THE UNIVERSITY OF BRITISH COLUMBIA

UBC REPORTS

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Stephen Forgacs photo

Andreas Lang receives an "infant scientist" degree from UBC President Martha Piper and Chancellor William Sauder as his mother Carolyn Reitsma-Lang looks on. Eight children received the degrees during the Oct. 9 launch of the university's *Think About It* awareness campaign to promote the diversity and value of UBC research. The children, together with their parents, recently volunteered to help with Psychology Prof. Janet Werker's research into how infants process speech. (See related story, page 3.)

Engineer wins B.C. award

Metals, medicine and mobility.

These are the fields of expertise of three members of UBC's community who will receive Science Council of B.C. awards at the B.C. Science and Technology Awards Dinner Oct. 20.

Metals and Materials Engineering Prof. Indira Samarasekera will receive the New Frontiers in Research Award, while UBC alumni Gary Birch and Dr. Bill Hunter will receive the Young Innovator Award and Industrial Innovation Award respectively.

Samarasekera, who holds the $1.5-million Dofasco Chair in Steel Processing, explores factors influencing the processing of metals and other materials, so that existing processes can be improved or new processes implemented.

Samarasekera and her team have de-

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Campaign promotes value of UBC research

UBC President Martha Piper conferred her first "honorary degrees" on eight diapered infants last week at the launch of the UBC Research Awareness Campaign.

The one- to two-year-olds received honorary "infant scientist" degrees in the First Nations Longhouse from Chancellor Bill Sauder and President Piper.

After tapping them each on the head with a "Think About It" cap, the chancellor said that he looked forward to admitting them officially "in the new millenium."

The infants, together with their parents, recently volunteered to help with Psychology Prof. Janet Werker's research into how infants process speech.

Bernie Bressler, vice-president, Research, said the graduation ceremony marked a lively beginning to an ongoing effort to promote the diversity and value of UBC research.

"The university has a dual mission of teaching and research," said Bressler. "We have a responsibility to make the public aware of linkages between the two as well as the positive impact that UBC research initiatives have on communities locally, across Canada and abroad."

Bressler said that UBC conducts the vast majority of research in the province with more than 4,000 research projects annually.

University researchers attract upwards of $135 million each year from government, industry and foundations.

In the last 12 years, UBC research has led to the creation of 71 spin-off companies, employing 1,500 British Columbians and generating close to $634 million in investment.

Bressler lauded UBC's participation in all 14 research networks in the federal government's Networks of Centres of Excellence program, noting that the Canadian Genetic Diseases Network at UBC recently had its funding extended for seven years.

However, he said, researchers at UBC and across Canada have serious concerns about their future, particularly in the area of basic research.

He said cuts to the three federal granting councils — the Medical Research Council of Canada (MRC), the Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council (SSHRC) — are jeopardizing basic research across the country.

"A great deal of public attention has been focused on the campus's physical transformation over the past decade," said Bressler. "The purpose of this research awareness campaign is to trumpet the value and excellence of UBC's intellectual infrastructure — its faculty, staff, students and alumni."

The Board of Governors broke from its regularly scheduled meeting to attend the launch.

Board Chair Shirley Chan said board members unanimously support the research awareness campaign "because research is one of the most important ways

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Nobel laureate Smith heads genome centre

UBC's Nobel prize winner Michael Smith has been named director of the first research centre in Canada devoted to decoding human genes.

The $25-million Genome Sequence Centre, a project of the B.C. Cancer Agency, will be focused on cancer research. Headquartered in Vancouver, it will collaborate with laboratories worldwide on the International Human Genome Project whose goal is to decode all of the human genes by 2005.

"This unique effort will help Canada make significant contributions to international science in general and to cancer treatment in particular," says Smith, who is the Peter Wall Distinguished Professor of Biotechnology at UBC.

"A genome sequence centre in B.C. will attract activity in the biomedical research sector and in industries. It will encourage companies to work here and take advantage of the technology and information that will be developed."

Smith will lead a team of over 30 scientists from UBC, the B.C. Cancer Research Centre, the University of Victoria and Simon Fraser University to establish the centre which is expected to open in the fall of 1998.

