University of Victoria

October 2008

UNIVERSITY OF VICTORIA

Annual Review

From the president

One of the truly great things about the University of Victoria is that our status as one of Canada's leading comprehensive universities stems from our core focus as an institution: we value the quality of our teaching, learning and research and their role in the enrichment of our entire society.

This was particularly clear to me this spring while talking to columnist Gary Mason from *The Globe and Mail* about UVic's Indigenous mini-university summer camps. Though these camps are only part of our ongoing commitment to support Indigenous academic achievement, the spark of discovery they produce is profoundly promising.

Mason went on to praise UVic's efforts to support Indigenous achievement as "one of the best good-news stories of the year," because these summer camps encourage participants to carry their hopes and experiences back to their home communities, and widen our invitation to join us in scholarship for the benefit of our world.

Of course, this one aspect of our university is only a small example of the vast diversity of teaching and research conducted at UVic.

While both *Maclean's* magazine and *The Globe and Mail* attest to our place as a national leader in postsecondary education, we remain focused on the promise of the future—a promise that grows brighter with each student we nurture and support.

This year's annual review highlights the accomplishments of students, faculty and staff who have embodied this promise of discovery, across a broad range of our activities.

Many of these achievements would not have been possible without the support of our many community partners. The ongoing support of governments, foundations, corporations and individuals has allowed us to grow and build one of North America's most vibrant and welcoming universities.

The quality of education offered at UVic attracts students and faculty from across Canada and around the world—students and faculty who aspire to improve their world through the highest quality teaching and learning, innovative research and real-life engagement. Please take a few moments to share in their accomplishments.

David H. Turpin, PhD, FRSC
President and Vice-Chancellor

ON THE COVER: Linguistics graduate student Andrew Cienski walks along the beach near Jordan River, along the west coast of Vancouver Island. Cienski specializes in translation and preservation of Hul'qumi'num, a Coast Salish language.

UVic's Mystic Vale, where President Turpin stands, is profiled on the inside back cover.

Student experience

Real-life learning

At UVic, innovation begins when academic work meets the challenge of the real world. UVic students participate in one of the largest experiential learning programs in Canada. With the support and input of businesses, government and community partners, UVic students enrol in practicum courses to solve real-world problems, work in co-op placements, and engage in clinical education, service learning, laboratory and fieldwork opportunities—providing relevant, engaged and practical learning experiences far beyond the classroom.

Partnerships drive our success.

Is hydrogen best for transit buses?

Is it greener to run a conventional bus, or to run a fuel-efficient bus that takes more energy to build? Mechanical engineering student Jeremy Wise answered that question for BC Transit during a co-op term last fall. Using life cycle analysis to compare greenhouse gas emissions of BC Transit's new hydrogen fuel cell buses to current diesel, bio-diesel and hybrid buses, including the energy to produce and distribute hydrogen fuel, Wise found that hydrogen fuel cell buses produce fewer emissions. This was great news for BC Transit, which expects to have 20 hydrogen fuel cell buses running in Whistler in time for the 2010 Olympics. The blue hydrogen fuel cell buses are currently being tested in Victoria. Wise says life cycle analysis "used to be used by just a subset of researchers—now there's no other way."

Doubling wave energy output

As an avid surfer, mechanical engineering grad student Scott Beatty already knew something about the power of waves when he began his co-op work term with Pemberton, BC-based SyncWave Energy. What he didn't know was that in a few short months, assisted by the ongoing efforts of his co-op employer, he would refine a method to convert wave energy into electricity, doubling the electrical output of the company's previous prototypes. "This is an exciting time for renewable energy, clean energy," says Beatty. "It's a big interest of mine and it's on the up-and-up. Government and industry are looking to invest in it." SyncWave president and CEO Nigel Protter praises Scott's assistance with speeding up the commercialization of this promising renewable energy source. "There's no ocean energy industry in BC, so we need to create conditions for it to thrive. Scott's a very valued employee of the company."

Engineering new energy solutions

UVic engineering students are seizing the opportunity to design sustainable energy systems for Canadian companies as part of a new fourth-year engineering design course, offered for the first time in 2007. Because of last year's success and the demand for green technology, 23 companies lined up to participate in this year's course. Seven teams are tackling projects ranging from new wind, solar and wave energy systems to ways to conserve energy from conventional sources. Sustainable energy is a perfect match for student design, says design engineer Sean McConkey. Not only are students environmentally motivated, a lot of projects are technically in reach of fourth-year students, and could have a huge impact on society's energy use. McConkey explains that the challenge is to design effective solutions that people can easily adopt. "We could make a huge dent without even using new technology."

Tenants complete a green building

When the struggle to conserve energy left the domain of engineers and entered the field of public persuasion, UVic alumnus Karen Jawl, project manager for Jawl Properties—the largest private owner of commercial buildings in Victoria—turned to a UVic Business co-op student to create its tenant energy awareness program. "We have a lot of mechanical and electrical engineers working on this, but the expertise we needed was in marketing and public relations," says Jawl. During her spring co-op term, business student Heather Weberg consulted with sustainable energy experts to put together an education campaign for building tenants, including a list of "52 Tips for Going Green" and a contest between buildings. BC Hydro and Jawl engineers had estimated that tenant behaviour could only affect energy savings by about two per cent, because most office workers don't have much control over a building's environment. But initial energy audits for the participating properties show the program exceeding these reduction goals.

Profile | NURSING PARTNERSHIP

A UVic-developed program connecting nursing students with members of the Tsawout First Nation to jointly address the health care challenges of Aboriginal communities was recently recognized by the Canadian Association of Schools of Nursing. The Reciprocal Partnership Model in Nursing Education—created to increase the number of Aboriginal health care professionals and to advance a nursing curriculum that provides reciprocal learning opportunities—won the 2007 Education Innovation Award from the nursing association's western region. "This type of partnership has never been tried before, and the community contributions were invaluable to the program," says Rhonda Underwood, project coordinator from the Tsawout First Nation. Allan Claxton, chief of the Tsawout First Nation, says it's "a valuable opportunity for nursing students and Indigenous community members to come together and learn from each other."

