peasant farmers influenced the operation and development of the land. Grenier makes a good case in showing that feudal life was quite different on these estates than those where feudal lords were absent.

Grenier also traces the birth of a new kind of nobility among the country feudal lords. Indeed, several resident landowners were illiterate commoners, or even persons of modest origins, who became nobility by simply acquiring estates. Over time, however, as Grenier observes, these "ennobled families kept nothing of their status."

In his first book, *Marie-Catherine Peuvret Veuve et seigneuresse en Nouvelle-France, 1667-1739* (Septentrion 2008), the author also focuses on the "seigneuresses," the women, often widows, who single-handedly managed feudal domains.

A specialist in the history of Canada and France, Grenier believes that feudal estates in New France from 1630 to 1854 (when the seigneurial system was abolished) offer up information yet to be uncovered. His work on changes in farming practices, as well as the role of the Séminaire du Québec, is ongoing. Grenier is also studying the place of women in trade during the 18th century. ❖



[Benoît Grenier, assistant professor in the department of history, has won the prestigious Michel-Brunet Award.]

report on

RESEARCH ACTIVITIES

By Liette Vasseur

Laurentian University is proud to celebrate faculty and students who have obtained national and provincial public grants, as well as private, industry, and foundation grants and awards for research, development, and creativity. We are proud of our professors, who are among the top scientists in the country. They are making a lasting impact on the region, its economy, and our reputation. In addition, Laurentian has recently enhanced innovation toward commercialization. With new patents and royalties under development, our researchers demonstrate the excellence of their contributions to society in many ways.

Just to highlight a few accomplishments from 2006/2007: I would like to commend Luis Radford, professor at Laurentian University's École des sciences de l'éducation, who was ranked first in SSHRC's standard research grant competition - Education 1 for the second time in a row. The Canada Foundation for Innovation (CFI) awarded \$261,854 to three Laurentian research teams to help modernize laboratories and equipment under the Leaders Opportunity Fund Equipment Grant program. Ontario's Ministry of Research and Innovation (MRI) gave \$1,923,333 to five Laurentian faculty members for research, outreach, and infrastructure programs. Also in 2007, the Ontario Centres of Excellence (OCE) awarded \$403,304 to six materials and manufacturing research projects at Laurentian.

Our faculty's dedication to research has led to several awards in 2007. Laxman (Lucky) M. Amaratunga, professor of engineering at Laurentian University, received the Teck Cominco Environmental Award at the Conference of Metallurgist and the "COPPER 2007" Symposium of the Metallurgical Society of the Canadian Institute of Mining and Metallurgy. Benoît Grenier, assistant professor in Laurentian

University's department of history, was the recipient of the prestigious Michel-Brunet Award at the 60th annual convention of the Institut d'histoire de l'Amérique française (IHAF). Gratiën Allaire, professor in the department of history at Laurentian University and director of the Institut franco-ontarien, was honoured with the Agathe Award of Excellence at the Artquimidia gala, in Amqui, Quebec.

I am very pleased to be associated with this magazine showcasing the accomplishments of Laurentian researchers, as well as the incredible

potential they have to contribute to HQP training, knowledge translation, and commercialization. ◀

Liette Vasseur is associate vice-president of research at Laurentian University.

PROPORTION OF RESEARCH FUNDING