Genome science identifies and decodes all of a living organism's genes.

By decoding the sequence of genes in the human genome, which is estimated to contain 100,000 genes, and identifying when the order is incorrect scientists may find the cause of a genetic disease.

UBC has already made significant contributions to the International Human Genome Project through its participation in the Canadian Genetic Diseases Network which is based at the university.

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"DNA...the hereditary material of life"

TONY GRIFFITHS
UBC GENETICIST; Genetics Society of Canada's 1997 Award of Excellence

THinK About It.
UBC RESEARCH

Werker becomes associate vice-president, Research

Janet Werker has been named associate vice-president, Research, effective Nov. 1, 1997.

Her duties will include all aspects of the research portfolio, with specific responsibilities for initiatives in the social sciences and humanities.

Werker is currently a professor of psychology and associate dean in the Faculty of Arts.

"I look forward to working with Dr. Werker and I know that she will be a valuable addition to our office," said Bernie Bressler, vice-president, Research.

As a developmental psychologist, Werker has gained an international reputation for her research examining the development processes in infancy that make possible the emergence of language. She has active laboratories both on the UBC campus and at Women's Hospital and Health Centre of B.C.

Her research, which is interdisciplinary and cross-cultural in nature, has received funding from the Natural Sciences and Engineering Research Council (NSERC) the Social Sciences and Humanities Research Council (SSHRC) and industry.

She has received several awards for her research including the Alumni Prize for Research in the Social Sciences in 1990, and a Killam Research Prize in 1991.

In addition to her research activities, Werker has taken part in many service activities for the granting councils, and is currently a group chair in the life sciences and a member of NSERC's standing committee on research grants.

Campus pitches in to help cause

Even before the United Way's campus campaign kick-off Oct. 7, first-year Forestry students had raised $800 by selling apples.

Campaign Chair Peter Nault of Plant Operations says he has no doubt that UBC will meet its goal of raising $310,000.

Throughout the campaign, a variety of events and give-aways are being held campus-wide.

Proceeds of faculty and staff tickets sales to the Oct. 17 football match against the Alberta Golden Bears will go to the United Way thanks to UBC Athletics. The game starts at 7 p.m.

On Oct. 21 the First Nations House of Learning hosts a lunchtime salmon barbecue.

All donors will have a chance to win the grand prize of a trip for two to any Canadian Airlines North American destination.

Besides helping 500,000 people in local communities, the United Way directs donations designated to more than 1,000 registered charities throughout Canada at no cost.

For information or to volunteer, call (604) 294-UWAY.

Awards

Continued from Page 1

Samarasekera

veloped mathematical models to predict the mechanical properties of hot-rolled steel, and have studied the causes of defects in the widely used continuous steel casting process.

The mathematical models are being tested at 14 steel companies in the U.S. and Canada.

She and her research team have also made significant contributions in the processing of aluminum, zinc, metal-matrix composite materials and semi-conductors such as gallium arsenide. Each has been a complex problem, whose solution involved detailed analysis of heat flow and stress. In every case, her results have been directly applicable to industry.

Gary Birch graduated from UBC in 1988 with a PhD in electrical engineering. Now executive director and director of research and development at the Neil Squire Foundation in Burnaby, Birch has become a well-known developer of new computer-based technologies and robotic systems for the disabled.

Birch is also an adjunct professor in electrical and computer engineering at SFU and UBC.

Bill Hunter was still a UBC medical student when he helped found Angiotech Pharmaceuticals Inc. in 1992. He saw an opportunity to develop and commercialize novel research for chronic inflammatory diseases, and diseases dependent on angiogenesis (the process of new blood formation).

Now, less than five years later, his Vancouver-based company is valued at approximately $100 million and employs 36 people. The company also has 10 active research collaborations and holds eight patents.

Talk

Continued from Page 3

some of their previous information so they can focus on learning words.

"They're efficient little problem-solvers," says Werker. "They focus on what's needed and drop what's not. It's an automatically assured process in learning language."

To make the discovery, the researchers observed 64 babies' reactions to word-object pairings.

Brightly-coloured moving objects were shown on a monitor in front of the baby. As objects appeared, they were paired with the syllables "bih" and "dih," announced through a speaker.

When first exposed to the pairings, babies showed their attention by concentrating on the screen. After the same pairings had been seen repeatedly, their attention wandered.

Werker and Stager watched to see if babies noticed a difference when objects or syllables were switched.

They didn't.

In a previous study Werker had found babies at this stage were capable of distinguishing between the sounds "bih" and "dih," yet in this study they acted as if they were the same syllable.

"All their attention is focused on matching the sound with the object," says Stager. "They're already working at full capacity. To get the job done, some detail gets ignored."

At ages three to four, when word learning is no longer difficult, infants return to distinguishing between subtle phonetic differences.

Understanding these stages in language development may be useful in working with children with delayed language or learning disabilities, says Werker.

Campaign

Continued from Page 1

this university serves the people of British Columbia."

Bressler ended his remarks by saying that the campaign would not succeed without the participation of all members of the campus community.

"We all have a responsibility to make the public aware of what we do," Bressler said. "Whether faculty, students, staff or alumni — we must all become advocates for UBC research."

Campaign co-ordinator Charlie Ker of the UBC Public Affairs Office said people can learn more about UBC Research through a Web site at www.research.ubc.ca.

Ker said a series of radio and print advertisements are being proposed for the new year to give people a better understanding of the scope of UBC research and its impact on people and communities throughout the province.

THE UNIVERSITY OF BRITISH COLUMBIA

Public Information Meetings for the campus and neighbouring community

on UBC's role in

APEC '97

and its impact on the campus and community

Nov. 6, 1997 • 12:30-1:30pm, Angus 104
• 7-8pm, Angus 104
2053 Main Mall

Topics will include:

- APEC initiatives at UBC
- Related work at MOA and Norman MacKenzie House
- Impact of the Nov. 25 APEC leaders' meeting on campus buildings, traffic and parking

For further information on the meeting call Carolyn McLean, UBC APEC Office, 822-2080; fax 822-1936; e-mail apec@unixg.ubc.ca

Edwin Jackson 224 3540

I base most of my fashion taste on what doesn't itch. *Gilda Radner*

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Dirty laundry displays compelling message

by Hilary Thomson

Staff writer

A tumble of multi-coloured T-shirts, paint brushes and felt pens litter the floor of the Women Students' Office (WSO) as small groups of women huddle over their work.

They are preparing exhibits to be shown Nov. 6-10 in the gallery of the Student Union Building (SUB) for the Clothesline Project, an international effort aimed at raising awareness about violence against women.

"It's a simple concept," says Kathryn Pedersen, counsellor in the WSO and one of the project organizers. "A clothesline on which women can air out society's 'dirty laundry' — things we don't talk about like sexual and physical abuse."

Each T-shirt carries symbolic messages about the creator's experience with violence. Shirts are colour-coded to represent different types of violence: pink or red shirts are associated with sexual assault, blue or green with child abuse and white or black shirts signify violent death. The shirts are then hung from a clothesline to create a visual statement about violence against women.

The WSO is holding a series of workshops that provide not only materials for shirtmakers but also a supportive environment in which to create them. Workshops are facilitated by WSO counsellors and provide time and space for women to create their own shirts in the company of other survivors.

"We want to honour both the survivors and victims of violence. This project helps women break the silence about what happened to them, supported by other women," says Pedersen. "And if we can increase awareness, that helps build a personal and collective responsibility to stop violence against women."

Over 1,000 people stopped to view last month's Clothesline Project display on SUB plaza and it had a strong emotional impact on students, Pedersen says.

"We have a book full of comments describing this year's show as amazing, shocking, brave and disturbing. Many students said they were unaware of the incidence of violence and thanked us for bringing the issue out in the open."

One in four women on campus reported that they have been sexually assaulted or raped according to a 1995 survey of UBC students conducted by sociologist Dawn Currie, chair of Women's Studies.

UBC is the first Canadian campus to participate in the international project which started in the U.S. in 1990.

The next project workshop is scheduled for Tuesday, Oct. 28 at the WSO in Brock Hall. To arrange an individual session call the office at 822-2415.

Hilary Thomson photo

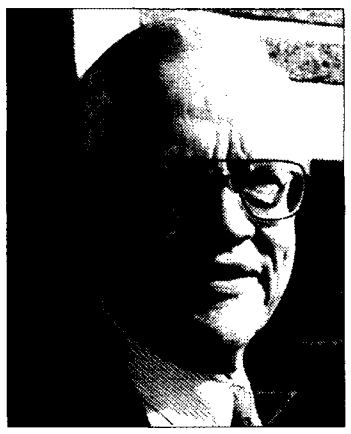
The message on a T-shirt displayed recently as part of the Clothesline Project captures a student's attention near SUB. The next display of the ongoing project which aims to raise awareness of violence against women takes place Nov. 6-10 in the SUB Art Gallery.

Diplomat captures Great Trekker honour

Maurice Copithorne, this year's winner of the Great Trekker Award, joined the Canadian Foreign Service after graduating with a UBC law degree to see a little of the world, never intending to make a career of being a diplomat.

"At the time," he says, "working for the government didn't seem like a very prestigious activity."

Today, much of his spare time is dedicated to conducting regular assessments of human rights in Iran and reporting back to the International Law Commission and the United Nations General Assembly.



Copithorne

Copithorne will be honoured for his international and community service, and for his dedication to UBC and to UBC students, at the Great Trekker Award ceremony and reception in the Student Union Building Art Gallery Oct. 20.

After 30 years of diplomatic missions to Vietnam, Iran, Malaysia, and Hong Kong, to name a few, he has seen a lot of the world but has never forgotten his ties to Vancouver, or to UBC, where he is now a part-time professor of law.

Born in Vancouver, Copithorne remembers an active student life, where he chaired the World University Service Committee and ran unsuccessfully for an Alma Mater Society post.

As a diplomat, Copithorne watched the Chinese cultural revolution unfold from Beijing, where he helped open the Canadian embassy in 1972.

He also served as ambassador to Austria and assistant undersecretary for Asia Pacific — the most senior person dedicated to Asia Pacific affairs.

Three years as Canadian commissioner in Hong Kong capped off his career and Copithorne and his wife returned to settle inVancouver.

"I always knew I'd end up back in Vancouver," he says.

Upon his return Copithorne taught constitutional law and the commercial law of Pacific Rim countries for two years as the Douglas McKay Brown Visiting Professor of Law at UBC.

The Great Trekker award is given annually by the students of UBC to a UBC graduate who has attained eminence in his or her field. Past winners include community activist Jim Green and author and broadcaster Pierre Berton.

This year marks the 75th anniversary of the Great Trek. On Oct. 28, 1922, a student population of 1,200 marched from the university's temporary Fairview site to an unfinished Point Grey campus.

Their efforts helped convince the government to complete work which had been idle for 15 years.

For information on the Great Trekker Award Ceremony, and for tickets, call the AMS at (604) 822-2050.

Canada's Year of Asia Pacific

CANADA'S YEAR OF ASIA PACIFIC 1997 L'ANNÉE CANADIENNE DE L'ASIE-PACIFIQUE

APEC Canada 1997

Students gain valuable experience by helping

Nearly 200 UBC students may get a ringside seat on history as volunteers for APEC '97.

They are among the 1,250 people who have applied to be volunteers for APEC, an economic forum for the discussion of trade issues that will bring 5,000 delegates from 18 Pacific Rim economies to Vancouver Nov. 19-25.

"The number of applicants who have come forward from UBC is a wonderful reflection of interest in APEC," said Mary MacKillop, manager, volunteer programs at the APEC Canadian Co-ordinating Office.

Student volunteers are drawn from all areas of campus, she said, especially from International Relations, Asian Studies, Political Science and Commerce and Business Administration.

One of them is Chris Gorman, a fourth-year Arts student majoring in Political Science and History.

"I've always been interested in international affairs," Gorman says. " I see this as a once-in-a-lifetime opportunity to experience history in the making. It will also give me hands-on experience that will be useful if I decide to pursue a career in foreign affairs."

During APEC, the volunteers' duties may include crowd control, airport meeting and greeting, staffing phone lines, working at the accreditation centre for photos and identification, other clerical and administrative work and helping out at gala dinners and receptions.

Most APEC events will take place at the Vancouver Trade and Convention Centre, although the leaders will meet for one day at UBC's Museum of Anthropology, Nov. 25.

MacKillop said the volunteer program was one of the ways in which to involve the public, and especially young people, in APEC '97.

"The city has really risen to the occasion," she said.

Volunteers were recruited through the Alma Mater Society's Volunteer Connections program and other post-secondary institutions and high schools throughout the Lower Mainland.

Applicants undergo a screening process similar to that of any other volunteer program, which includes a security check for criminal records and interviews to see how students' interests could be matched with specific duties.

The program has many partners, including Volunteer Vancouver which is participating in interviews.

As well as sharing in the excitement of an important international event, volunteers will be invited to a thank-you reception with Prime Minister Jean Chretien.

Due to an overwhelming response, volunteer applications are no longer being accepted.

• • • • •

The next APEC public information meetings at UBC will take place on Nov. 6 at 12:30 p.m. and 7 p.m. in room 104 of the Henry Angus Building, 2053 Main Mall.

For more information on APEC, see page 16.

Researchers unlock secrets of baby talk

by Hilary Thomson

Staff writer

Baby talk. Is it idle infant banter or part of an innate process of language development?

That's what UBC psychologists Prof. Janet Werker and graduate student Christine Stager are trying to find out.

"We know a lot about language acquisition around age two, but less about the period between one and two years," says Werker, who has spent more than 20 years studying language acquisition in infants. "We're interested in understanding how babies move from being sensitive to the sounds of language to mapping those sounds onto words."

Until Werker and Stager published the results of their most recent three-year study in the scientific journal *Nature*, researchers didn't know what information babies stored as they learned new words.

"We now realize they're storing less than we thought," says Stager.

During their first year, babies listen carefully to the sounds of the language spoken around them. By 10 to 12 months they can distinguish between consonants and vowels spoken in their native language from the same syllables spoken in another language.

At around 14 months a change occurs.

Werker and Stager discovered that at that point babies begin to ignore

*See **TALK** Page 2*

Athletics

Fit, fast and smart

T-Bird scholars have zero time to waste

by Stephen Forgacs

Staff writer

"She shoots, she scores," Laura Bennion used to shout as she tumbled on the carpet of her family home, clutching a goalie's hockey stick.

Years later she realized that, although not the most appropriate words for a goalie, her childhood cry may have hinted at the on-ice success that lay ahead.

Bennion, who plays centre for UBC's varsity women's ice hockey team, and Mike Dalziel, a pillar of the men's volleyball team, both developed their love of sports at a young age. A further similarity is the fact that while excelling in their sport of choice, Bennion and Dalziel have also excelled as students, consistently earning Academic All-Canadian status for maintaining academic averages of better than 80 per cent.

"It's remarkable for a varsity athlete to pull that off," says men's volleyball coach Dale Ohman, noting the amount of time the athletes have to spend practising and travelling.

Within days of returning from competition in Finland and Estonia, Dalziel was hitting the books at the beginning of his fourth year in Mechanical Engineering. Since graduating among the top four B.C. high school students in his year, Dalziel has continued to earn grades in the high 80s and 90s.

"Mike's not your typical All-Canadian, he's a phenomenon," says Ohman. "Mike's combination of athleticism and scholarship is outstanding and unique among the athletes I've coached."

Dalziel is also taking on a leadership role on the team. His game has improved each year to the point where he is now a formidable player at offense and defence. At 6-7, Dalziel is able to attack from any position on the court, with a spike serve and the ability to spike from the front row and back.

Dalziel downplays his dual successes citing "a few late nights here and there." Volleyball practices take up at least three hours a day, six days a week, and Saturdays are "a total write-off" with the best part of the day spent competing and travelling.

Last year he was involved with the Society of Automotive Engineers (SAE) Heavy Lift team, a group of students who design and build a remote-controlled aircraft to certain specifications yet able to lift as heavy a load as possible in competition with entries from across North America. This year his design tasks are smaller and more numerous. He and fellow student Geoff Dosman, a keen mountain biker, are currently designing a light and strong carbon fibre brake booster to improve bicycle braking power.

Bennion's accomplishments are equally remarkable.

She played on her first team at age eight after her mother signed her up for boys' hockey as Larry rather than Laura. The team coach was a willing accomplice and the parents who grew wise to the deception stayed quiet. By the next year there were more opportunities for girls to play.

A Vancouver native and graduate of Lord Byng High School, Bennion enrolled in Arts at UBC and played junior varsity basketball until shoulder injuries forced her to stop.

Deciding to pursue an interest in journalism, she switched to Northeastern University in Boston after second year and skated back into the world of competitive hockey. While completing her journalism degree, Bennion played varsity hockey, practising six days a week for three years and earning consecutive athletic scholarships.

After graduation she returned to Vancouver and UBC where, while working as editor of UBC's sports newspaper *The Point*, she founded UBC's women's varsity ice hockey team. She also decided to change careers.

Now in third-year medicine at UBC, Bennion is well on her way to becoming a doctor. And, with grades consistently in the 80s, she also qualifies as an Academic All-Canadian.

"It's not at all unusual for medical students to have interests beyond their studies," she says. "A lot of students have varied interests, from dance, to sports, to the arts. You really need it just to keep your sanity."

Bennion coached the hockey team for its first two years, initially because she wasn't a student, and for two more years while the team progressed to the Division 1 level. Last season she turned over the coaching to Steve Mathias and hit the ice as centre. The team made the playoffs before being knocked out by Bennion's old club team, Britannia. This season she's even more optimistic about the team's chances.

"We've got a lot of first-year players from Vancouver Island and the Fraser Valley," she says. "I think our team is going to challenge to win Division 1 this year."

Like Dalziel, Bennion doesn't have a lot of time for activities other than athletics and studies during the school year. And, like Dalziel, she takes the demands of varsity sports and academia in stride.

"My time is pretty well structured," she says. "I think the ability to do that came from my experience at Northeastern because we were on the ice six days a week. You couldn't afford to spend your free time watching TV or goofing around. If I wasn't playing hockey I would be involved in some other sport or recreational activity."

There are roughly 625 varsity athletes at UBC who spend many hours practising in their sport while also fulfilling the requirements of a range of degree programs. At the end of the 1996-97 academic year, 79 of those athletes were awarded Academic All-Canadian status.

Northeastern University photo

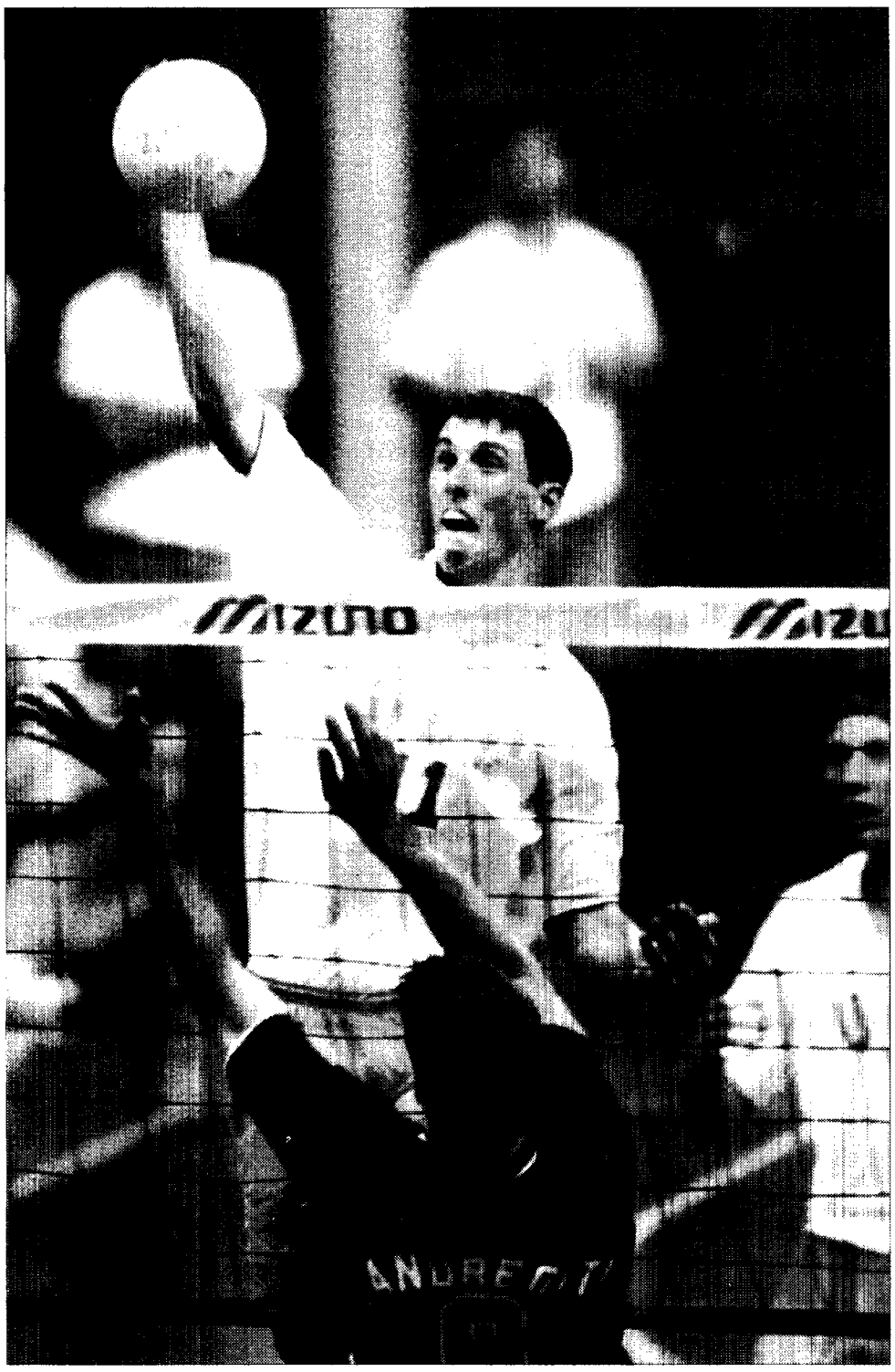
Laura Bennion started playing hockey when she was eight years old. Today she finds the time to balance playing centre on the UBC women's varsity ice hockey team with medical school.

CIAU Academic All-Canadians

UBC congratulates its Canadian Interuniversity Athletic Union (CIAU) Academic All-Canadians — student athletes who play on UBC's CIAU teams and achieved 80 per cent or better in their studies:

Sarah Adams, Track & Field
Lisa Archer, Soccer
Doris Bakgaard, Soccer
Nico Berg, Soccer
Duane Bieber, Track & Field
Tracy Brown, Track & Field
David Buchanan, Basketball
Kimberly Buker, Field Hockey
Carmel Burke, Basketball
Eric Butler, Basketball
Sarah Cherry, Swimming
Lindsay Clerkson, Soccer
Matthew Coley, Track & Field
Michael Dalziel, Volleyball
Erin Digitale, Swimming
Brad Edgington, Ice Hockey
Jeff Fallows, Volleyball
Erin Fennel, Basketball
Christopher Franks, Soccer
Leslie Gold, Track & Field
Melanie Griswold, Volleyball
Shahid Gul, Track & Field
Ann Harada, Field Hockey
Strachan Hartley, Football
Paul Heilbuth, Track & Field
Nicola Higgins, Swimming
Brady Ibbetson, Basketball
Jennifer Keefer, Track & Field
Andrew Kemper, Ice Hockey
David Kennedy, Track & Field
Nicole Krause, Soccer
Christopher Lennon, Football
Samara Lewis, Track & Field
Heather MacDonald, Track & Field
Lesley Magnus, Field Hockey
Noa Mallek, Track & Field
Melanie McKean, Field Hockey
Jessica Mills, Basketball
Suzanne Muldoon, Track & Field
Andrew Newton, Football
Ed Ng, Swimming
Jennifer Rauh, Volleyball
Jennifer Regan, Field Hockey
Alex Seal, Track & Field
Casey Souter, Football
Devon Stevens, Track & Field
Pavel Suchanek, Ice Hockey
Andrea Thompson, Swimming
Oliver Utting, Track & