THE UNIVERSITY OF BRITISH COLUMBIA

UBC REPORTS

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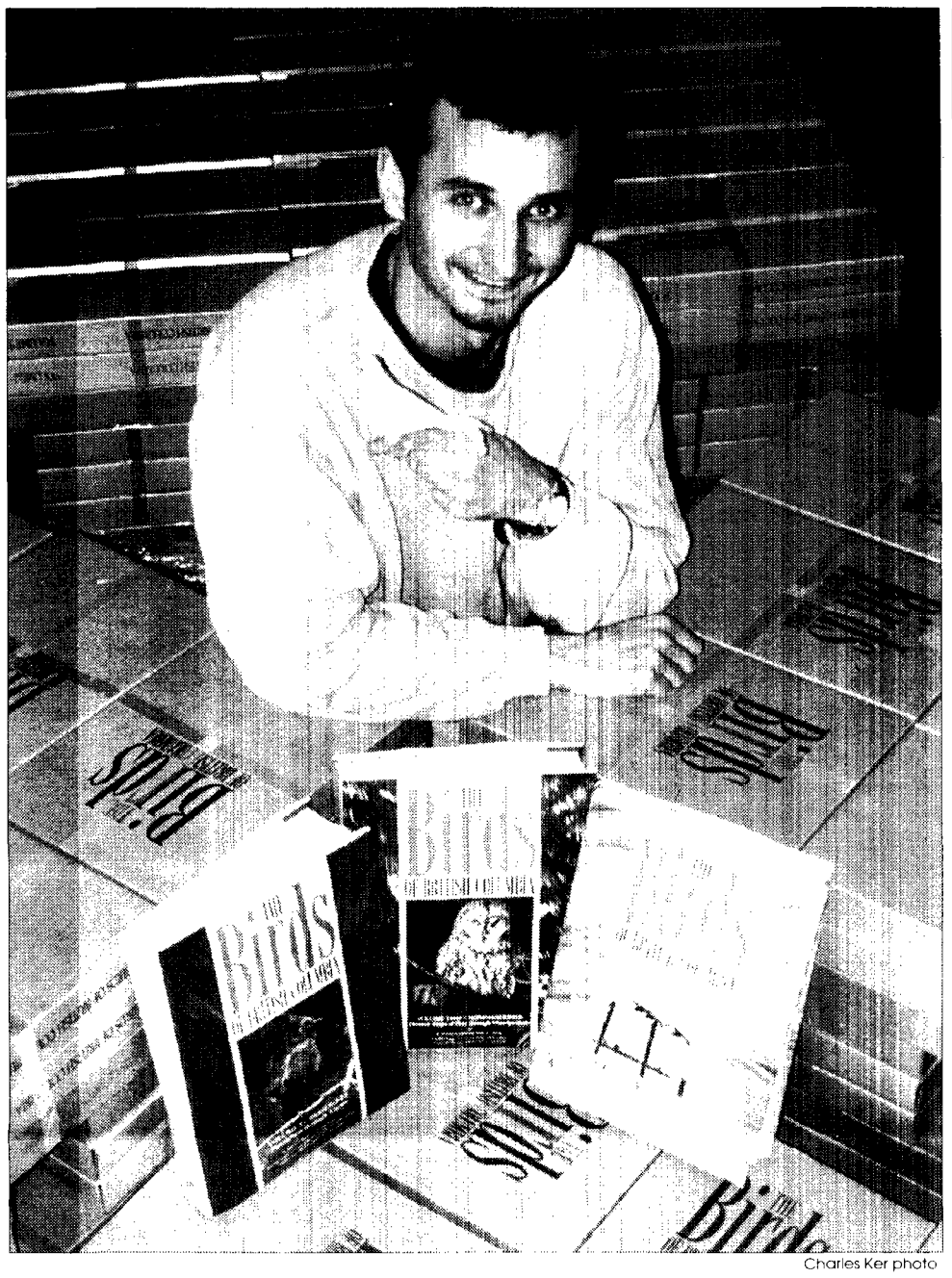

Charles Ker photo

Big Birds

Curb Ivancic, warehouse supervisor for UBC Press, deals with the weightiest shipment of books in the press's 25-year history. UBC Press has distributed almost 3,000 copies of *The Birds Of British Columbia* volume three, along with 1,200 copies of volumes one and two.

Ornithologist's book rolls off the presses

by Gavin Wilson

Staff writer

For legions of bird-watchers, *The Birds of British Columbia* is not just another book; it's an event.

And for UBC Press, it's a landmark publication — one of the largest projects it has ever undertaken, a benchmark in regional ornithology and an important milestone in the documentation of B.C.'s incredibly rich birdlife.

"This is one of the largest ornithological research projects ever undertaken," said UBC Press director Peter Milroy. "It has been ongoing for almost 20 years and involves a large number of people — about 10,000 — in one way or another."

The third of what will be a four-volume set was published this month. It covers 91 species including such common ones as swallows and starlings, and is illustrated with 700 colour photographs, maps and drawings. In total, 472 species will be covered in the four volumes.

The books comprise a complete reference work for bird-watchers, ornithologists and naturalists with information on history, habitat, breeding habits, migratory movements and distribution patterns.

"We have written these books to be useful to professionals," said one of the authors, Ian McTaggart-Cowan, dean emeritus of Graduate Studies, whose first book on birds was published in 1947.

"But we also know that most people who will read the book will do so because birds are gorgeous creatures."

The mammoth undertaking began in 1972 when McTaggart-Cowan, then a professor of Zoology, and his student Wayne Campbell decided to fill what they saw as a pressing need for a comprehensive work on the province's birds.

They enlisted the help of thousands of bird-watchers and many naturalists throughout the province, eventually compiling 1.5 million index cards of information.

The initial two volumes, published in 1990, sold out almost before they reached the bookstores. They have now been reissued to coincide with the publication of volume three, for a combined print run of more than 10,000 books, nearly half of which were pre-sold before publication.

The fourth and final volume will be published in about two years' time, Milroy said.

Students to vote on technology fee

A student technology fee of $90 will be voted on in a student referendum to be held April 9-16.

The university's Board of Governors decided to put the fee to a vote at its March 20 meeting. The board meeting coincided with the occupation of UBC President David Strangway's office by a group of students protesting fee increases.

The student technology fee, aimed at providing students with better access to information technology, was recommended by the Advisory Committee on Information Technology (ACIT) with input from representatives of the Alma Mater Society and Graduate Student Society.

Effective Sept. 1, 1997, the proposed $90 fee would be payable in two installments — September and January — and assessed to all undergraduates in the winter session enrolled in a program of 18 credits or more. Undergraduate students taking fewer than 18 credits in any session would be assessed $5 per credit while full-time graduate students would pay $30 per installment and part-time graduate students would pay $20 per installment. The maximum fee payable by any student is $90 per academic year.

Maria Klawe, vice-president, Student and Academic Services, says the allocation of funds raised by the fee would be decided by a committee on which students would have a voting majority.

Klawe says the student technology fee would pay for improvements that would directly benefit students such as more and better computer labs, dial-in access, software training and help.

"It will not be used to wire the campus or to pay for things which are presently paid for by the university," says Klawe.

Klawe says the Registrar will be responsible for running the referendum which will be carried out using the Registrar 's Office's Televote system.

A referendum on an athletics and recreation fee has been deferred to the next academic year.

Opera star, judge to be honoured

University of British Columbia graduates **Ben Heppner**, a celebrated tenor in the world's premier opera houses, and retired B.C. provincial court justice **Alfred Scow** are among 14 distinguished individuals to be awarded honorary degrees by UBC this year.

Heppner

Prominent in the professions and the community, honorary degree recipients are recognized for their distinguished achievements in their respective endeavours and for the contributions their accomplishments make to the life of the university and the betterment of society. Honorary degrees will be awarded during UBC's Spring Congregation, May 25-30, and Fall Congregation, Nov. 20 and 21. All ceremonies will take place in the new Chan Centre for the Performing Arts.

Heppner graduated from UBC's School of Music in 1979 and gained international prominence in 1988 as a Metropolitan Opera Auditions finalist and first recipient of the Birgit Nilsson Prize. He debuted at the famed La Scala Opera one year later.

Scow

Scow was the first Aboriginal person to earn a Bachelor of Laws (LLB), prac-

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Issues that divide today's universities are open to debate this month

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Adults in B.C. learn longer, but do they get to use what they learn?

Applied Minds 4-5

Feature: More than just gears are at work in the Faculty of Applied Science

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Forum: Dean Shirley Neuman on the universe which others call the library

Letters

Fraternity pub crawl prompts outrage and action

Editor:

I would like to address the events of Dec. 18, 1996 when some members of Phi Gamma Delta were involved in a "Pub Crawl" on the Downtown Eastside of Vancouver.

I would like to formally apologize on behalf of the members of the UBC Chapter of Phi Gamma Delta for any embarrassment we may have caused the University of British Columbia due to the unfavourable media attention that followed the incident.

The members of the Pi Gamma Chapter of Phi Gamma Delta hold their informal affiliation with the university in the highest regard. Our conduct was not in accordance with the ideals and values of our fraternity or the university. In order to rectify the situation and to re-align ourselves with these ideals and values, all members of the chapter were called to a strategic planning and goal-setting retreat and the following action-oriented decisions were made. Implementation of these new committees and programs will occur before January 1998.

- a new Chapter Board of Conduct to discipline members whose behaviour is unacceptable
- a new Chapter Community Relations and Safety Committee to evaluate all chapter events and individual behaviour
- an increased focus on serving the community including a new project to assist with the renovation and restoration of a hospice for the terminally ill
- a seminar hosted at our Chapter House to increase student alcohol awareness on campus
- There will be another chapter retreat held before the end of January 1998, to evaluate our progress with respect to these issues.

We recognize that Phi Gamma Delta must constantly evaluate herself to ensure that she continues to be a positive influence on the lives of men who choose to affiliate during their enrolment at UBC. Given these internal changes, we hope to re-align ourselves with our own values and continue to produce men of virtuous principles whose participation in university life is a positive force on campus.

President, Pi Gamma Chapter
Phi Gamma Delta

Editor:

If I understand correctly, UBC does not have a formal relationship with the fraternities and the incident did not take place during school hours, and therefore UBC cannot (at this time) discipline those involved.

I would like to recommend that UBC students have to face student discipline if they are involved in such clearly unacceptable behaviour, whether or not that behaviour takes place during school hours.

Felicity Jules, Asst. Director
Native Indian Teacher Education Program

Editor:

I am writing to add my condemnation to the action of this fraternity, whose members nearly got some of their own killed, promoted racism/sexism against native people, and deeply insulted residents of the Downtown Eastside, all in one evening.

I understand UBC has no direct authority over fraternities at UBC. I ask, however, that you keep this incident in mind if in the future there are any relations between UBC and Phi Gamma Delta Society. From this community's point or view, reparation may be forthcoming if this fraternity issued an apology and offered some time or money to an organization in the Downtown Eastside.

Tom Laviolette, Co-ordinator
Carnegie Community Action Project

Honour

Continued from Page 1

tice law and receive a judicial appointment in British Columbia. He is credited for performing a major role in educating non-aboriginal people about the legal, cultural, social and historical issues facing First Nations.

Other honorary degree recipients include: **Sally Aw Sian**, an international newspaper publisher and philanthropist; acclaimed conductor **Mario Bernardi**; **Cheung-Kok Choi**, a major contributor to education in B.C. and abroad; **Haig Farris**, a leader in promoting science and technology education and research; **Richard Goldstone**, chief prosecutor of the War Crimes Tribunal of the former Yugoslavia; **Clarence Jules**, chief of the Kamloops Indian Band; pre-eminent organic chemist **Raymond Lemieux**; arts patron **David Lemon**; **Shinroku Morohashi**, chair of the board of Mitsubishi Corp., who played a pivotal role in supporting the creation of the Centre for Japanese Research at UBC's Institute of Asian Research; **Masateru Ohnami**, president of Ritsumeikan University; **Roy Taylor**, internationally respected for his work in the field of botanical gardens and arboreta; and respected biochemist **P. Roy Vagelos**, chair of the board, Merck & Company, Inc., and supporter of UBC's leading edge basic research in advanced genetics and neural diseases.

THE UNIVERSITY OF BRITISH COLUMBIA
UBC Bookstore Review Committee

The University of British Columbia Bookstore (the Bookstore) is the largest university bookstore in Canada and the 10th largest in North America. The Bookstore provides an extensive range of products and services within five divisions.

1. Book Division
2. Office Products Division
3. General Merchandise Division
4. Computer Division
5. Services Division

The UBC Bookstore Review Committee, reporting to the vice-president, Administration and Finance, is seeking written submissions from interested parties. We invite you to submit your suggestions, comments and/or opinions on the following broad areas:

1. The role of the Bookstore in the university community
2. The mandate of the Bookstore
3. The Bookstore's degree of success in meeting the needs of students and faculty
4. Opportunities for enhancing services
5. Quality of the product
6. Quality of service
7. Price competitiveness

The deadline for submissions is April 30, 1997.

Invitation for Written Submissions

Please address your submissions to:
Chair, Bookstore Review Committee
Arts Faculty, Buchanan 130
1866 Main Mall
V6T 1Z1

Comments may also be submitted by e-mail to: peterg@hr.ubc.ca

Submissions will be kept confidential.

UBC
LANGUAGES

French
Spanish
Japanese
Chinese
German
Italian
Punjabi
Arabic
Greek
Swedish

Non-credit conversational classes start
April 12th
• Tuesday evening or Saturday morning classes for adults

Spanish Immersion in Oaxaca, Mexico:
July 4-24, 1997

822-0800
Language Programs and Services
UBC Continuing Studies

CALL FOR PRESENTATIONS

Sponsored by Continuing Education in the Health Sciences, The University of British Columbia
in cooperation with First Nations Women's Association

3rd Annual B.C. Conference on Aboriginal Women and Wellness
Qwum Qwum Sleni*: Looking Forward
(*Musqueam for "Strong Women")
March 22-25, 1998

DEADLINE FOR SUBMISSIONS: JUNE 1, 1997
For further information, Call: (604) 822-4965 or Fax (604) 822-4835
or E-mail elaine@cehs.ubc.ca

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D. Thomson photo

Under Glass

Fourth-year Plant Science students Katherine Fulcher (left) and Ingrid Hoff inspect healthy cycads being raised in UBC's new, state-of-the art horticulture greenhouse complex located at 2334 West Mall. More than 15 species of cycads, the most ancient plants in existence, are on display. Also housed in the 1,000-square-metre facility are a new micropropogation laboratory and undergraduate resource centre. The greenhouse officially opens April 4.

Conference tackles academic freedom

by Gavin Wilson

Staff writer

Political correctness. Chilly climates. Charges of racism and sexism. Fears of free speech stifled. These issues have generated heated and divisive debate at many universities — including UBC — in recent years.

A conference to be held on campus April 10-12 will tackle these and many other related topics in an effort to foster greater understanding among the often antagonistic viewpoints.

UBC President David Strangway called the conference more than a year ago as part of the healing process at the university following charges of racism and sexism in the Political Science Dept.

The conference's central focus will be how to welcome previously excluded groups to universities, where the new issues of inclusiveness often clash with traditional academic principles, said Dennis Pavlich, associate vice-president, Academic and Legal Affairs.

"The McEwen Report raised a range of issues which divided the campus community. One of those issues was academic freedom and how that can accommodate the relatively new values the university must adopt in order to welcome different groups to campus," he said.

"I am confident that the conference speakers and participants will emerge with many good ideas about how these different values can be reconciled."

Titled Academic Freedom and the Inclusive University, the conference brings together prominent academics, social activists and commentators to discuss ways of clarifying issues and resolving conflicts.

Conference organizers have also scheduled ample opportunity for participation from audience members, including workshops, discussion groups and question periods after each panel presentation.

Among the speakers scheduled to appear at the conference are: York University historian Jack Granatstein; Stan Persky, a Capilano College instructor and political commentator; Carleton University's Peter Emberley, author of *Hot Button Politics;* Judy Rebick, former head of the National Action Committee on the Status of Women and host of the CBC-TV program Face Off; McGill University Principal Bernard Shapiro, who will deliver the keynote address; Lorna Marsden, president of Wilfrid Laurier University; and former UBC Board of Governors member Tom Berger.

Speakers from UBC include: Graham Good, English; Stanley Coren, Psychology; and George Hoberg, Political Science.

Two speakers, John Fekete, professor of cultural studies at Trent University and author of *In Moral Panic*, and Duke University's Stanley Fish, will be featured at the Vancouver Institute lecture on April 12 which is free and open to members of the public.

All are welcome to attend the conference. The fee of $125 includes admission to all conference sessions, dinner on Friday and lunch Saturday. Admission for students is free, but does not include social events.

For more information on conference content, call (604) 822-1460. For registration information, call (604) 822-1050.

Lifelong learning on upswing, study shows

A significantly higher number of British Columbians are participating in adult education and training programs than were a decade ago, UBC researchers say.

Compared to previous Statistics Canada figures measuring adults' participation in education and training, the rate of increase in B.C. was more than double the rate for Canada.

"This likely reflects the faster economic growth in the province, but may also reflect growth in commitment of adult learning in B.C. relative to Canada overall," says Kjell Rubenson, a professor of Educational Studies.

Rubenson and doctoral student Gong-Li Xu recently completed an analysis of Statistics Canada's 1994 Adult Education and Training Survey (AETS), the fifth in a series of questionnaires initiated in 1986.

More than 47,000 Canadian households were sampled for the 1994 AETS, 4,231 of them in B.C.

"Our analysis shows that the highest participation rates in adult education and training were associated with those with a university education, an income over $50,000, a white-collar occupation and working for large employers like public administration, health care and education," the researchers report.

They also note, however, that once disadvantaged groups are recruited to education and training, the chance that they will return for further programs increases.

The survey revealed that 58 per cent of participants in any form of adult education and training received employer support. Overall, 26 per cent of people employed in B.C. received some employer-supported training or education.

Employed workers with a university degree received the greatest amount of employer support at 40 per cent, compared to 30 per cent of those with a post secondary diploma or certificate and only 10 per cent of employees with less than a high school diploma.

Levels of interest in lifelong learning, based on socialization at home, school and work, and structural disparities in society at large may help explain the inequalities that exist between groups, the researchers say.

Their report also states that better-educated employees may engage in education and training programs more frequently because their jobs provide direct opportunities to do so and encourage them to invest in their own development.

Despite the increased emphasis on an industry-led workforce to increase Canada's competitiveness in the global economy, and greater participation in adult education and training programs, the report cautions public policy makers and employers against focusing on merely supplying a skilled labour market.

"It is not enough to increase the extent of human resource development in the labour force, or to make existing education and training programs more relevant," the report states.

"It is also necessary to overcome the minimalist approach to the utilization of workers' skills. The real problem might be ensuring the skills are used and developed at work, rather than simply concentrating on supply."

The study was conducted under the auspices of the Faculty of Education's Centre for Policy Studies in Education with funding from the B.C. Ministry of Education, Skills and Training. The complete report is available at http://www.ceiss.org/randa/welcome.htm

Political Science scholar earns top honour

Political Science Prof. Kalevi Holsti has become only the seventh UBC faculty member to be named a University Killam Professor, the highest honour bestowed by the university on its faculty.

The designation recognizes the university's most exceptional faculty members who have distinguished themselves in teaching, scholarly activity and service.

Holsti is considered Canada's most distinguished scholar of international relations and has taught and lectured around the world since joining UBC in 1961.

Holsti

His textbook *International Relations: A Framework for Analysis*, has remained in print for nearly 30 years, published in seven editions and translated into several languages. It continues to be the leading textbook in the field, influencing countless students around the world.

Holsti followed the textbook with a major monograph entitled *Why Nations Re-Align: Foreign Policy Re-Structuring in the Post-War World.* In this work, Holsti explored the dynamics of change in foreign policy, drawing on comparative cases to advance a novel theoretical explanation.

But perhaps his most influential contribution to the development of international relations is the book *Peace and War: Armed Contests and International Order.* The book was one of five finalists for the 1991 Lionel Gelber Prize for best English language book in international relations. In it, Holsti used historical perspective, scholarly description and theory to explain the cause of war and peace over the last 300 years.

Holsti has continued to produce leading scholarship and his latest book, *The State, War, and the State of War* was recently published by Cambridge University Press.

Renowned as a teacher, Holsti is popular with undergraduates who nominated him for a Master Teacher Award. He has acted as a mentor and graduate supervisor to many young scholars.

A member of the Royal Society of Canada, Holsti is the only Canadian to have been president of both the Canadian Political Science Association and the International Studies Association. He is also a past National Killam Fellow, the editor of two leading journals and a former member of the board of the Canadian International Institute for Peace and Security in Ottawa.

University Killam Professors continue to teach in their disciplines with reduced duties, are administratively responsible to the president and meet as a group with the president at least annually to discuss plans for advancing the goals of the university.

They are also expected to contribute to the overall intellectual life of the university and to serve as academic ambassadors.

Previously earning the distinction were Michael Smith, Dr. Patricia Baird, Roy Daniells, Charles McDowell, Michael Shaw and Peter Larkin.

Applied Science

by Stephen Forgacs
Staff writer

"Fun" earns researcher a sterling reputation

Prof. Keith Brimacombe has long had a fascination with how things work, something he credits to his early years spent in a farming community in Alberta.

This fascination, coupled with what he sees as an engineer's obligation to society, led him into the sweltering confines of Canadian steel mills on a quest to understand and improve the processes involved in steel production.

It has also earned him dozens of awards, most recently the Canada Gold Medal for Science and Engineering, the nation's top award in the field, sponsored by the Natural Sciences and Engineering Research Council of Canada (NSERC).

"What I'm trying to do is to help Canadian companies be as competitive as possible on a world basis," he says. "These companies pay people, they pay taxes, they make our economy strong, and incidentally, they put money into NSERC."

Brimacombe, director of UBC's Centre for Metallurgical Process Engineering, has forged his reputation in industry and academia by combining complex mathematical modelling with fundamental studies of physical and chemical phenomena, and direct measurements on industrial processes. Founded in the mid-1980s, the centre operates with an annual research budget of about $2 million. From there, Brimacombe works with a team of a dozen or so graduate students and in frequent collaboration with colleagues in other science and engineering disciplines.

Brimacombe made his mark by putting up with the heat and dirt in steel mills to obtain in-plant measurements during the various stages in a metallurgical process, such as continuous casting of steel, and then using that information to complement computer models and laboratory research.

Although ultimately rewarding, working in the mills poses its share of research challenges, Brimacombe says.

"When you're in the plant, people are in the business of making steel or aluminum or copper and you have to work around their schedules. You don't necessarily have the kind of control you would like. That can be a real advantage and opportunity, or a difficulty, depending on how you want to treat it."

Regardless of the challenges encountered in gathering in-plant information, the light it sheds on research is invaluable, he says.

"The combination of in-plant measurements, computer modelling, and whatever measurements we undertake in the lab, is very powerful," he says. "We don't have to extrapolate many of our results to real life. They are real life."

Brimacombe's contributions to "real life" industry have led to numerous awards and recognition. He is an Officer of the Order of Canada. He has been awarded the Killam Memorial Prize from the Canada Council, the E.W.R. Steacie Memorial Fellowship from NSERC and the B.C. Science and Engineering Gold Medal. In 1987, he received the Ernest C. Manning Principal Prize reserved for a Canadian "who has shown outstanding talent in conceiving and developing new concepts, procedures, processes or products of potential benefit to Canada and society at large." Earlier this year, he was elected as a Foreign Associate of the National Academy of Engineering in the United States. The academy elects only eight foreign associates each year.

When the Canada Gold Medal was announced March 20, Jon Gerard, Secretary of State, Science, Research and

Brimacombe

Development, said: "Dr. Brimacombe has been a major contributor to the economic competitiveness of the Canadian steel industry and to the nationwide effort to build productive research links between industry and universities."

Brimacombe's most recent research includes studies led by Prof. Indira Samarasekera, who holds the Dofasco Chair in Advanced Steel Processing, on hot rolling of steel and aluminum. Hot rolling is a process through which cast metal is converted into metal products.

Another process research activity involves the development of a continuous casting mould that is intelligent.

"We're trying to make this process smart, to give it its own brain. We have a computational intelligence system that will take sensor signals as it assesses itself and the cast product, recognize the information, know when there is a problem and have the knowledge to diagnose the problem and provide a remedy online."

A smart process, Brimacombe says, will enhance quality and continuity in production as operators change from shift to shift.

He has also been working on flash smelting, a process that involves the addition of oxygen to nickel, copper or lead sulphide concentrates. The ensuing autogenous reaction, one which generates its own heat, leaves a liquid metal or oxide and a gas strong in sulphur dioxide — a by-product that can be used for bleaching in the pulp and paper industry or as sulphuric acid. Brimacombe lists several key advantages in flash smelting: the use of oxygen to trigger the reaction enhances ease of operation and control and does away with the need for an additional fuel; the recovery of sulphur through the process is an environmental plus; and the ability to contain potentially harmful fumes, such as lead vapours, improves operational hygiene.

In the lab, using a two-colour pyrometer customized by one of his graduate students, Brimacombe can observe tiny particles of copper, lead or iron sulphide, as they are heated to more than 3,000 C. By observing the composition and behaviour of these particles as they are heated to the point of vapourization, Brimacombe can learn such things as how to improve dust recovery in the flash smelting process to reduce waste.

"Much of this research gets quite fundamental," he says. "But it has very strong practical implications in operation. And for me, that's always been the fun — marrying fundamentals to real life. That's where all the excitement is."

Cheryl Niamath photo

Electro-Mechanical Design Engineering students Johnny Patterson and Barbara Irwin are close to completion of a 12-month work term with CAE Machinery Ltd. in Vancouver. They will graduate, along with six other students, with both bachelor's and master's degrees in engineering in May.

First class to graduate with double degrees

The first group of graduates ever from the challenging Electro-Mechanical Engineering option will receive two degrees each during the Spring Congregation ceremonies this May.

Eight students will receive both Bachelor and Master of Engineering degrees following completion of the five-year program that combines electrical and mechanical engineering courses with extensive work experience.

During the final year of the program, students undertake graduate level research and design projects in industry. The projects last 12 months and consist of an advanced machine design component and an advanced instrumentation component. While the project is underway the students operate largely as employees of the host company, which pays them for a minimum of eight months, but are not required to take on work beyond the scope of their specific projects. They are supervised by a company engineer as well as Prof. Yusuf Altintas, program director and professor of Mechanical Engineering.

"It's certainly been a lot more work than a bachelor program," says Barbara Irwin, who, with fellow fifth-year student Johnny Patterson, is completing a year-long work term with CAE Machinery Ltd. "We've been working on larger projects that are important to the company and are key parts of machinery they will be selling next year."

In fact, Altintas says three of the four companies employing the fifth-year students will seek patents for designs developed by them.

The projects currently being completed by the students in their final year of the program include design of an automatic dynamic braking and magnetic orientation mechanism for TRIUMF's cyclotron, a computer-controlled wood strander to produce wood strips for composite wood products for CAE Machinery, design of a device for ultra precision machining of lenses and other components for the National Research Council, and a displacement sensor and hydraulic test facility for outboard motors for TELEFLEX Ltd.

Students are selected for admission into the program during their second year in Mechanical Engineering.

"The students we select for the program must have not only good academic skills, but also strong communications skills and practical skills such as design or even music," says Altintas. "We consider a number of factors including an aptitude for teamwork, which is an important aspect of the program and of most professional engineers' work long after they leave university.

"The fifth-year projects are undertaken by teams of two, so the ability to work well with others is vital."

At the end of second year, students work in industry during a summer co-op term. In third year, students take both mechanical and electrical engineering core courses including machine dynamics, automatic control, digital logic design, system software engineering and a two-term engineering product design course. At the end of third year students begin their second co-op work term. Fourth year involves further mechanical and electrical engineering courses. In their fifth and final year students take four graduate courses and complete the two 12-month projects.

Women in Engineering at UBC

The following is taken from the Women in Engineering at UBC home page maintained by third-year engineering student Rozlyn Bubela.

- The first female chemical engineer to graduate from UBC, and apparently the first in Canada, was Rona Wallis (née Hatt) in 1922.
- Women currently make up about 20 per cent of the approximately 2,000 undergraduate students in engineering at UBC and are in each of the nine departments. Many are among the top students.
- The Association For Engineering Women (AFEW) is a UBC club that encourages the participation of women in all aspects of engineering.
- A mentoring program, developed in conjunction with the Division for Advancement of Women in Engineering and Geoscience, provides female students with personal contact with women practising engineering or with senior engineering students.
- Electrical Engineering Prof. Rabab Ward became UBC's first female engineering professor in 1981. Of 123 faculty members, nine are women.

The Women in Engineering at UBC Web site can be found at http://www.apsc.ubc.ca/stuserv/womeneng.htm

Engineering change for a changing world

Stephen Forgacs photo

The design of a machine to facilitate recycling of aluminum chips, like those held here by fourth-year Engineering Physics student Peter Bonac, garnered first prize for environmental innovation in a competition sponsored by the Canadian Intellectual Property Office. Co-recipients, all in Engineering Physics, are (l-r) David Moffat, Jeffrey Chang, Craig Wilkinson and Vincent Kwong.

Students solve waste problem inexpensively

A group of Engineering Physics students has designed a small device that will encourage the recycling of aluminum waste chips from machine shops, and help reduce the release of harmful chemicals in the recycling process.

The device, an automated aluminum chip compressor for a computer numerically controlled (CNC) machine, was designed by fourth-year students Peter Bonac, Jeffrey Chang, Vincent Kwong, David Moffat and Craig Wilkinson as a course project. Their design recently won first prize in the 1997 PATSCAN Environmental Innovation Contest, as well as the 1997 Molson Prize for best recycling concept.

The idea for the project came from student Peter Bonac, whose father operates a machine shop using CNC machines. These automated machines are commonly used to manufacture parts from aluminum blocks, using instructions from a computer system with pre-programmed co-ordinates to guide the machine's tools. In the machining process, small waste chips of aluminum are continually expelled from the machines. These chips, coated in a coolant used to control heat in the machining process, must then be collected and either disposed of or recycled.

Problems associated with recycling the chips include removal of the coolant, which is costly and toxic but can be reused, and storage of a large enough volume of chips to make recycling a financially worthwhile venture. Available compressors are versatile but are also extremely expensive and large, Chang said.

"We set out to design a compressor purely for use in CNC shops," he said. "It had to be small, easy to automate, able to run off power and air pressure already available in the shops, and inexpensive enough that the shops could recover the cost within a couple of years through recycling."

The device, which will be largely finished by early summer, consists of a cylinder less than a metre long and about 25 centimetres in diameter. Within the cylinder a compression chamber increases readily available air pressure from 80 to 100 pounds-per-square-inch (psi) to 8,000 to 10,000 psi. As the chips are compressed, the coolant is forced out of the chamber through small troughs so that it can be collected for reuse. Once compression is complete, a small pellet of compressed aluminum — about the size of a small stack of loonies — is expelled from the chamber. These pellets can be easily stored, in far less space than is required for the same amount of loose chips, until a sufficient amount has been collected for recycling.

Recycling of compacted aluminum pellets is more efficient than recycling of loose flakes, as smaller chips will evaporate as the metal is heated, Chang said.

The greatest design challenge the group faced was devising a method of feeding the compression chamber with the loose chips.

"The chips that are expelled from the CNC machines vary in size," Chang said. "But they are often tangled into larger clumps which then have to be fed into a small port in the compression chamber."

> **"...the choice to recycle is an easy one if there is money to be made at it."**
>
> —Jeffrey Chang

To do this the group designed a conical screw drive, a rotating hollow cone resembling a large tapered spring, that would draw the aluminum chips through a narrowing passage and then into the small port in the compression chamber.

The cost of the device, said Chang, will be about $2,000 to $3,000. Savings to the user will come from the ability to collect and reuse the coolant on-site, and through the elimination of an intermediary who would otherwise perform the compression and coolant extraction off-site for a price before delivering the pellets to the recycling facility.

"An inexpensive machine capable of facilitating the recycling process for smaller machine shops would be extremely beneficial to both shop owners and the environment, as the choice to recycle is an easy one if there is money to be made at it," Chang said.

Faculty emphasizes "real life" experience

Work and academic experience that now seem exceptional for a student graduating with an undergraduate degree in engineering could become commonplace as UBC's engineering programs change with the times.

It's likely that within a few years, international work experience and problem-based research experience will grace the resumé of many undergraduate students in engineering at UBC, even before they complete their degrees, the dean of the Faculty of Applied Science said.

"A greater emphasis on research experience at the undergraduate level and increased opportunities to gain international work experience will ensure students graduating with a bachelor's degree in engineering are as well equipped as possible for employment in industry," said Axel Meisen.

Meisen

Engineering programs, which have been developed at UBC since 1915, are continuing to evolve to meet the needs of industry, society and the students who choose to enter the profession.

There are now more than 2,200 undergraduate students and 700 graduate students enrolled in engineering programs. These include bioresource engineering; chemical engineering; civil engineering; electrical and computer engineering; engineering physics; geological engineering; mechanical engineering; metals and materials engineering; and mining and mineral process engineering.

Meisen, who will step down this summer after 12 years as dean, lists a number of directions in which he expects the university's engineering programs to develop.

A greater integration of research and design early on in undergraduate level programs will introduce students to the sorts of problems they may face working in industry and give them the confidence and ability to tackle problems they have never encountered before, Meisen said.

He also anticipates a greater shift away from discipline-focused research toward problem-focused research, such as work on such societal issues as unemployment, automation and creating a better life for the aged through the application of technology.

The development of collaborative arrangements with industrial and academic partners in Canada and abroad will provide students with opportunities to gain not only relevant work experience through co-op programs, but also international academic experience. Meisen said that although a number of international agreements are in place, the trickle of engineering students taking advantage of exchange programs is relatively small.

"With the increasing internationalization of engineering, our graduates are very likely to find themselves in positions of either competing with or collaborating with engineering firms from around the world," he said. "A semester of study in Asia, or completion of a co-op work term in Latin America, will prove invaluable when it comes to dealing with colleagues or competitors in these areas later.

"Most of our co-op students are being placed in B.C. and in Canada. But I see that changing, particularly in the Asia Pacific and the Americas, including the U.S.

"We have to take advantage of being next to such a large, technologically advanced nation."

Despite a high level of UBC success in negotiating agreements with Asian partners, Meisen said increasing competition in the region will lead to fewer opportunities.

"I think we'll need to develop a second string to our bow, and that should be the Americas. They're in our own backyard and it makes strategic sense. If we don't develop in the direction of Latin America we'll miss a major opportunity."

Increasing political and economic stability in Latin America, and well-established business relationships between Canadian industries — particularly mining and forestry — and Latin American partners, make the area attractive for UBC.

Other developments in UBC's engineering programs are likely to include growth in the areas of software engineering and bio-sciences, Meisen said.

"Tremendous advances have been made in the areas of molecular biology and genetic engineering," he said. "But these advances haven't found great expression in practice and application yet. UBC is extremely well-positioned with its multi-faculty expertise in that area."

There is also room for the introduction of a Doctor of Engineering program heavily weighted in course work and having a wider approach than the current PhD research programs, he added.

Engineering video wins award

A video produced for the Faculty of Applied Science to encourage high school students, especially women and other under-represented groups to consider engineering as a career, has won its second international award.

Engineering the Future, produced by Vancouver's The Eyes Multimedia Productions, features two UBC engineering students, Sundiep Tehara and Victor Szabo, as they take viewers on an informal tour of engineering at UBC. The video illustrates and raises awareness of the rewards of engineering as a career.

The most recent award is a Silver World Medal presented at the 39th Annual New York Festival, an international non-broadcast competition for industrial, educational and informational productions. More than 1,000 entries were received from 39 countries. The video won the silver medal in the Career Guidance Category.

The video also won a Silver Screen Award at the U.S. International Film and Video Festival last year.

Calendar

April 6 through April 19

Sunday, Apr. 6

Green College Performing Arts Group
Green College Choir Recital. Green College, 8pm. Call 822-6067.

Monday, Apr. 7

Biochemistry & Molecular Biology Discussion Group Seminar
TGF-Beta And MADR Proteins. Dr. Jeffrey Wrana, Hospital for Sick Children. IRC#4, 3:45pm. Refreshments 3:30pm. Call 822-4070.

Physics and Astronomy - Astronomy Seminar
Destroying Protoplanetary Disks In Orion's Trapezium. Doug Johnstone, Canadian Institute of Theoretical Astrophysics. Hennings 318, 4pm. Refreshments 3:30pm. Call 822-2802.

Resident Speaker Series
Sundry Doctrines And Sumptuous Banquets: The Inns Of Court And The Politics Of Dramatic Taste. Brent Whitted, English. Green College, 5:30pm. Call 822-6067.

19th Century Studies
Working-Class Bodies And Domestic Spaces In Gaskell's 'Mary Barton.' Jill Matus, U of Toronto. Green College, 8pm. Call 822-6067.

Tuesday, Apr. 8

Grad Fair
Con'grad'ulations Fair - Information, Products And Services For The Class Of '97. Bookstore, 9am-5pm. Continues April 9. Call 822-2665.

Animal Science Seminar Series
Novel Applications Of NIRS In Predicting The Nutrient Quality Of Western Canadian Cereal Grains. Mary Lou Swift, PhD candidate. MacMillan 158, 12:30pm. Refreshments. Call 822-4593.

Seminar
Ferns In British Columbia: More Questions Than Answers. Adolf Ceska, System Ecologist, B.C. Ministry of Environment. BioSciences 2000, 12:30-1:30pm. Call 822-2133.

Lectures in Modern Chemistry
Ring-Opening Polymerization As A Route To Inorganic Polymers With New And Controlled Architectures. Prof. Ian Manners, U of Toronto. Hennings 202, 1pm. Refreshments 12:40pm. Call 822-3266.

Earth and Ocean Sciences Oceanography Seminar
Chemical Tracers Of Anoxia: From Fjords To Deep-Sea Nodules. Bob Collier, Oregon State U. BioSciences 1465, 3:30pm. Call 822-1814.

Seminar
Co-ordinated Regulation Of Cell Morphology And Gene Transcription By The Rho Family Of GTPases. Alan Hall, University College, London. IRC#1, 3:30pm. Refreshments before seminar. Call 822-2210.

Statistics Seminar
A Review Of Some Model Selection Techniques (With A Conjecture). Prof. Bertrand Clarke, Statistics. CSCI 301, 4-5:30pm. Refreshments. Call 822-0570.

Medical Genetics Seminar
Molecular Studies of Inversion Duplication 8p. Tanya Nelson, PhD candidate. Lipoprotein Lipase And Atherosclerosis: Studies In Mouse Models. Susanne Clee, PhD candidate. Wesbrook 201, 4:30-5:30pm. Refreshments 4pm. Call 822-5312.

Wednesday, Apr. 9

Orthopedics Grand Rounds
Orthopedics Spine Management Of Metastatic Tumours. Dr. C.G. Fisher, Dr. L. Zeller, Orthopedics. Vancouver Hospital/HSC, Eye Care Centre Auditorium, 7am. Call 875-4646.

Microbiology and Immunology Seminar Series
Potentiation Of BPD-Mediated Photodynamic Purging Of Contaminated Bone Marrow. Stephen Yip, Microbiology and Immunology. Wesbrook 201, 12:30-1:30pm. Call 822-3308.

Noon Hour Concert
UBC Contemporary Players. Stephen Chatman, Eric Wilson, directors. Music Recital Hall, 12:30pm. Call 822-3113.

Research Division Seminar (OBST 506)
Characterization Of The 5'-Flanking Region Of The Human Gonadotropin-Releasing Hormone Receptor Gene. Phido Cheng, PhD candidate. B.C. Women's Hospital/Health Centre 2-N35, 2pm. Call 875-3108.

Ecology and Centre for Biodiversity Research Seminar
Male-Female Antagonostic Coevolution As An Evolutionary Catalyst: Speciation And Sex Chromosomes. Bill Rice, U of California, Santa Cruz. Family/Nutritional Sciences 60, 4:30pm. Refreshments Hut B-8, 4:10pm. Call 822-3957.

Respiratory Research Seminar
Asthma Education: Is It Worthwhile? Dr. Sarah Broder, Respiratory Division. Vancouver Hospital/HSC, 2775 Heather St., 3rd floor conference room, 5-6pm. Call 875-5653.

Theatre Performance
The Ends Of The Earth by Morris Panych. B-490 Theatre Collective. Frederic Wood Theatre, 8pm. Continues to April 12. Matinee April 12, 1pm. Refreshments. Call 822-2678.

Thursday, Apr. 10

Concert
UBC Opera Ensemble. Nancy Hermiston, director. Old Auditorium, 12:30pm. Call 822-3113.

Environmental Engineering Seminar
Progressive Systems Closure: Treatment Of TMP Whitewater By Ultrafiltration And Aerobic Memabrane Biological System. Christina Ragona. CEME 1215, 3:30-4:30pm. Refreshments. Call 822-2637.

Invited Speaker Seminar Series
The Level Set Method: What's In It For You? Stanley Osher, UCLA. CICSR/CS 208, 4-5:30pm. Refreshments. Call 822-0557.

Genetics Graduate Program Seminar
The Tissue Specific Distribution Of Chromosomal Mosaicism In Cases Diagnosed With Confined Placental Mosaicism. D. James Stavropoulos, MSc candidate, Pathology. Wesbrook 201, 4:30pm. Refreshments 4:15pm. Call 822-8764.

Conference
Academic Freedom And The Inclusive University. Welcoming reception, 5:30-7pm. Conference continues to April 12. Non-students, $125. To register, call 822-1050.

Friday, Apr. 11

Pediatrics Grand Rounds
Respiratory Syncytial Virus - New Information From The Canadian Epidemiology Studies. Dr. Elaine Wang, U of Toronto and Hospital for Sick Children. GF Strong Auditorium, 9am. Call 875-2307.

Health Care and Epidemiology Rounds
Health Impact Assessment As A Tool For Population Health Promotion And Healthy Public Policy. Dr. Jim Frankish, Inst. of Health Promotion Research. Mather 253, 9-10am. Call 822-2772.

Occupational Hygiene Program Seminar
Kiln Emissions And Potters Exposures. Bob Hirtle, Health Care and Epidemiology. Vancouver Hospital/HSC Koerner pavilion G-279, 12:30-1:30pm. Call 822-9595.

Chemical Engineering Weekly Seminar
Viscosity And Mixing Of A Lignin-Based Slurry Fuel. Dusko Posarac, Chemical Engineering. ChemEng 206, 3:30pm. Call 822-3238.

Concert
UBC Opera Ensemble. Nancy Hermiston, director. Old Auditorium, 8pm. Call 822-3113.

Saturday, Apr. 12

Know Wonder Time
Folktales From Many Cultures For Kids Of All Ages. Bookstore, 1:30pm. Call 822-2665.

Concert
UBC Opera Ensemble. Nancy Hermiston, director. Old Auditorium, 8pm. Call 822-3113.

The Vancouver Institute Lecture
Academic Freedom And The Inclusive University. Prof. Stanley Fish, Duke University and Prof. John Fekete, Trent University. IRC #2, 8:15pm. Call 822-4636.

Sunday, Apr. 13

Concert
UBC Opera Ensemble. Nancy Hermiston, director. Old Auditorium, 2:30pm. Call 822-3113.

Green College Performing Arts Group
The John Doheny Quintet. Green College, 8pm. Call 822-6067.

Monday, Apr. 14

Asian Street Foods Festival
Asian Foods And Folkways At The Carpark In The CK Choi Building. CK Choi lounge, 11am-2pm. Continues to April 18. Call 822-2629.

Biochemistry and Molecular Biology Seminar
Dissection Of The Protein Folding Problem. IRC#4, 3:45pm. Refreshments 3:30pm. Call 822-3341.

Physics and Astronomy Astronomy Seminar
Peter Stetson, Dominion Astrophysical Observatory. Hennings 318, 4pm. Refreshments 3:30pm. Call 822-2802.

Resident Speaker Series
Rendering The Imagination: The Making Of A Computer Animation. Allan Rempel, Computer Science. Green College, 5:30pm. Call 822-6067.

Tuesday, Apr. 15

Medical Genetics Seminar
Gene Therapy For Sickle Cell Disease. Sharlene Faulkes, PhD candidate. Functional Analysis Of The Werner Syndrome Gene. Richard Bruskiewich, PhD candidate. Wesbrook 201, 4:30-5:30pm. Refreshments 4pm. Call 822-5312.

Wednesday, Apr. 16

Orthopedics Grand Rounds
Dr. B.A. Masri, Orthopedics. Vancouver Hospital/HSC, Eye Care Centre Auditorium, 7am. Call 875-4646.

Book Buy Backs
Bring Your Used Texts In For Cash. Bookstore front lobby, 9am-4:30pm. Call 822-2665.

Research Division Seminar (OBST 506)
Spontaneous And Progesterone Induced Sperm Acrosome Reaction. Dr. Peter Pan, National Yang Ming University. B.C. Women's Hospital/Health Centre 2-N35, 2pm. Call 875-3108.

Respiratory Research Seminar Series
Physiological Changes Following Lung Volume Reduction Surgery. Dr. Arthur Gelb, professor UCLA. Vancouver Hospital/HSC 2775, Heather St. 3rd floor conference room, 5-6pm. Call 875-5653.

Senate
The Eighth Regular Meeting Of Senate, UBC's Academic Parliament. Curtis 102, 1822 East Mall, 8pm. Call 822-2951.

Thursday, Apr. 17

Genetics Graduate Program Seminar
Sequencing Rare Cutter Sites On Human Chromosome 8. Leah Debella, MSc candidate. Wesbrook 201, 4:30pm. Refreshments 4:15pm. Call 822-8764.

The Narrativity Research Group
Madame Butterfly Symposium. Susan McClary, UCLA; Anne McClintock, Columbia; Bart Testa, U of Toronto. Green College, 7:30pm. Continues April 18-19, 9am-5pm. Call 822-6067.

Friday, Apr. 18

Pediatrics Grand Rounds
Focal Segmental Glomerulosclerosis: Slow Progress In A Slowly Progressing Disease. Dr. J. Carter, BC's Children's Hospital. GF Strong Auditorium, 9am. Call 875-2307.

Health Care and Epidemiology Rounds
Complexity In Epidemiology: Is It Time For New Methods? Dr. Steve Marion, Health Care and Epidemiology. Mather 253, 9-10am. Call 822-2772.

Saturday, Apr. 19

Conference
Best Privacy Practices For Private And Public Sector Organizations. Robert Betterell, Assoc. Lawyer, Ratcliff & Co.; David Flaherty, Information and Privacy Commissioner, Province of B.C.; Colin Bennett, Assoc. Prof. Political Science, U Victoria; Alexandra Bradley, President, Harwood Information Associates Ltd. University Golf Club, 5185 University Boulevard, 9am-4pm. $180. Resource materials, lunch, refreshments. Sponsored by the School of Library, Archival and Information Studies. Call 822-2404.

Know Wonder Time
Making Napkin Rings And Straw Holders For Kids Of All Ages. Bookstore, 1:30pm. Call 822-2665.

Concert
UBC Medicine Spring Gala. Presented By UBC Medical Students. Chan Centre, 7:30pm. Tickets at UBC and Dean's Office (Faculty of Medicine), Vancouver Hosp/HSC, Laurel Pavilion. Donations gratefully accepted at the door. Proceeds to the Children's Wish Foundation of Canada. Call 822-2421.

Notices

Eczema Study
Dermatology is looking for persons 12-40 years old who have a current flare of eczema. Honorarium will be paid for five visits over a 15-day period. Call 875-5296.

Facial Psoriasis
Dermatology is looking for persons 18 years and older, able to attend five visits over eight weeks. Call 875-5296.

Psoriatic Arthritis
Dermatology is looking for persons 18 years and older, must have psoriasis as well as psoriatic arthritis. Honorarium paid upon completion. Call 875-5296.

UBC REPORTS

CALENDAR POLICY AND DEADLINES

The *UBC Reports* Calendar lists university-related or university-sponsored events on campus and off campus within the Lower Mainland.

Calendar items must be submitted on forms available from the UBC Public Affairs Office, 310 – 6251 Cecil Green Park Road, Vancouver B.C., V6T 1Z1. Phone: 822-3131. Fax: 822-2684. An electronic form is available on the *UBC Reports* Web page at http://www.ubc.ca under 'News.' Please limit to 35 words. Submissions for the Calendar's Notices section may be limited due to space.

Deadline for the April 17 issue of *UBC Reports* — which covers the period April 20 to May 3 — is noon, April 8.

THE UNIVERSITY OF BRITISH COLUMBIA

HEALTH, SAFETY AND ENVIRONMENT PERSONAL SECURITY COORDINATOR 1996 YEAR END REPORT

Key Accomplishments in 1996:

- ***"Code Blue" Emergency Phones & Campus Lighting Upgrades***
- ***UBC "Clothesline Project" by the Women Students' Office***
- ***Fixed Route Security Bus***
- ***AMS Student Safety Audits***
- ***1996 UBC Safety Guide by the Women Students' Office***
- ***Compliance with WCB Regulations on the Prevention of Violence in the Workplace***

The Personal Security Coordinator is responsible for developing and implementing University-wide personal security programs, as well as promoting existing and ongoing programs. The Coordinator is responsible for coordinating the collection, analysis and distribution of personal security information and for assisting with the resolution of complaints related to personal security.

The Personal Security Coordinator's report on the status of UBC's personal security programs reflects, insofar as possible, all of the activities underway at UBC. This Report provides an overview of current services and ongoing programs; however, programs detailed in last year's report are not included in the 1996 Report.

1. The Personal Security Coordinator's Office:

During 1996, the Coordinator focused primarily on the following areas: resolution of specific incidents, assisting with the development of UBC's policy *Response to Threatening Behaviour*, and increasing awareness around personal security issues. As well, the Coordinator was very active as a member of the transitional management team of the department of Parking, Transportation and Campus Security. Two major campus projects, the Personal Security Review Audit program conducted by the Local Safety Committees and the UBC Risk Assessment in compliance with the WCB Regulations on the Prevention of Violence in the Workplace, were completed and the Coordinator is now planning future activities stemming from these projects.

a) Personal Security Review Audit Program:

Local Safety Committees conducted personal security review audits of seventy campus buildings in the fall of 1995 under the direction of the Coordinator. The results of the 1995 audits were entered in a database and the Coordinator, with the assistance of a work-study student, is generating a report providing an overview of concerns and recommending future improvements which will be forwarded to Campus Planning & Development. Many of the Local Safety Committee auditors identified areas of concern which the students also identified in their audits, and the information was relayed to Campus Planning & Development and used to establish the priority list for minor capital projects related to the Safer Campuses Initiative.

The Personal Security Review Audit Program reveals the need for a consistent, measurable audit program that can be used by the Local Safety Committees and other campus groups on an ongoing basis. The Coordinator's work-study student is working on developing a comprehensive audit program with staff of Campus Planning & Development and interested campus constituents. The ongoing, standardized audit program provides an assessment of the UBC community's concerns about the safety of the campus, and will provide coherent, useful information to the administration regarding prioritizing ongoing improvements to the physical plant.

The AMS has sponsored three student safety audits: two during the 1995-1996 academic year, and one in December, 1996. The students responsible for the 1995-1996 safety audits presented their summary report to the Board of Governors at its January 1996 meeting. The Coordinator and David Grigg, Manager of Engineering Services, Campus Planning and Development, prepared a written response to the Student Safety Audit summary.

In response to the students' recommendation that the University establish a reliable, central reporting system to monitor the street lights on campus to identify burnt out lights, in the Spring of 1996, Plant Operations supplemented its 24-hour "trouble calls" service with an email address to report lights out on campus: lightsout@plantops.ubc.ca. As well, the students identified seven areas or issues of priorities and the following point form list illustrates the students' priorities and the University's response to their concerns:

1. *Woodward Library/Health Sciences Area:*

- CP&D installed a "Code Blue" emergency telephone in the plaza area near the IRC.
- CP&D has improved lighting on the north side of the IRC through to University Blvd. and on the south side of the hospital area and replaced existing sodium lights with white metal halide lights which provide better lighting.
- Plant Operations has trimmed bushes and undergrowth in the area.

2. *Main Library, Sedgewick Library & Buchanan Complex:*

- CP&D has improved lighting around the Main Library, on the path from the Library to Memorial Road, and along Memorial Road from Main Mall to East Mall near the Buchanan complex.
- Plant Operations has trimmed bushes and undergrowth in the area.

3. *Walking Route from Totem Park:*

- CP&D installed "Code Blue" emergency telephones on Stores Road behind the Forward Building, and in the Information kiosk in front of the CICSR complex on Main Mall.
- CP&D upgraded the lighting in the "O" Lot behind MacMillan building.

4. *Residences by First Nations House of Learning:*

- CP&D installed a "Code Blue" emergency telephone at Gate 6 on University Blvd. near Place Vanier residences.
- CP&D improved lighting on the paths in the Ponderosa complex area.

5. *Student Recreation Centre & GSAB Parking Lot:*

- CP&D improved the lighting in the GSAB Lot which services the Rec. Ctr.

6. *Route to Fairview and Acadia:*

- CP&D improved lighting on the pathway near Fairview Avenue.

7. *Parking Lots:*

- In addition to the above-mentioned projects, CP&D upgraded lighting in the parking areas near Ritsumeikan Residence (the "A Lot" on Lower Mall), and in the parking areas near the Museum of Anthropology and the Anthropology and Sociology building (the "Mary Bollert Lot").

b) Compliance with WCB Regulations on Violence in the Workplace & Policy Development:

The Coordinator conducted a risk assessment in compliance with the WCB Regulations in the fall of 1995 and collected the responses and entered the results in a database in the Spring of 1996. Attached to this report is a copy of the Risk Assessment Report. The Risk Assessment Report will be presented to the Administrative Heads and the Personal Security Coordinator will be involved in the ongoing implementation of training programs and assessments to reduce any identified risks of violence to UBC employees.

The Coordinator was actively involved in the "working group" process of developing a University-wide policy on *Response to Threatening Behaviour* to assist members of the University community resolve incidents where people exhibit threatening or violent behaviour. The Vice Provost has presented the *Response to Threatening Behaviour Policy* to the Board of Governors.

2. The Women Students' Office:

a) "Clothesline Project:"

The WSO sponsored the UBC Clothesline Project, which was displayed in the Student Union Building Art Gallery the week of December 3, 1996 to commemorate the deaths of fourteen women at the Ecole Polytechnique in Montreal. The Clothesline Project is a "powerful visual display of t-shirts with graphic messages and illustrations created by individual women to represent her own personal experience of violence".

The WSO will sponsor another display of the UBC Clothesline Project in March, 1997 in conjunction with International Women's Day activities, and plans to display the Clothesline Project at other post-secondary institutions throughout the province and Canada. The Clothesline Project received $7,400 through the 1995-1996 provincial Safer Campus Initiatives funding to sponsor the project.

b) Safety Guide and Peer Educator Workshops:

The WSO continued to sponsor the Peer Educator program, offering "Sex, Dating & All That Jazz" Workshops on acquaintance sexual assault and Personal Security Workshops for students. The WSO reprinted its Safety Guide for 1997, and updated the version offered on the WSO "home page". Both the WSO Peer Educator program and the Safety Guide received funding through the provincial Safer Campuses Initiative 1996-1997.

3. Parking, Transportation & Campus Security:

Fixed Route Security Bus Service:

In the Spring term of 1996, through funding provided by the office of the Vice President, Student and Academic Services, the department of Campus Security added a second security bus on a trial basis to provide service on a scheduled route from 6:00 p.m. till 2:00 a.m., Monday through Friday nights. The department conducted a user survey at the conclusion of the trial period and determined that the majority of users preferred the fixed route service. In the fall of 1996, the department reduced its security bus service to one fixed route bus. The security bus averages between one hundred and one hundred and fifty riders per shift.

4. The Alma Mater Society:

a) Safewalk Program:

The AMS sponsored Safewalk program received $5,400.00 from the 1995-1996 provincial Safer Campuses Initiative funding to expand its operation. In October, 1996, Safewalk established a second "office" in the Buchanan Building to expand its operation for students enrolled in night classes in the area. The Safewalk program used some of the Safer Campuses funds to purchase new jackets and rechargeable battery packs for the volunteers' flashlights. In the past, the program did not operate during the exam period due to a lack of volunteers; however, this year the service operated during the exam period for the first time. The current Director is hopeful that Safewalk will soon use two-way radios which have access to the Campus Security frequency and thus improve the service and the safety and security level of the Safewalk volunteers and clients.

b) Safety Commissioners:

The AMS has two Safety Commissioners who are responsible for increasing awareness about safety issues on campus among the student body. The Safety Commissioners provide information at campus events and solicit students' concerns about personal safety and helped with the Student Safety Audit (see paragraph 2a). As well, the Safety Commissioners act as liaisons with other campus groups to help resolve student concerns.

5. Safer Campuses Initiative Funding:

The Ministry of Skills, Training & Labour, through its 1995-1996 Safer Campuses Initiative, provided $25,000 to every post-secondary institution in the province to continue ongoing projects to improve campus safety and to implement other related programs. Based on a proposal submitted to the Ministry by the Personal Security Advisory Committee, the 1995-1996 funding was allocated as follows:

- $1,200 for the development of personal security workshops for persons with disabilities;
- $5,400 for improving and expanding the student operated Safewalk program;
- $11,000 for promotional material concerning safety on campus; and
- $7,400 for the UBC Clothesline Project.

Additional information on the Safer Campuses Initiative funding is provided in the relevant sections of this report. The Ministry has indicated that the Safer Campuses Initiative funding will no longer be available as of 1997.

6. Safer Campuses Initiative Minor Capital Funding:

In 1995-1996, the Ministry of Skills, Training & Labour provided UBC with $450,000.00 in minor capital funds earmarked for "Safer Campus" projects. These funds were used to improve exterior lighting on campus and to install six "Code Blue" emergency telephones at locations across the campus, based on a list of priorities identified through the Student Safety Audit and the Personal Security Review Audit programs. These projects have a visible impact on the perception of safety on the campus at UBC, and we have received positive feedback from the community about the lighting improvements and the emergency phone program.

The future of minor capital projects related to the Safer Campus Initiative is uncertain as the Ministry froze the 1996-1997 minor capital funds earmarked for "Safer Campus" projects.

THE UNIVERSITY OF BRITISH COLUMBIA

COMMUNICATIONS REPORT 1996/97

THE UNIVERSITY OF BRITISH COLUMBIA

April 3, 1997

Dear Colleagues:

Here for your review is the Communications Report 1996/97 prepared by the university's Public Affairs Office. The report outlines communications programs and services provided by the External Affairs Division to support administration, faculties, departments and other campus units.

We welcome your feedback and comments.

Sincerely,

Peter W. Ufford
Vice-President, External Affairs

Overview

UBC's Public Affairs Office, housed within the External Affairs Division's University Relations Department, is responsible for communicating UBC's mission, key messages, and values to both its internal community of faculty, staff and students, and to the broader external community which comprises multiple audiences. Public Affairs coordinates programs and messages in concert with other units of the External Affairs Division, UBC administration, faculties and departments, and service units.

Programs are built on a layer of communications policies and practices, including the *Policy on Communications*, approved by the Board of Governors in May 1994, which formally acknowledges UBC's responsibility to keep its many communities informed and ensure two-way dialogue. Programs are also built on the *UBC Communications Plan*, finalized in January 1995 and slated for updating in the spring of 1997, which was developed with widespread campus input and designed to respond to the ever-changing environment in which UBC operates. The plan's five emphases are: *critical issues management, public information centre, internal communication, two-way communication, and external communication.* These emphases form the basis of Public Affairs' workplans.

This office provides a comprehensive communications program directed toward the campus community, the general public, government, the business community and the media. The primary goals of the office are to keep the campus community informed about developments in university policies, its people, research, teaching, and events; to increase public understanding and support for UBC; to provide avenues for the on-campus and off-campus community to communicate with the university; to encourage public use of campus facilities and attractions; and to promote interaction between the university and the private and public sectors. The office provides the news media with accurate and timely information about research activities and other matters of public interest, and produces a wide range of publications including the tabloid newspaper *UBC Reports*, President's Reports, and brochures. Staff also provide public and media relations counselling and other communications services to UBC academic and administrative units.

1996/97 in review

Several key university initiatives were supported by the Public Affairs Office in 1996/97, including the Official Community Plan and the Liu Centre for International Studies, and many public issues required strategic communications support, including issues such as:

- New president appointed for University of British Columbia
- Funding cuts to have lasting impact on UBC

Public Information Centre

UBC's first Public Information Centre began to take shape in late 1996, with the establishment of an information line, UBC-INFO (822-4636), and walk-in centre at the Cecil Green Park Coach House. The centre is staffed on a full-time basis and provides a wide range of information about UBC programs, services and facilities, as well as offering directions to campus and information about events. An advertising campaign is underway to promote the centre to both on-campus and off-campus users. The number of visitors and phone calls to the centre, and the types of requests, will be monitored to identify best future expansion opportunities for the centre.

World Wide Web

The Public Affairs Office Web site, which provides on-line access to *UBC Reports*, media releases, *Facts & Figures*, and other communications vehicles, was launched in August 1996. The estimated number of people worldwide who can read and respond directly to these communications initiatives on the Web is 26.4 million. Forecasters predict that by the end of 1997, 52 million people will be using the World Wide Web. The Public Affairs Office also completed the External Affairs Division Web site and contributed to the renewal of UBC's home page and Web site.

Media relations

The office also initiated a new format for media releases in order to enable it to increase its ability to publicize and celebrate many of the achievements of UBC's faculty, staff and students. An increasing emphasis was placed on telling the stories of the "people" of UBC in all communication materials.

The Public Affairs Office was awarded a silver medal by the Council for the Support and Advancement of Education (CASE) for news release writing.

UBC Reports

UBC's main vehicle for communicating with its internal audience on an ongoing basis is the bi-weekly tabloid *UBC Reports*. While continuing to promote the achievements in teaching, research and service of UBC's faculty, staff and students, four new columns were initiated to highlight trends in teaching, safety on campus, reengineering or efficiency initiatives, and the changing environment in campus food services.

Fund-raising communications

The integration of the Donor Relations and Communications unit of the Development Department was completed at the beginning of the 1996-97 fiscal year. The amalgamation means Public Affairs can increasingly support university-wide and faculty fund-raising initiatives. One of this unit's major projects in 1996 was the production of a two-part video on the opening of the CK Choi Building for the Institute of Asian Research and UBC's international programs and facilities.

Looking ahead

UBC's relationships with its many diverse constituents remain a priority and Public Affairs will support these relationships during the coming year by providing communications/consultation programs for UBC initiatives, including:

- Official Community Plan (May 1997)
- Liu Centre for International Studies project (Spring 1997)
- Chan Centre for the Performing Arts Opening (Spring 1997)
- Asia-Pacific Economic Cooperation (APEC) forum (November 1997)
- transition to a new president (August 1997)
- expansion of the Public Information Centre and its services (ongoing)
- updating UBC's communications plan to reflect ongoing changes in the university's environment (Spring 1997)
- placing an increasing emphasis on the contributions made by UBC faculty, staff and research to the province of BC and beyond (ongoing)
- providing ongoing communications support to senior administration, and faculties and departments for their identified priorities (ongoing)

Reporting to the community

Messages

UBC's messages reflect its mission statement and the goals set for the university, including:

- UBC is a world-class educational and research institution
- UBC is open and accountable, is meeting and serving community needs, and is encouraging input and participation
- UBC fosters and contributes social, economic, scientific, cultural and educational benefits to society
- UBC plays a leadership role in advancing British Columbia on the provincial, national and international scene
- UBC's faculty, staff and students are part of a unique community and their participation in the university is valued

Audiences

- internal (on-campus): faculty, staff, students
- external (local, regional, provincial, national, international)
- alumni
- government (municipal/provincial/federal)
- donors (individual/corporate/foundation)
- business/industry sector
- media (print/radio/tv/wire/magazine)
- public (UEL/regional/provincial/national/international)
- organized labour
- friends of UBC
- visitors to campus

Communications services

The Public Affairs Office offers a range of communications services to campus, including:

- *UBC Reports* — tabloid newspaper published 21 times annually; circulation 37,000, includes UBC Gazette, policy and other inserts
- Media releases — 200 in 1996/97 publicizing more than 100 research, teaching, people and policy announcements
- Phone contact — 200 calls per day
- Placement of UBC's people and stories — hundreds annually in TV, radio and print media, both in the Lower Mainland and across Canada
- News conferences
- Daily clips service — 200 packages annually, approximately 1,000 items
- *Facts & Figures* university brochure
- World Wide Web site
- Public consultation/public process
- Report to the Community — Vancouver *Sun* and *Province*
- President's tours
- Homecoming events
- Contributions to faculty/departmental newsletters
- President's Reports
- Speakers Bureau
- Alumni *Chronicle* contributions
- Media training services
- Communications consultation
- Campus tours
- UBC experts contact service
- Brochures and other publications
- Speech writing services
- Editing services
- Congregation
- MLA/MP visits
- Donor publications
- Personal contact/one-on-one meetings
- Video productions

Forum

The universe (which others call the library)

By Shirley Neuman

Shirley Neuman is dean of UBC's Faculty of Arts. She gave the following remarks recently at the opening of the Walter C. Koerner Library.

Some of you will recognize in my title the opening words of Jorge Luis Borges' short story, "The Library of Babel." The universe of Borges' fiction is no edifice of concrete and glass like the new Koerner which we are celebrating, its shelves deployed in orderly rows, individual carrels each with its own computer connection for the aspiring PhD candidates who were perhaps imagined as its ideal users.

Borges' universe-cum-library consists of identical hexagonal rooms. From each of these hexagons, one can see, "interminably," the hexagons above and below. Four sides of each hexagon hold five rows each of identical bookshelves. One side is bounded by a low railing overlooking an airshaft; dead librarians are thrown over the railing into an "infinite" fall that proves that the library/universe is unending. The sixth side of the hexagon opens onto a modest hall, which leads transversely to other hexagons, and vertically by means of a spiral staircase to hexagons above and below. On either side of the hall, we are told, are two small closets, one that enables a reader to sleep standing upright, the other a latrine.

The universe that Borges' fictional librarian describes is an architecture of infinite regression and infinite duplication, populated by books and other librarians. It is a place of dreams and danger: a place of futile quests "in search of a book, perhaps the catalogue of catalogues;" a place of ferocious debates in which, "for every sensible line of straightforward statement, there are leagues of senseless cacophonies, verbal jumbles and incoherences; it is a place of "extravagant happiness."

The library, Borges' narrator informs us, is analogous to early theologians' definitions of God: it "is a sphere whose exact centre is any one of its hexagons and whose circumference is inaccessible." Librarians may be the product of chance or of malevolent demiurgi," but "the universe, with its elegant endowment of shelves, of enigmatical volumes, of inexhaustible stairways for the traveller and latrines for the seated librarian, can only be the work of god."

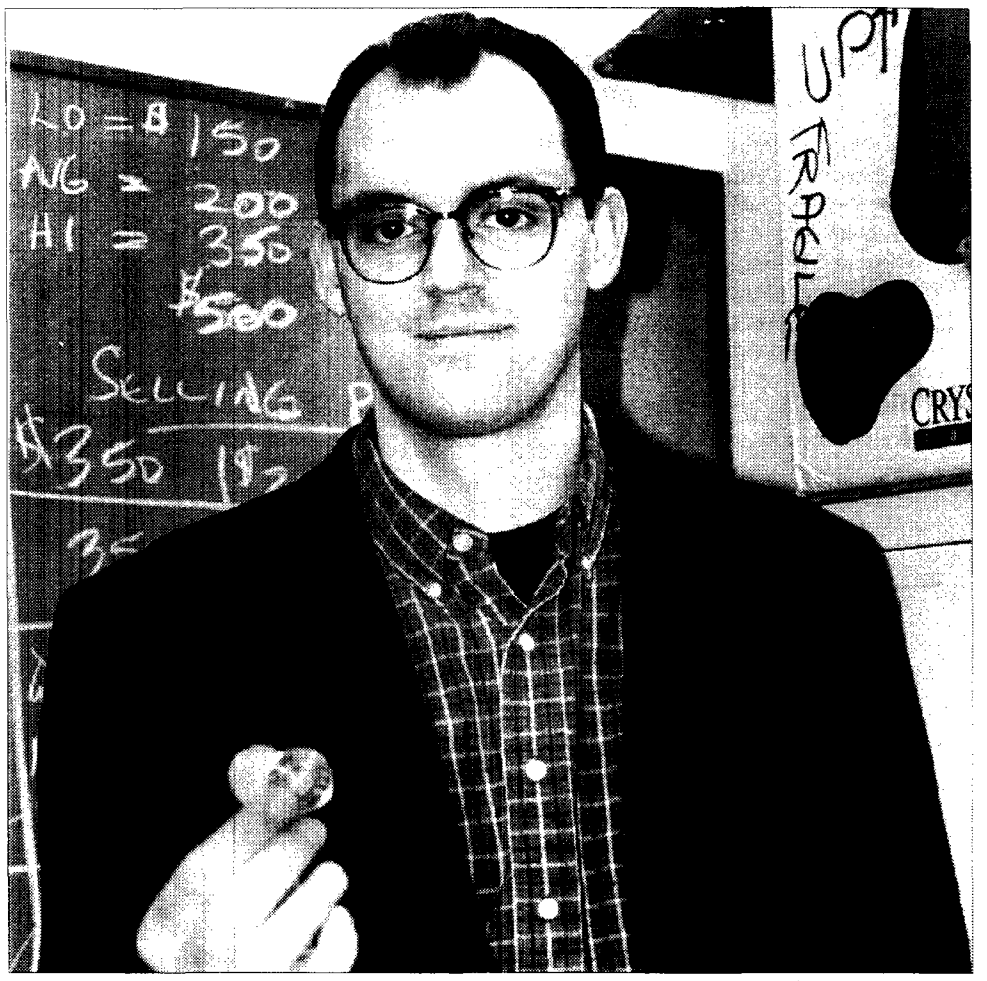
The library is a place of orderly disorder, disorderly order. One of its axioms is that "the orthographical symbols are 25 in number," an orderly principle if there ever was one, into which more orderly disorder is introduced by an epigram to the short story from Burton's *The Anatomy of Melancholy* which alludes to an alphabet of 23 letters, and, in my reading, by the fact that I am citing from a translation into English with its 26 letters. We may not know how to read it, our Borgesian librarian suggests, but there is no nonsense in the library: "I cannot," he says, "combine some characters which the divine Library has not foreseen and which in one of its secret tongues do not contain a terrible meaning. No one can articulate a syllable which is not filled with tenderness and fear, which is not, in one of these languages, the powerful name of a god." The library, in short, is a universe, in the root sense of that word, *to be whole, entire.*

"The Library is total ... Everything: the minutely detailed history of the future, the archangels' autobiographies, the faithful catalogue of the library, thousands and thousands of false catalogues, the demonstration of the fallacy of those catalogues...the true story of your death, the translation of every book in all languages, the interpolations of every book in all books."

The universe, Borges' extravagantly developed metaphor tells us, is a library. With the rigorous reasoning of grammar as our guide, we can turn this sentence around across the copulative verb, "is." The library is the universe, whole and entire. Which is to say that our world is what is known about it. Our world is the physical and social, the spiritual and intellectual phenomena we observe and describe, even when we cannot explain them; it is our representations of those phenomena; and it is our attempts to interpret them, to theorize them, to give them meaning. Whether we are medical practitioners or foresters, agriculturalists or lawyers; whether we are businessmen or teachers, engineers or botanists; whether we are mathematicians or geomorphologists, dramaturges or economists; whether we are art historians or psychologists, theologians or social workers; whether we are writers or sociologists, musicians or the architect of a new building called the library, the library is our history, our source, our wholeness. It is the repository of what in the past we thought we knew, of what we thought about it and of what we imagine we know now; of our ideals and aspirations for the future. It holds the data we call facts, and the meanings we have given those facts, as well as imaginings that have nothing to do with what we call facts and everything to do with the truths of the human spirit. The library is a building of many self-contradictory sorts: foundation for the scholarly edifice we erect above it, it is also that edifice; structure we renovate and add on to through new discovery, new interpretation, new creations of the imagination, it is also our renovations and additions.

Encoded somewhere in the library, waiting for us to decipher it, Borges argues, is all we know and all we need to know. The library is our universe, our university, and it is the measure of our minds, our lives. In its labyrinths we may get irrevocably lost or we may spend our lives sitting on the latrine bent over a single book; we may be led up its spiral staircases to infinity or plunge over its low railings to "decay and dissolve in the wind generated by the fall." Whether its holdings are bound in precious leather and illuminated in red and blue and gold, or whether they include videos, microforms, and computerized databanks matters not at all to the meaning of the library.

Should the "human species... be extinguished," as Borges' fictional librarian argues it is about to be, "the Library," he further insists, "will endure: illuminated, solitary, infinite, perfectly motionless, equipped with precious volumes, useless, incorruptible, secret." The library will retain the root meaning of *universe*: to be entire, whole. But should the library be lost, then a part of our knowledge of the world goes, and with that knowledge the world it signifies disappears: the universe is no longer whole, entire. The library (which some call the universe and others the university).



Stephen Forgacs photo

Consumer behavior is far from being based purely on financial factors says Peter Darke. The assistant professor of Marketing recently found fairness and luck also played an important part.

More to a bargain than money, professor finds

by Stephen Forgacs

Staff writer

Retailers who think they can attract shoppers by simply promising savings might be surprised to hear that money alone is not necessarily enough to make a bargain hunter happy.

Peter Darke, an assistant professor of Marketing in UBC's Faculty of Commerce and Business Administration, recently completed a study that confirms that non-financial factors — such as the concept of fairness — play an important role in bargain hunting and consumer satisfaction.

"We found that shoppers are likely to be excited about having got a bargain, even if there is no personal financial gain involved," Darke said, adding that this may help explain why people will drive across town to buy something on sale even if the trip virtually eliminates any real savings.

"People derive pleasure or satisfaction from the idea that they are paying a fair price," he said.

In the study, Darke and Darren Dahl, a graduate student in Marketing, had subjects purchase videos in a store near UBC. The subjects, students from the Faculty of Commerce and Business Administration, were each given $10 to buy a video.

Some students were given a financial incentive to bargain hunt — although they were not allowed to keep the video they purchased, they were told they could keep the change left over after their purchase. Other students were told in advance that they would have to hand over their video purchase and the change, removing any financial incentive.

In the video store, subjects received either no discount on their purchase, a moderate discount or a high discount.

Darke and Dahl found that students who received a discount when they made their purchase were excited about the fact that they got a bargain whether they had a financial incentive or not.

"When the students returned from making a bargain purchase we almost didn't need to ask them questions," Darke said. "Their faces would light up even if they didn't stand to gain financially. We could have rated their facial expressions."

The UBC study is Darke's third study in the area of non-financial motives and bargain hunting. It confirms his findings in the earlier studies which suggested that the motivation for bargain hunting extends beyond the prospect of financial gain or savings.

In another study of consumer behaviour at the University of Toronto, Darke found that shoppers tend to attribute good deals to fairness on the part of the retailer and to luck, rather than their own shopping prowess.

"The most surprising thing we've found, was that the people in our studies did not take credit for their success in getting a bargain," Darke said, adding that this finding is contrary to other research. "One of the most substantial claims in social psychology is that people bend over backwards to take credit for anything positive that happens to them, even when it is impossible that they are responsible for their achievement."

In the U of T study, Darke observed the reactions of research subjects who were given a hypothetical situation in which they had to buy a TV set for their office, with no financial incentives and knowing that the hypothetical boss would be indifferent to the outcome.

The results suggested that people derived pleasure or satisfaction from getting a good deal or "fair" price even when there was nothing at stake.

Darke said his studies also indicate that the percentage discount offered is another important factor in shopper satisfaction. Even if the amount of money involved in a discount is relatively small, a higher percentage discount, 40 per cent for example, leads people to infer that they are getting a fair price.

"This may be why people like bargains, because even if there isn't a lot of money involved, at least they feel they have been treated fairly. And that has positive meaning for people. It's nice to be treated fairly, it's terrible to be jerked around, even if there is little money involved."

Another finding in the UBC study was that even people identified in advance as marketing mavens — shoppers who tend to be proud of their ability to find bargains and are likely to tell others about their finds — attributed the discounts they received to luck rather than skill. And subjects in all of Darke's studies seemed to like bargains they stumbled across just as much as those they had figured out.

News Digest

This year's William G. Black Memorial Prize essay competition has been won by third-year law student Mathew Englander.

More than 50 undergraduates were competing for the prize, which is worth $1,500.

Students entering the competition are given two hours to write an essay — without the use of resource materials or computers — on a topic presented at the time of the competition that relates to some aspect of Canadian citizenship.

This year's topic was: "Should all persons born in Canada be granted Canadian citizenship automatically? Consider this practice from more than one perspective."

• • • • •

Dr. Donald Paty, a professor in the Dept. of Medicine, and Dr. Wayne Moore, a clinical professor of Pathology, have received funding of $146,000 from the pharmaceutical company Berlex Canada Inc. for research on multiple sclerosis (MS).

Paty and Moore's research will seek further understanding of the significance of MS lesions, which can be detected on brain scans done with magnetic resonance imaging during the initial onset of the disease, which may last two to 15 years.

CUSTOMER APPRECIATION DAYS

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Research Note
Raymond Spencer Rodgers PhD:

- Has authored original concepts in a wide range of subjects — communications, economics, education, ethics, government, international studies, metaphysics, planning, sociology, etc;
- First person to write comprehensively about an "electronic web" and consequences — as impacting other technologies, cultures, economics, consciousness, etc. 1971, Man in the Telesphere [and see Netschay, "Cybervisionary ignored," Internet News, Dec. 95];
- Identified by Rotstein (in 1972 Read Canadian) as one of first three persons to seriously address the branch-plant economy;
- Previewed the "Rifkin" "end of work" thesis in an April 1957 article in the Social Democrat, Montreal;
- Identified as the "intellectual father of Lousiana's current French-language movement." Lafayette Advertizer, Louisiana;
- Provided the theoretical framework for, and drafted and negotiated (on behalf of Louisiana), the Quebec-Louisiana Cultural Agreement. Amer. Journal International Law, 67, 70;
- Planner of the world's first community centre integrating shopping with a wide range of public services — auditorium, seniors centre, library, daycare, etc. Oakridge, Vancouver.

Etc.

Inquiries from persons seeking dissertation topics or with other research interests may contact rodgers@vcn.bc.ca.

Anybody wishing to reprint this notice at any size in any publication is hereby invited and authorized to do so. RSR.

Classified

The classified advertising rate is $16.50 for 35 words or less. Each additional word is 50 cents. Rate includes GST. Ads must be submitted in writing 10 days before publication date to the UBC Public Affairs Office, 310 – 6251 Cecil Green Park Road, Vancouver B.C., V6T 1Z1, accompanied by payment in cash, cheque (made out to UBC Reports) or internal requisition. Advertising enquiries: 822-3131.

The deadline for the April 17, 1997 issue of *UBC Reports* is noon, April 8.

Accommodation

POINT GREY GUEST HOUSE A perfect spot to reserve accommodation for guest lecturers or other university members who visit throughout the year. Close to UBC and other Vancouver attractions, a tasteful representation of our city and of UBC. 4103 W. 10th Ave., Vancouver. BC. V6R 2H2. Phone or fax (604)222-4104.

TINA'S GUEST HOUSE Elegant accom. in Pt. Grey area. Minutes to UBC. On main bus routes. Close to shops and restaurants. Inc. TV, tea and coffee making, private phone/fridge. Weekly rates available. Tel: 222-3461. Fax:222-9279.

GREEN COLLEGE GUEST HOUSE. Five suites available for academic visitors to UBC only. Guests dine with residents and enjoy college life. Daily rate $50, plus $13/day for meals Sun.-Thurs. Call 822-8660 for more information and availability.

SHORT-TERM ACCOMMODATION - daily, weekly or monthly rate until mid-June. Very reasonable rates, comfortable queen beds, quiet, kitchen and laundry facilities. 5 blocks from UBC. Very close to bus. Call Douglas at 222-8073.

PENNY FARTHING INN 2855 West 6th. Heritage House, antiques, wood floors, original stained glass. Ten minutes UBC and downtown. Two blocks from restaurants, buses. Scrumptious full breakfasts. Entertaining cats. Views. Phones in rooms. Call (604)739-9002. E-mail:farthing@uniserve.com.

BRIGHT ATTRACTIVE ONE BR apartment close to UBC, with patio and one affectionate cat. Fully furnished and equipped. Available from mid-June for two months, possibly longer. $800/month. Please call 228-8825.

MODERN ONE BR FURNISHED garden level bsmt. suite, near UBC and bus. Suit one person. Private entrance. Six appliances, N/Pets, N/S. $888 per month incl. util. Avail. July 1. 224-9319.

SHORT-TERM ACCOMM. Daily, weekly, reasonable rates. Comfortable Queen bed, TV, VCR in beautiful room with a view of the ocean and an ensuite washroom. Very close to UBC at 16th and Dunbar. Phone (604)730-8305.

THREE BR AND DEN HOME. Large living room, dining room. One bathroom. Furnished or unfurnished. Long-term preferred. Near UBC, school and bus. $1350/mo. 327-4851.

EXCLUSIVE POINT GREY ONE BR furnished. Spacious, fully renovated garden suite in house. Hardwood floors, gas fireplace, private entrance, yard, washer/dryer, view from bedroom. Short/long term, $1600/mo. incl. hydro and cable, 813-7555.

SPANISH BANKS SUMMER RENTAL, mid-June to end July. Charming three bedroom home with basement suite. Two blocks from beach. Views of water, mountain, city. $2800. Call 822-5236 or 222-4435.

Accommodation

POINT GREY. COMFORTABLE furnished four bedroom house available. August 1/97 - July 31/98. $2000/month plus utilities. Call Nikki 822-9175 or 222-3346.

EXECUTIVE HOME, PANORAMIC view of city, water and mountain, walking to Jericho beach, Three B/R furnished plus nanny unit. Gourmet kitchen. Available May 1. $3600/month plus utilities. No pets. No smoking. Tel: 738-8717. Fax: 738-0810.

KITSILANO HOME three BR, (one BR ensuite) plus one room in basement. Large back yard with fruit trees. Available June 1. Suitable for family or sharing. No smoking. $1700/month plus utilities. Tel: 738-8717. Fax: 738-0810.

FURNISHED HOUSE WITH VIEW three bedroom house, five min. drive to UBC and beaches. Available July and August 1997. Flexible with dates and rental period. $2000/month. Call (604)228-0990.

TWO FULLY FURNISHED and fully equipped suites in beautiful Point Grey home two blocks from UBC gates. One available May 31. Other available now. N/S N/P. $950/$1400/month utilities included. Weekly rates available. 228-8079.

GROUND LEVEL, ONE BR SUITE. Fully furnished: washer/dryer, telephone, answering machine, TV, stereo, pots, pans. Utilities included. Located one block from UBC. Easy access to bus/downtown. $800/month. Contact Martine @ 224-8712.

SALTSPRING ISL. SPRING RETREAT. Waterfront, south facing, 3-bedroom home with fireplace; spectacular views; private beach, perfect for windsurfing and kayaking; relax on the deck; walking trails from your doorstep. The great escape. Experience tranquility! T/F(604)739-8590.

TORONTO. PROFESSOR'S 3-BR home for sublet July-August. Annex area, near university, cultural amenities, restaurants, subway. Three-storey, backyard, children welcome. Below market rent, $1,250/month +. (416) 920-0755, ivan.kalmar@utoronto.ca.

FURNISHED GARDEN SUITE. Excellent condition. No smoking. No pets. Avail. May 1. Call 734-3513.

Please Recycle

Housing Wanted

TEACHER SEEKS ACCOMM. Shared, sublet or house sitting. Early May to August or later. Kitsilano or Point Grey. David Heinimann, North West College (250)624-6054 ext 5729 office; (250)627-8218 home

PROFESSIONAL COUPLE waiting for condo to be finished seek to sublet or house-sit from May 1-August 31. Great with yards. Flexible with dates. Call 730-9459 evenings.

RESPONSIBLE PROFESSIONAL woman, high school teacher in Calgary, UBC post-grad, returning to UBC on sabbatical September to December 1997. Wishes to rent/sit furnished apt./condo or house. Please call Heather at (403)281-9106 or e-mail hmaki@cbe.ab.ca.

House Exchange

HOUSE SWAP 4- BR LOG HOME in Canmore, Alberta for house near UBC. July 1997 to July 1998. Ski, hike, climb in Rocky Mountains. 55 minutes to University of Calgary. Call (403)762-1422.

OCEANVIEW, BRIGHT CLEAN, quiet house. Three bedrooms. Furnished. Close to amenities, solarium. Exchange accomm. equal for Vancouver area for one year or more. Charles (250)479-9966 or cell: (604)818-6737.

Services

UBC FACULTY MEMBERS who are looking to optimize their RRSP, Faculty pension and retirement options call Don Proteau, RFP or Doug Hodgins, RFP of the HLP Financial Group for a complimentary consultation. Investments available on a no-load basis. Call for our free newsletter. Serving faculty members since 1982. Phone: 687-7526. E-mail: dproteau@hlp.fpc.ca dhodgins@hlp.fpc.ca.

LICENSED ELECTRICIAN living in Point Grey, specialising in home repairs and installations. Twenty years experience. Can fix anything (almost). Reasonable. References. Free estimates. Call Brian 733-3171.

INCOME TAX PREPARATION. Ed Jackson. 224-3540.

CREATIVE MINDS CHILD CARE Centre, at 38th and Camosun near UBC, offers full and part-time care in their literature-based program for children ages three through six. Call 263-4711 for information.

Next ad deadline:
noon, April 8

Westcoast - Waterfront Home

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Breathtaking view over Strait of Georgia to Vancouver Island and the Gulf Islands. The south-facing house is very spacious, beautifully designed and surrounded on all sides by large decks. Beautiful trees, rocky outcrops and private beach. Available for longtime lease with possibility of purchase. No dog. Tel. or Fax: (604) 885-2970.

Charles Ker photo

Tea For Three

Ritsumeikan exchange student Ai Nishiuo and Fumiko Okudaira and Tamiko Yoshikawa (l-r) performed a Japanese tea ceremony during the Asian street foods festival at the C.K. Choi Building. The three women are all students in the Faculty of Education. The festival continues April 14-18 from 11 a.m. - 2 p.m.

THE UNIVERSITY OF BRITISH COLUMBIA

St. John's College

St. John's College is a new residential graduate college that will focus on international research themes and issues. The College is the realization of a dream held by local and international alumni of the former St. John's University in Shanghai (SJU) to revive the spirit of their alma mater. SJU was operational between 1879-1952, with a renowned international reputation as one of the most prestigious and influential universities in China. Its alumni can be found in key posts on both sides of the Taiwan Strait, in Hong Kong, Singapore, and on every continent. Continuing in the tradition of its namesake, St. John's College will strive to build bridges between different parts of the world, serving as an intellectual and social centre for graduate student and senior scholar residents, and for other members of the University of British Columbia and wider community who share the scholarly objectives of advanced international studies. Its aim is to create a vibrant international community in which students from different parts of the world will learn from each other in a collegial setting.

St. John's College is located on the west side of the University of British Columbia campus, close to ocean and forest. The College is being developed in three phases, with completion of Phase I by Sept. 1, 1997, and anticipated completion of Phase II in 1998 and Phase III in 1999 on the 120th anniversary of the founding of St. John's University. Upon completion, St. John's College will have accommodation for 170 residents and will include several lecture facilities, seminar rooms, as well as dining facilities, lounge and social areas, and a landscaped open air courtyard.

Upon completion of Phase I, the College will accommodate 35 graduate students, post doctoral researchers and visiting scholars. In addition to these residential members, there will be a number of members from various academic units on campus and from the wider community who will enrich College life as non-residential members.

Applications for graduate student, post doctoral researcher and visiting scholar residential as well as faculty, graduate student and post doctoral researcher non-residential membership are welcome at any time. Residency in Phase I of St. John's Collge will commence on Sept. 1, 1997.

Call for membership applications

For further information or to receive an application form, please contact:

Susanna James,
St. John's College
phone: 822-0533, fax: 822-5802
e-mail: st-johns@mercury.ubc.ca

Commerce to offer real estate appraisal program next year

UBC's Faculty of Commerce and Business Administration will offer education programs on behalf of the Appraisal Institute of Canada (AIC) starting Jan. 1, 1998.

The faculty's Real Estate Division and the AIC signed a five-year agreement recently under which UBC will assume responsibility for the delivery of the AIC Education Program.

"This agreement will allow the AIC to benefit from UBC's expertise in refining and administering professional programs," Commerce Dean Michael Goldberg said. "The institute will gain a high degree of consistency in its educational programs as a result of this move and the faculty will, in turn, benefit from a closer association with the AIC."

The AIC is the national society of professional real estate appraisers. It assures high standards in the profession through the granting of Canadian Residential Appraiser (CRA) and Accredited Appraiser Canadian Institute (AACI) designations. More than 5,500 members practice the profession in Canada, providing valuations widely respected by the courts, real estate corporations, banks and other lending institutions, as well as by government and individuals.

AIC President Allan Beatty said the agreement will allow students across Canada to gain consistent access to regularly offered courses without having to travel to attend classes at a university or college.

"UBC's proven ability to communicate to individuals in distance learning format right across the country was an important factor in arriving at this agreement," Beatty said. "And, by shifting the educational programs to UBC, students and employers will benefit from courses combining strong practitioner and academic materials."

Robert Laing, executive director of the faculty's Professional Programs, said courses will be offered through distance education using printed materials and the Internet to submit assignments and access tutors.

"The courses covered by the agreement will come on stream gradually," Laing said. "We have two courses ready to go and others will follow during the next few years as they are developed for distance learning."

UBC will offer as many as 15 courses that meet the basic educational requirements for the AACI designation.

"Moreover, it is planned that these courses will be integrated into an applied distance degree in real estate which is currently in development as a collaborative project between the Real Estate Division and the Open University," Laing said.

People

by staff writers

Faculty of Agricultural Sciences student **Jose Meza** is one of five Canadians selected by the Inter-American Institute for Cooperation on Agriculture (IICA) to receive a grant from its graduate internship program.

Meza, a PhD student in the Soil Science Dept., will be hosted by the University of Tinga Maria and the IICA office in Peru where he will continue to study the effects on soils structure and productivity of a mixed turf by application of poultry manure and composted bark mulch.

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Associate professor of Landscape Architecture **Patrick Mooney** has won a Canadian Society of Landscape Architects Award for his design work at Iona Island.

Mooney's marsh restoration project, executed in collaboration with the GVRD, was cited for significantly increasing the population of yellow-winged blackbirds, a species nearing extinction.

Mooney served on faculty at Kansas State University and the Nova Scotia College of Art and Design before joining UBC in 1986. In 1992 he was UBC's landscape architect responsible for the restoration and enhancement of the Nitobe Memorial Garden.

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Patricia Vertinsky, professor and head of Educational Studies, has been named a Hooker Distinguished Visiting Professor at Hamilton's McMaster University for 1997/98.

Vertinsky received her EdD specializing in the social foundations of education from UBC before joining the faculty in 1975. Her research interests include gender relations and social policy, health promotion and policy development and implementation in education, health and physical education.

She is a Senior Fellow at Green College, an International Fellow of the Academy of Kinesiology and currently serves as president of the North American Society for Sport History.

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Asst. Prof. **Douglas Bonn** has won the 1997 Herzberg Medal from the Canadian Association of Physicists. The medal is given for outstanding achievement in any field of research by a physicist who, in the year of the award, is not more than 40 years of age.

Bonn has been a faculty member with the Dept. of Physics and Astronomy since 1994. He is a condensed matter experimental physicist who is working in the area of high temperature superconductivity.

UBC faculty from the department have won five of the last nine Herzberg Medals. Previous winners include Tom Tiedje (1989), Ian Affleck (1990), Rob Kiefl (1992) and Jeff Young (1994).

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THE UNIVERSITY OF BRITISH COLUMBIA

Selection of the Director of the Disability Resources Centre

Open Forums

The campus community is invited to attend Open Forums with candidates for the Director of the Disability Resources Centre. Each candidate will make a 15-minute presentation on a topic of his or her choice. This will be followed by an open discussion. Those attending will be asked to provide written feedback to the advisory committee. All forums are from 12:00-12:45 p.m. in Room 0017, Brock Hall.

April 14 Dr. Peter Colebrook
April 16 Mr. John Lane
April 17 Ms. Janet Mee
April 18 Dr. James Leonard

Other input: Individuals or groups may ask to meet with the candidates. Please forward your request to Richard Spencer (822-3265 or richard.spencer@ubc.ca)

Don Wehrung photo

Attraction Abroad

Mary Stott (right), director of the Student Resources Centre, answers questions about UBC from a throng of potential international students attending the fourth annual B.C. Educational Fair held recently in Taipei, Taiwan. UBC representatives attended five educational fairs throughout Asia to help launch the university's international student recruitment initiative.

Student exchange proves popular

A record 265 students have been accepted into UBC student exchange programs this year — 250 in the Exchange Abroad Program (EAP) and 15 in the Group of Ten Exchange Program (GOTSEP) across Canada.

Thevi Pather, program coordinator, said the numbers meet the goal set in 1989 to have five per cent of third-year students participating in education abroad.

"The program is open to undergrads and graduate students but the emphasis is on students heading into third year," said Pather. "The exchange program has been a life-changing experience for many UBC students as well as for visiting exchange students from afar who add to the cultural richness of our own campus."

The EAP program started in 1988 with three students exchanging with counterparts at the University of California. Pather says that in the last two years, participation has doubled.

The University of California remains the most popular destination with 23 students heading south on exchanges. Other top destinations include the University of New South Wales, Lancaster University, the University of Glasgow and Keele University in the United Kingdom.

Pather expects UBC's recent agreement with the Sorbonne in France will be a popular addition. In total, UBC has education abroad agreements with 54 institutions in Australia, Belgium, Denmark, France, Germany, Hong Kong, India, Japan, Korea, Malaysia, Mexico, New Zealand, the Philippines, South Africa, Singapore, Sweden, Taiwan, the United Kingdom and the United States.

The GOTSEP is an undergraduate exchange program with universities in Ontario, Alberta and Quebec.

For both EAP and GOTSEP, students can exchange for a term or a full year.

Pather says roughly 70 students participate annually in a separate exchange program run by the Faculty of Commerce and Business Administration.

Seed fund gives research a boost

Promising research at UBC and 10 other universities in Western Canada got a boost recently with the announcement of a $25 million fund supporting early stage development of new technologies.

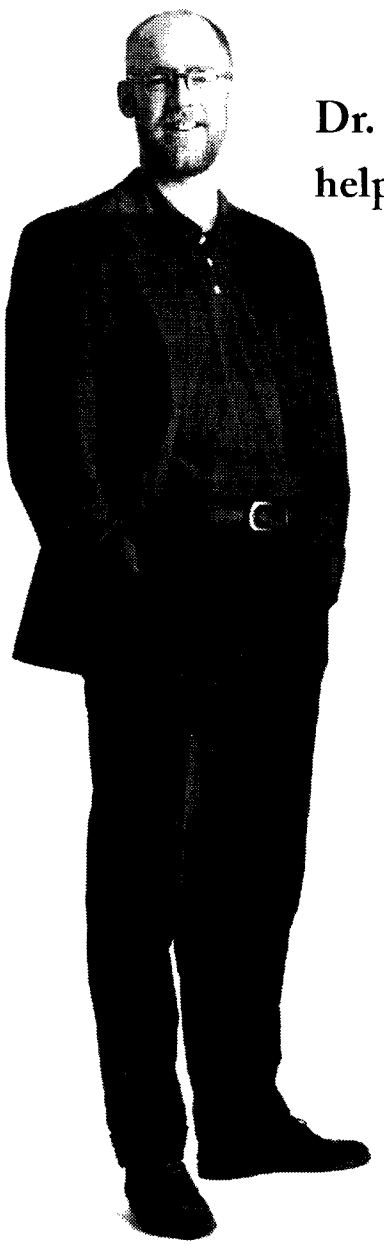
The Western Technology Seed Fund will invest capital and management expertise in emerging companies and assist in setting up businesses to develop the commercial potential of university research discoveries. The fund was established by the Bank of Montreal and the Business Development Bank of Canada.

Bill Palm, director of UBC's University Industry Liaison Office (UILO), says researchers and entrepreneurs have traditionally had the hardest time finding capital in in the phase directly after a promising technology is conceptualized.

"This new fund will be an important initial link in the financing chain," Palm said. "It will help ensure that university research discoveries reach the marketplace where their economic and social benefits can be realized."

A network of industry liaison offices at the 11 western universities has been formed to help build relationships among the three fund managers and research groups on campuses.

UBC's UILO receives more than 100 invention disclosures annually. The office's Prototype Development Program, the first of its kind in North America when it was created in 1989, shepherds inventions from the feasibility stage through to commercialization.



We'd like to personally thank Dr. Chris Orvig, Conference Chair, for helping us host the 856 delegates of the 31st International Conference on Coordination Chemistry at the University of British Columbia.

Chris and other research and education conference organizers brought over 12,000 delegates to UBC last summer, and in doing so, helped foster collaboration with other educational institutions, made a significant economic contribution to the University community, and created summer employment for over 100 UBC students.

To all of our 1996 conference organizers, thank you.

If you think your colleagues would appreciate having your association's next event on the spectacular campus of the University of British Columbia, call us to find out how easy it is to host a conference – in your own backyard.

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