(L to R) Project co-coordinator Rhonda Underwood, Tsawout elder Geraldine Underwood and nursing student Heather Olsen. At lower left: UVic project co-leader Joan Gillie and Heather Olsen.

Supporting student excellence

UVic's academic programs, research projects and support services are constantly evolving in response to our rapidly changing world. Sensitive to social, political, technological and environmental change in our society, we constantly examine our programs and practices to ensure our students are challenged and engaged, so they develop a desire and capacity for learning and societal contribution that will last a lifetime.

Bringing emerging artists downtown

From May to July 2008, visitors to the Legacy Gallery in downtown Victoria enjoyed an exhibition of visual artists at the bright beginnings of their careers. Four UVic MFA grads presented their thesis projects, expanding the conversation on meaning and contemporary art well beyond the campus. Devon Knowles's stained glass sculptures, Peter Gazendam's acrylic postmodern signage, Mike McLean's photographic investigation of Canada Post's role in shaping Canadian national identity, and Todd Lambeth's painterly interpretations of plant forms all helped enrich the engaging visual culture downtown.

Healing with words

When UVic writing student Kerissa Dickie wrote her short story "Wild Flowers," she drew on the brutal memories of residential school she'd heard from her mother, aunts, uncles and grandparents. A member of the Fort Nelson First Nation, Dickie wanted to honour her ancestors' experiences, and drew on her work with the Residential School Healing Project for the story's inspiration. With it, she not only captured a powerful sense of longing, loss and connection, but she also attracted the attention of the Dominion Institute, whose judges awarded Dickie a top prize in its Aboriginal Writing Challenge, a short story contest for young Aboriginal Canadians. Dickie's story is now part of the grade 12 curriculum at the Fort Nelson First Nation Chalo School, and will be published by Theytus Books in an anthology of work by emerging Aboriginal writers, as well as in *The Beaver: Canada's History Magazine*.

Kerissa Dickie's powerful tale, depicting the life of a young girl at a residential school, is winning high praise.

A welcome centre, rising

An expression of UVic's commitment to foster a learning environment that is welcoming and accessible to all Indigenous students, the 12,160-square-foot First Peoples House is now being built in the heart of campus. As a centre for cultural and academic support programs that will help more Indigenous students access and complete post-secondary education, First Peoples House will help UVic achieve its goal of becoming a North American leader in Indigenous initiatives and programs. When complete, the house will support the academic, emotional, spiritual and physical needs of Indigenous students, while recognizing and honouring the diversity of values and beliefs among Indigenous people. First Peoples House is scheduled to open in July 2009. The building will feature a ceremonial room, built in the Coast Salish big house style, that can accommodate up to 200 people for ceremonies and special events.

Taking law beyond the office

Through its comprehensive and wide-ranging approach to legal education, UVic Law has become a Canadian leader in programs that prepare students for a multitude of exceptionally rewarding careers, providing ongoing assistance with career planning and helping students identify career paths that are best suited to their personal interests and aspirations. A UVic law degree is extremely versatile—our graduates soon discover that the knowledge and skills they've developed are highly prized in a wide variety of professions. Thousands of UVic Law graduates have become influential members of the legal community in many different fields, including conventional law practice, the judiciary, business, public interest organizations, international consulting firms, and provincial and federal governments.

Profile | ENCOURAGING ENTREPRENEURS

Winners of two competitions held by UVic's Innovation and Development Corporation (IDC) to encourage students to turn their great ideas into businesses, Rian Bowden and Lewis Sobotkiewicz have begun to turn their own successes into further opportunities for others. Bowden, a commerce student, teamed up with computer science student Sobotkiewicz to develop a new media distribution and development system called DailySplice. Shortly after winning the IDC awards, recent graduate Bowden and Sobotkiewicz, who is finishing up his master's degree, sponsored their own $1,500 computer coding competition, drawing entries and a prize winner from UVic's software engineering program. And they're quickly developing a strong commercial clientele, helping Saanich police, international online booksellers AbeBooks and a number of UVic programs set up Splice Station podcast channels online. The commercial potential these two students demonstrated in IDC challenges is just beginning to be unlocked, as other partners sign on to work with DailySplice.

(L to R) Rian Bowden and Lewis Sobotkiewicz pitch their new business, DailySplice.

Inspiring teaching

The quality of our teaching sets the University of Victoria apart, securing our reputation as a supportive and stimulating learning community where students can realize their full potential. Backed by the resources of a leading comprehensive research university, our faculty bring the fruits of their investigations into an engaging classroom setting that encourages creative problem solving and original thought. Our students consistently rank their learning experience among Canada's finest.

History professor wins Molson prize

Angus McLaren, RSC Fellow and Canada Council Molson Prize winner

UVic history professor emeritus Angus McLaren is one of two winners of a Canada Council Molson Prize this year—the first historian from Western Canada to be awarded this honour. McLaren joins the ranks of outstanding Canadians including Margaret Atwood, Robertson Davies, Alice Munro, Jack Shadbolt and Glenn Gould, who have won the award in past years. A world-renowned expert in the history of sexuality, McLaren started teaching at UVic in 1975 and retired in December 2007. His 10 published books range from a cultural history of impotence and an examination of what it means to be masculine to a study of eugenics in Canada and a history of contraception. "I really do feel honoured," says McLaren. "I was much surprised by the announcement of the award, and I'm of course pleased to be included in such a group of luminaries."

Putting business in the green

When Dr. Monika Winn began researching business and sustainability 15 years ago, the field was virtually unknown. "In management scholarship, nature just didn't exist," she says. "They were seen as two different things and were totally disconnected." But the tenacity of Winn and a handful of like-minded scholars has since led to a substantial body of knowledge about green business strategies—just in time for the recent surge in popular interest in business sustainability. Winn's inclusion of triple bottom line business strategies in her teaching helps ensure that all UVic business graduates are eco-literate. "They examine the topic as part of their basic management education and are passionate about shaping a greener future." Winn remains a leader in her field, winning the UVic Business Outstanding Innovation Award in 2007. Winn and two international colleagues also co-authored the paper that was selected from among 5,000 entries for the prestigious Carolyn Dexter Best International Paper Award, given annually by the Academy of Management.

Exploring international relations

For political science professor Michael Webb, one of two 2007 winners of the UVic Alumni Awards for Excellence in Teaching, engaging student interest in international diplomacy comes naturally. An expert in the politics of economic globalization, Webb's award-winning teaching opens the door to the intricacies of international relations—just the right credentials for serving as faculty advisor to a team of UVic students who represented China this year at the National Model United Nations Conference in New York. The team was awarded the right to represent the Chinese delegation last fall, and its months of preparation paid off with several awards, including one for Distinguished Delegation. Several team members also won individual awards for their work as delegates and for their position papers. "It's quite an honour to be chosen to represent China," says Webb, "and this was a wonderful opportunity for students to learn about world politics from the perspective of a major non-Western country."

Profile | TEACHER EDUCATION

While UVic is proud that instructors across every department are known for their inspiring teaching, few on campus have done as much as Dr. Lorna Williams to change the underlying approach to teaching, both at UVic and in the school systems beyond. As Canada Research Chair in Indigenous Knowledge and Learning and the director of Aboriginal Education at UVic, Williams has brought core principles and practices of traditional learning into teacher education. The touchstones of understanding built on Indigenous ways of sharing knowledge and practice—storytelling while weaving, entering the world through song, or learning about natural sciences by making traditional instruments like drums— help UVic graduates "enter the culture where they're teaching," explains Williams. "Our courses help students see that Indigenous people have knowledge, and that teaching and learning are already part of those cultures." Williams' courses help students experience the Lil'wat principle of *Kamucwkalha*, a spirit of working and learning together, and listening to one another in an environment where everyone can speak without fear.

(L to R) Lorna Williams and co-instructor Charlene George.

Research depth

Climate, matter and energy

UVic's environmental achievements and basic science research have duly garnered international praise, and we continue to take strides to meet the challenges of the future. As issues of climate assessment and mitigation, and sub-molecular research into the nature of matter and energy bring these fields into the spotlight, UVic will play an increasingly prominent role on the national and international stage.

International leadership in climate, oceans and energy

Unprecedented climate initiative

Announced in January 2008, the British Columbia government-funded Pacific Institute for Climate Solutions (PICS)—hosted and led by UVic—builds on the strengths of British Columbia's four research-intensive universities to develop climate change solutions and lead the way to a vibrant low-carbon economy. The $94.5-million pledge—the largest single contribution to a Canadian university endowment—supports an enormous mission to promote the commercial development of climate change solutions and provide the public with information and ideas on how to reduce greenhouse gas emissions.

What proteins help the pine beetle?

How can we make trees more resistant to pine beetles? That's one of the questions scientists at the UVic-Genome BC Proteomics Centre hope to answer with new million-dollar equipment Western Economic Diversification Canada is helping to purchase. The equipment will be used for metabolite research—the study and identification of metabolic products of cells that may be used to distinguish diseased organisms from healthy ones—used in a number of areas including the study of plant health. "The equipment can provide a comprehensive analysis of the metabolites that can kill the mountain pine beetle," explains centre director Dr. Christoph Borchers. "Once we know what's making the trees vulnerable we can work on breeding the right trees."

Spinning up wind energy

"In the days when ships moved by sail alone, seafarers relied on the wind to bring them home," suggests mechanical engineering professor Curran Crawford. "I think wind is going to show us the way once more, at least as one reliable option for renewable and sustainable energy." While a PhD student at Cambridge University, Crawford developed the sophisticated computer modeling system which is now at the core of his current research at UVic. His new turbine blades are the subject of very real optimism for BC, and as the province moves to cleaner energy sources, Crawford feels "wind is ready for the taking." In BC, "Consumers usually require the most energy in the coldest months, when the wind is fiercest," he adds. "We can store three years' worth of hydro-electric energy to fill in the 'gaps' during less windy times of the day or year." With Crawford working on even more efficient turbine blades, BC can expect great things in its energy future.

Dark matter discoveries

A remarkable discovery by UVic scientists could change the way we think about dark matter, a mysterious substance that can't be seen but which we know exists because of its gravitational effects on visible objects, such as galaxies, stars, gas and planets. Astrophysics postdoctoral fellow Andisheh Mahdavi, assistant professor Hendrik Hoekstra and professor Arif Babul describe their observation as a "cosmic trainwreck." While working on another project, Mahdavi discovered that the collision of two swarms of galaxies —the "trainwreck"—left behind dark matter, which should always stay with the galaxies. But what they discovered in this case was that one of the densest parts of the collision has no galaxies, only gas and dark matter. "It blew us away that it looks like the galaxies are removed from the densest core of dark matter," says Hoekstra. "This would be the first time we've seen such a thing and could be a huge test of our knowledge of how dark matter behaves." Babul agrees, explaining, "if our results hold up to more detailed scrutiny, they'll have a profound impact on our understanding of matter itself."

Profile | VENUS

Launched with the aim of making ocean research available to everyone via the Internet, the VENUS cabled ocean observatory celebrated two years of live data collection from the sea floor in 2008. Until now, oceanographers primarily relied on ship-based research for information about deep water conditions and habitats. But VENUS-led advances in engineering have created a successful powered fibre-optic cable system, providing multiple, continuous data streams that enable researchers to look at complex, long-term data in exciting new ways. The VENUS observatory provides two-way communication with an array of scientific instruments on the sea floor in Saanich Inlet and the busy Strait of Georgia near Vancouver, demonstrating that interactive, continuous ocean research is now possible, and that it represents the future for the many fields that rely on its findings. Along with its larger companion observatory, NEPTUNE Canada, which is also led by UVic, VENUS is establishing Canada as a world leader in this exciting, emerging area.

100 metres down in the Saanich Inlet, a robot arm adjusts electrical cable, leaving fragile plumose anemones intact. Herring, once almost depleted in the area, are often abundant now. At left: Dr. Verena Tunnicliffe, VENUS director, with a scale model of an undersea power-and-communication node. Three nodes, each about the size of a small car, sit at the bottom of the Strait of Georgia and Saanich Inlet, serving as the hubs of the undersea observatory.

Building a healthier society

The health of society is of paramount concern to graduate student and faculty researchers at the University of Victoria. Research and innovation programs in the health and life sciences can be found throughout UVic, from cutting-edge research that may help doctors fight the dreaded "superbug" to potential treatments to diminish the effects of fetal alcohol syndrome. The many UVic research centres devoted to health issues build on the expertise of our faculty, and enhance their ability to improve our lives.

Exercise that rebuilds brains

Neuroscientist Dr. Brian Christie, one of the first researchers to discover that exercise promotes the birth of brain cells involved with learning and memory, is now targeting Fetal Alcohol Syndrome (FAS). Christie was shocked by just how big a difference exercise made in increasing the number of neurons in an FAS-affected brain, compared to other brain disorders. When he gave adult rats with FAS the chance to run four to five kilometres a day, their learning and memory improved to the point where they were indistinguishable from normal healthy rats. Christie stresses that exercise will probably not be as dramatic a cure in humans given their relative brain complexity, but daily exercise should still be a key treatment. Christie joined UVic's Island Medical Program and the Division of Medical Sciences in 2007, the same year his research earned him a Michael Smith Foundation for Health Research Career Investigator Award.

New island doctors

Arriving on campus in 2005 as part of a bold new program to address the shortage of physicians in British Columbia, the first 22 graduates of UVic's Island Medical Program (IMP) received their degrees in 2008 and started their post-graduate residencies throughout Canada. A collaboration between the UBC Faculty of Medicine and the University of Victoria, the IMP leads new doctors directly into residencies, where they receive in-depth training in a specific branch of medicine. Three IMP grads are completing family practice residencies at Royal Jubilee Hospital and Victoria General Hospital in Victoria, while another is doing the first year of a dermatology residency in the city. All say their experiences during their four years of medical school, whether attending at births, working in the emergency room of a small North Island hospital or visiting remote communities by helicopter, will influence their future directions as physicians.

(L to R) IMP grads Averil Russell and Bjorn Vegsund.

Finding answers among vulnerable populations

Translating research knowledge into usable information for front-line service providers, and promoting public understanding of that linkage, is a driving force in the career of UVic sociologist Dr. Cecilia Benoit. Her research—on midwifery and maternity care, youth health, and gender, work and health—helps policy-makers, practitioners and community organizations find better ways to serve the public interest. Beginning with her pioneering studies of maternity care systems in democratic societies, her research has illuminated how the intersections of gender, class and ethnicity matter in the Canadian context. As author of more than 90 publications and a frequent public speaker, sharing her research findings and their policy implications to help reduce gender inequalities and promote the health and well-being of vulnerable populations in Canadian society, Benoit was this year's winner of the Craigdarroch Award for Research Communication.

Profile | WELLNESS ATLAS

In order to engage community attention on health and wellness, two UVic faculty have literally written the book on how healthy living maps out across British Columbia. Supported by a grant from the Ministry of Healthy Living and Sport, Dean of Social Sciences Dr. Peter Keller and Dr. Leslie Foster, of geography and child and youth care, co-wrote the *BC Atlas of Wellness*, showing among other things that the capital region climate may be good for you. While it's difficult to say that clean air is more important than the outdoor habits people develop to enjoy BC's welcoming natural surroundings, the atlas makes it easy to see that many areas in the province help people stay active and healthier throughout their lives. Foster and Keller have already provided a requested seniors supplement, and have begun work on additional supplements and updates to promote health awareness. "We wanted to shift the focus by paying more attention to what leads to a healthy life, rather than what makes us sick," explains Keller.

(L to R) Peter Keller and Leslie Foster found that the inviting outdoor climate helps Victoria-area residents sustain healthy lifestyles.

Community works

Contributing to our society

The University of Victoria has become a leading Canadian research university by promoting the mobilization and application of knowledge for societal benefit. Through research initiatives that involve communities and address their priorities, we are helping our region thrive, and establishing national leadership in community-based research.

Working with communities to build opportunity.

Cultivating Indigenous languages

2007 marked an important year in the preservation of BC's Indigenous languages. In November, the first set of students received certificates in Aboriginal Language Revitalization as part of a program designed to bolster the use of Indigenous languages in BC communities. The Indigenous Language Revitalization program—developed by the Faculty of Education, Department of Linguistics and Division of Continuing Studies in cooperation with local school districts, First Nations and the Enow'kin Centre—has trained participants to bring local languages like Kwak'wala and Lik'wala into preschools and kindergartens, after-school programs and evening classes in the community. Program participants, most of whom are moving on to pursue teaching credentials, build on and support the knowledge base within the community, while UVic "provides background and training so our students can become skilled and confident language teachers in their native languages," explains program coordinator Aliki Marinakis. The community programs the certificate recipients have developed, including language and culture camps for children based on an intergenerational mentorship program on Quadra Island, have built momentum in the communities—momentum that will continue to assist these students when they take their places as Indigenous language teachers in the schools, ensuring that Indigenous languages will resound across British Columbia for generations to come.

Innovations help meet special needs

Manjinder Benning, CanAssist project coordinator and client Vanessa Del Grande

Since 1999, the interdisciplinary team of students, researchers, faculty and staff at UVic's CanAssist have worked with countless community agencies, volunteers and clients to design, build and modify devices for people with disabilities—providing individual and customized solutions which would be difficult if not impossible to develop in the private sector. The amazing success CanAssist has had improving quality of life with novel technologies led to a $3-million BC provincial grant in March 2008, allowing the program to meet the increasing demand for innovative assistive devices around the world. These funds will also support diversifying CanAssist services beyond assistive technology, as the program widens to work with community agencies to provide and promote meaningful employment and training opportunities (and related supports) for those with special needs.

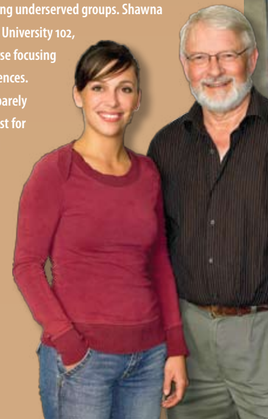
Protecting our natural resources

As the first program of its kind in Canada, the Environmental Law Clinic (ELC) attracts some of the country's brightest students interested in public interest and environmental law. Working under the supervision of senior lawyers, clinic students offer pro bono legal representation and assistance, produce legal education materials, and advocate on a wide range of environmental and sustainability law issues. "The ELC is training Canada's next generation of public interest environmental lawyers," says legal director Calvin Sandborn. For over a decade, the clinic has worked on behalf of community groups, First Nations and conservation organizations in BC whose voices might not otherwise be heard. The clinic provides UVic Law students with hands-on legal experience as they address complex environmental challenges, and plays a vital role in enhancing the capacity of the law to better protect the environment.

Profile | UNIVERSITY 101

Gordon Shrimpton leads an evening University 101 course. At lower left: Shrimpton and Shawna Johnson.

Shawna Johnson, a single working parent, credits UVic's University 101 program with helping her develop greater confidence in her own abilities. She explains that the free, non-credit courses in the humanities and social sciences "allowed me to challenge myself and push beyond my comfort zones to develop my critical thinking skills." University 101 provides Victoria-area residents who have previously faced barriers to education with ongoing opportunities for immersion in the humanities, keeping a vital conversation alive about the value of intellectual development, and feeding the quest for knowledge among underserved groups. Shawna also appreciates University 102, a follow-up course focusing on the social sciences. "The course has barely satisfied my thirst for knowledge, and has left me wanting more. University 102 has reignited my passion for lifelong learning."



Local and global achievements

The discoveries and innovations emanating from universities profoundly affect the well-being of society, in our neighbourhoods and around the globe. As UVic develops programs that are both locally relevant and internationally significant, we demonstrate our commitment to communities through positive, transforming initiatives that can be applied throughout Canada and around the world.

Reseeding a lost way of life in the Iraqi marshlands

Fishers using a traditional boat in the Iraqi marshlands

Beginning in 1989, most of Iraq's exceptional marshland ecosystem was drained under Saddam Hussein's regime. Now, two researchers at the University of Victoria and an expert at the Fraser Basin Council are helping to frame a new way of life for the people of the southern Iraqi marshes. The international community and Iraqi representatives have placed great emphasis on the restoration of this eco-reserve as part of the overall reconstruction of Iraq. UVic geography professor Dr. Stephen Lonergan, Maureen Maloney, QC, director of UVic's Institute of Dispute Resolution, and David Marshall of the Fraser Basin Council were selected by CIDA to work with Iraqi officials to develop long-term plans for reinvigorating the social and economic patterns of life in the marshlands.

UVic helps make the world a better place for seniors

When the World Health Organization set out to make the world a better place for urban seniors, UVic's Centre on Aging stepped up to the plate. In all, 33 cities participated in the 2006 WHO Global Age-Friendly Cities Project, including Rio de Janeiro, Cancun, Nairobi, Moscow, New Delhi, Tokyo and Saanich, BC. With support from the BC Ministry of Health, Dr. Elaine Gallagher, the centre's director, and her research team spent a year investigating the living conditions of Saanich seniors. Both WHO and Saanich issued their own reports in 2007. The WHO project inspired two other initiatives: research by Gallagher aimed at making Canadian rural and remote communities more senior-friendly, and a push to have BC communities assess their age-friendliness and implement changes in time for the 2010 Olympics. In Saanich, changes are already underway. Projects include making public transit more accessible, widening sidewalks to accommodate scooters, and recognizing age-friendly businesses.

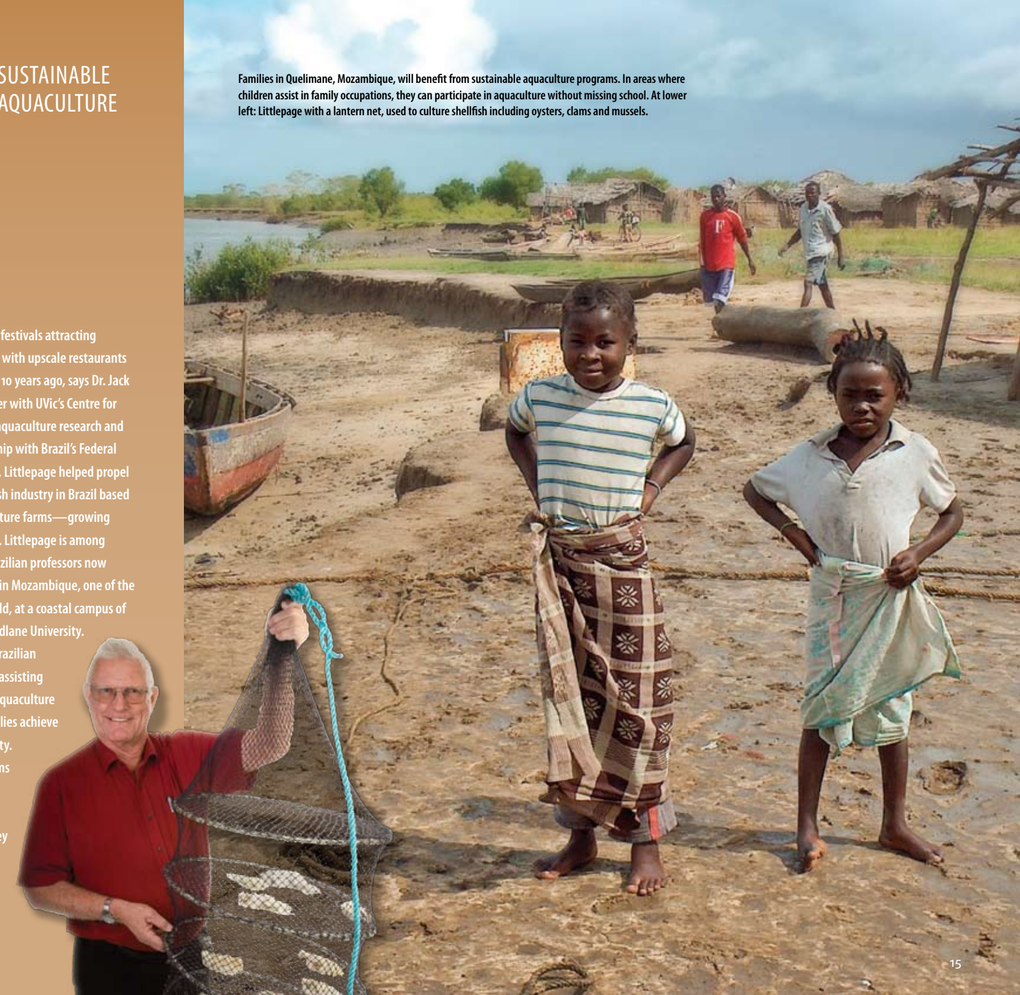
Protecting our drinking water

Dr. Asit Mazumder, who examines watershed practices, ecology and drinking water quality, had some unsettling news for Shawnigan Lake, BC, residents this spring—he had found high levels of caffeine in Shawnigan Lake, their drinking supply. Worried less about jittery fish than about other contamination, Mazumder explains that just as caffeine likely seeped into the lake from nearby septic fields, other excreted pharmaceuticals are also likely entering the water supply. The problem is well worth worrying about, he says, because "our studies suggest this is a problem common to all freshwater lakes bounded by homes with septic fields." Best known locally for his successful work with the Victoria Capital Regional District—where he has helped develop land practices that have kept Victoria's water supply, the Sooke Lake Reservoir, uniquely pristine—Mazumder is a world leader in identifying indicators of contaminants in drinking supplies. After comparing Sooke and Shawnigan lakes for the last decade, Mazumder hopes to help reduce chemical and microbial contaminants in Shawnigan Lake, just as he has in over 20 other BC communities and 16 Canadian Aboriginal communities, as well as in Bangladesh, Haiti and Cambodia.

Profile | SUSTAINABLE AQUACULTURE

Families in Quelimane, Mozambique, will benefit from sustainable aquaculture programs. In areas where children assist in family occupations, they can participate in aquaculture without missing school. At lower left: Littlepage with a lantern net, used to culture shellfish including oysters, clams and mussels.

Southern Brazil has seafood festivals attracting thousands of tourists a year, with upscale restaurants offering menus unimagined 10 years ago, says Dr. Jack Littlepage, an oceanographer with UVic's Centre for Global Studies. Developing aquaculture research and training courses in partnership with Brazil's Federal University of Santa Catarina, Littlepage helped propel a multimillion-dollar shellfish industry in Brazil based on small family-run aquaculture farms—growing mussels, oysters and shrimp. Littlepage is among a group of Canadian and Brazilian professors now establishing similar courses in Mozambique, one of the poorest countries in the world, at a coastal campus of Mozambique's Eduardo Mondlane University. Bringing the multifaceted Brazilian model to Mozambique, and assisting the Ministry of Fisheries in aquaculture development, will help families achieve self-sufficiency and prosperity. Littlepage says shellfish farms make sense for developing nations because they are inexpensive to start, and they can improve ecosystems by encouraging invertebrate growth, which attracts fish back to overfished areas.



Care of our resources

Carefully tending our growth

Sustainability and stewardship

The availability, development and stewardship of financial, organizational and physical resources are key to the growth and success of our university. The University of Victoria is pledged to transparency in its stewardship of those resources, acquired from both public and private sources, that allow us to achieve our objectives in a sustainable manner.

New facilities support learning

UVic's capital construction program finished three new buildings in 2008. The new facilities are part of a $130-million project to ease current space shortages and accommodate growth in student enrolment.

The Mearns Centre for Learning (an expansion of the McPherson Library), the Social Sciences and Mathematics Building and the Ocean, Earth and Atmospheric Sciences Building opened in 2008.

Three additional buildings are under construction. The Support Services Building, which will house executive, administrative and research offices, is planned to open in late 2008. The Enterprise Data Centre, which will meet growing requirements for server and data processing capacity, is scheduled for completion in December 2008. First Peoples House, which will create a welcoming and supportive space in the centre of campus for Indigenous students, will open in July 2009.

Environmental gold

The Canada Green Building Council has conferred gold-level status in its Leadership in Energy and Environmental Design (LEED) green building rating program on UVic's Engineering/Computer Science Building, the second building on campus to receive gold status. UVic's off-campus Vancouver Island Technology Park is also rated gold. In all, UVic owns three of the seven LEED-certified buildings in Victoria and is pursuing certification on three others.

Taking responsibility for emissions

As part of its effort to become a carbon-neutral institution, UVic completed a preliminary inventory of 2006 greenhouse gas (GHG) emissions. This study identified places where the university can most efficiently and effectively reduce its impact on the climate. The inventory, conducted by UVic's Institute for Integrated Energy Systems, also demonstrated the depth and complexity involved in quantifying GHG emissions.

Quantifying emissions is only the first step. A UVic sustainability policy and action plan are also under development, with opportunities for the campus community to discuss creative and innovative ways for quantifying, reducing and eventually offsetting emissions. The policy and action plan are expected to be completed by spring 2009, in time to contribute to the university's 2009/10 integrated planning process.

A new home for world-leading scientific cooperation

The new Ocean, Earth and Atmospheric Sciences Building will be a hub of climate research.

The new Ocean, Earth and Atmospheric Sciences Building brings more than state-of-the-art learning and research laboratories to the UVic campus—it also brings the remarkable scientific team of Environment Canada's Canadian Centre for Climate Modelling and Analysis together in the same building with our world-leading researchers in the School of Earth and Ocean Sciences. This powerful partnership is a great opportunity to further expand the impact of two of the most accomplished and influential climate research groups in the world.

Profile | LEARNING RESOURCES

When writing student Gavin Howie began his co-op work term in UVic's new Mearns Centre for Learning, he knew he'd be channelling his creative energies to help others unlock their own. Tasked with developing instructions for the new "Gear 2 Go" program as part of the new Music and Media Commons, Howie wrote tutorials and manuals that help UVic students achieve their multimedia dreams. With digital cameras, audio devices, and laptops running top-of-the-line media software available to all UVic students, regardless of their faculty or program of study, the media commons provides an important enhancement to library services in an era marked by digital literacy and rich-media class presentations.

The expansion of the McPherson Library has also drawn many other learning resources to this important student hub. The Learning Commons, home to numerous support programs in core learning areas like writing, math, chemistry and scholarly research methods, is right around the corner in the new, welcoming environment—helping students meet the academic challenges of university life.

Gavin Howie explains how the Gear 2 Go equipment works together to make rich media projects easy. At lower left: Howie and Pia Russell, teaching and learning librarian at the Learning Commons.

Accountable to our community

We are grateful for the support of individuals, corporations, foundations and government agencies who make our accomplishments possible. We hold ourselves to the highest standards of stewardship of these resources and strive to provide a thorough accounting of our activities. Further elements of our accountability framework can be found in the Accountability section of the UVic website (www.uvic.ca).

An economic powerhouse for BC

The University of Victoria generates $1.77 billion annually in economic activity. This includes direct and indirect expenditures such as salaries and benefits, student and visitor spending, taxes, spin-off companies, patents and licenses, and the effects of an educated workforce. The university directly and indirectly supports over 11,000 jobs, and is the fourth-largest employer in the Victoria area.

In addition, our Vancouver Island Technology Park, which houses the greatest concentration of high-tech companies on Vancouver Island, supports more than 2,000 jobs and contributes nearly $280 million annually to BC's economy. UVic and VITP are proud to assist the exciting growth of Victoria's high technology industries, which, generating an estimated $1.67 billion per year, are the area's largest, surpassing tourism at $1.19 billion.

Research capacity

Continued success in external research grant competitions at the national level attests to the importance and high quality of research conducted by UVic faculty and graduate students. This year, UVic broke the $100-million mark, with UVic researchers awarded more than $106 million in outside research grants and contracts in 2007/08. This more than doubles the research support of the previous five years, for a total of $368 million in the most recent span.

Each year, UVic ranks as one of Canada's top comprehensive universities, and last year *Maclean's* magazine ranked UVic number one in this category.

UVic is also Western Canada's top comprehensive university in terms of research effort, says *Research Infosource*. Placing UVic in the top three nationally (behind two Ontario universities), *Research Infosource* says UVic has "demonstrated superior achievement in earning research income and in publishing research in leading Canadian and international scientific journals."

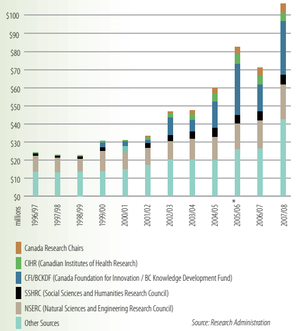
Supporting our students

Helping students achieve their full academic potential is our first priority, and removing financial barriers helps students meet their goals. In 2008/09, UVic increased the number of major, multi-year scholarships by 70 per cent, adding $1.5 million to the financial assistance available for UVic students. One quarter of new applicants were offered scholarships in 2008/09, and relocation grants are now awarded to help students from outside Victoria with moving expenses.

A warm thanks to our donors

Thanks to the generosity of our valued donors, we will be able to invest more than $30 million this year to expand student support, educational programs and research initiatives. This support helps create a future full of promise for our students and for the wider community we serve.

External research grants and contracts

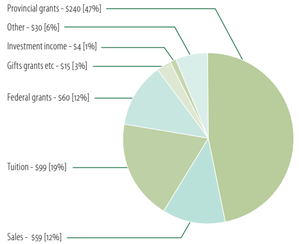


Source: Research Administration

*Included in the 2005/06 total is $17.5 million to expand the NEPTUNE Canada cabled ocean observatory, compared to $8 million in 2006/07.

Revenues by source 2007/08

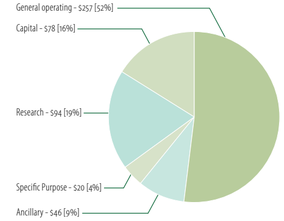
[Fund accounting basis. In millions.]



Total revenues $507 million

Expenditures by fund 2007/08

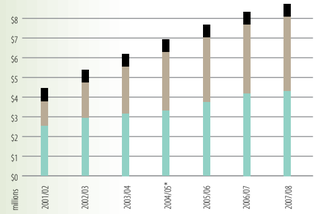
[Fund accounting basis. In millions.]



Total expenditures $495 million

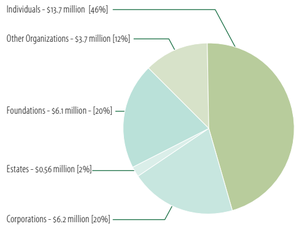
Student financial aid

[Primarily undergraduate.]



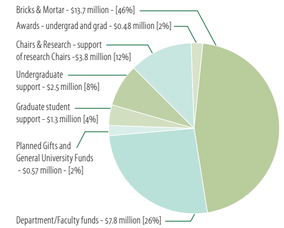
** Bursary amount for 2004/05 does not include $900,000 in additional one-time funding provided by the University of Victoria*

Fundraising sources 2007/08



Total fundraising $30.2 million

Allocation of funds raised 2007/08



Total allocated $30.2 million

Honours

Students and faculty

UVic is, above all, a community of extraordinarily gifted people, dedicated to the pursuit of knowledge and its application in the service of society. On these pages, we list some of the awards and honours bestowed this year upon our students, faculty and graduates in recognition of their outstanding achievements.

Students and graduates

- **Aimy Bazylak** (Engineering), inaugural Bullitt Environmental Fellowship
- **Andrée Boisselle** (Law), Pierre Elliott Trudeau Foundation Scholarship
- **Judith Friedman** (History), Segall Prize from the Canadian Society for the History of Medicine
- **Sebastien Picard** (Physics and Mathematics), Killam Fellowship
- **Geoff de Ruiter** (Engineering), BC Hydro PowerSmart Innovation Challenge
- **Roselynn Verwoord** (Education), Vancity Youth Leadership Award

Groups

- **Autonomous Underwater Vehicle Design Team** (student engineering group), first place in Canadian Engineering Competition's innovative design competition. Second year in a row winning this award.

Faculty and Staff

- **Sibylle Artz** (Child and Youth Care), Victoria's Leadership Award
- **Ken Babich** (Purchasing Services), leadership and excellence award from the National Institute of Governmental Purchasing
- **Cornelia Bohne** (Chemistry), 2008 Clara Benson Award from the Canadian Society for Chemistry
- **Judy Burgess** (Nursing), National Health Sciences Students' Association 2008 Interprofessional Education Mentorship Award
- **Jeannine Carriere** (Social Work), North American Council on Adoptable Children 2008 Adoption Activist Award
- **Elaine Gallagher** (Nursing), Confederation of University Faculty Associations of BC's 2008 Career Achievement Award
- **Christopher Garrett** (Physics and Astronomy), Chairman's Award for Career Achievement, British Columbia Innovation Council
- **Bill Gaston** (Writing), City of Victoria Butler Book Prize
- **Kathy Gaul** (School of Exercise Science, Physical and Health Education), Canadian Association for Medical Education Certificate of Merit Award
- **Robert Gifford** (Psychology), recognized as a fellow by the Association for Psychological Science
- **Rebecca Grant** (Business), Decision Sciences International Case Study Award
- **Pat Gregory** (Biology), Herpetologists' League Distinguished Herpetologist of the Year
- **Myer Horowitz** (Education), Special Recognition Award of the Canadian Teachers' Federation
- **Hubert King** (Mechanical Engineering), Canadian Institute of Mining, Metallurgy and Petroleum silver medal
- **Eike-Henner Kluge** (Philosophy), awarded the Abbyann D. Lynch Medal in Bioethics by RSC: The Academies of Arts, Humanities and Sciences of Canada
- **Bonnie Leadbeater** (Psychology), Victoria's Leadership Award
- **Angus McLaren** (History), Canada Council Molson Prize
- **Anita Molzahn** (Nursing), Ethel Johns award from the Canadian Association of Schools of Nursing
- **Michael J. Prince** (Human and Social Development), President's Award from the Canadian Association for Community Living
- **Jeff Reading** (Institute of Aboriginal Peoples Health), 2008 National Aboriginal Achievement Award in the field of health
- **Irving Rootman** (Education and Human and Social Development), awarded fellowship in the Canadian Academy of Health Sciences
- **Martin Taylor** (Ocean Networks Canada), 2008 LifeSciences British Columbia's Leadership Award
- **Holly Tuokko** (Psychology), Canadian Association of Gerontology's Betty Haven Award in Longitudinal Research
- **David Turner** (Social Work), 2008 Canadian Association of Social Workers Distinguished Service Award for BC
- **Ian Walker** (Geography), J. Ross MacKay Award from the Canadian Geomorphology Research Group
- **Andrew Weaver** (Earth and Ocean Sciences), Guggenheim Fellowship
- **Monika Winn** (Business), Academy of Management's Carolyn Dexter Best International Paper Award
- **Geraldine Van Gyn** (Exercise Science, Physical and Health Education), awarded the Dr. Graham Branton Research Award from the Canadian Association for Co-operative Education

Governance

Chancellor

Ronald Lou-Poy

Executive

David H. Turpin
President & Vice-Chancellor

J. Howard Brunt
Vice-President Research

Jamie L. Cassels
Vice-President Academic & Provost

Julia Eastman
University Secretary

Gayle Gorrill
Vice-President Finance & Operations

Valerie Kuehne
Vice-President External Relations

(as of September, 2008)

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Jane Butler McGregor

Caitlin Meggs (elected by students)

Susan Mchinagic, Vice-Chair

Richard Park (elected by students)

Chris Petter (elected by staff)

Raymond Protti, Chair

Eric Sager (elected by faculty)

David Turpin, President & Vice-Chancellor

Barbara Whittington (elected by faculty)

(as of September, 2008)

Honorary degrees conferred

November 2007

David Anderson, conservationist, Olympian and former federal cabinet minister

Timothy R. Parsons, marine scientist

Don Vaughan, landscape architect

June 2008

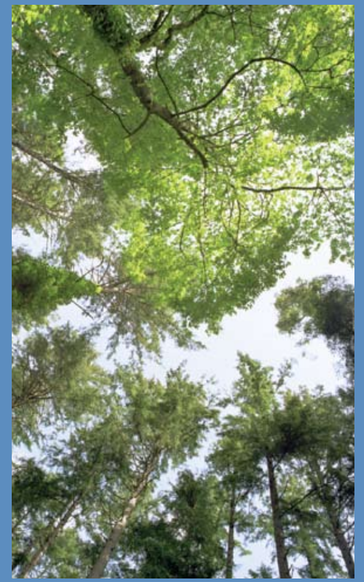
Eliza Chan, entrepreneur and public servant

Ian D. Clark, public servant

Donald B. Rix, medical doctor, scientist, entrepreneur and humanitarian

Rajesh Tandon, community-based researcher

Mystic Vale



Along with Haro Woods, which lies to the north of campus, the 10-acre Mystic Vale site is protected from development in perpetuity. To ensure the long-term health of this ecologically significant forest valley as habitat for local flora and fauna, UVic is committed to the preservation of the area, currently bounded by 55 acres of protective, undeveloped forest. Since its acquisition in 1993, invasive species have been removed and it has become an important outdoor laboratory and teaching resource.

University of Victoria

www.uvic.ca

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UVic Communications
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This publication can be made available, on request, in alternative formats such as large print or electronic file. For more information, please contact UVic Communications at 250-721-7636.

Eco Audit

The University of Victoria *Annual Review* has been printed on Forest Stewardship Council-certified paper with 100 per cent post-consumer recycled fibre, manufactured in a chlorine-free, carbon-neutral process approximately 100 miles from the UVic campus, resulting in the following benefits to our natural environment (compared with the use of virgin paper):

Trees saved	Electricity saved	Wastewater saved	Solid waste not generated	Greenhouse gases prevented	Energy saved
13	1,635 kwh	10,233 gallons	1,139 lbs	2,250 lbs	14 million BTUs

Above information is based on:
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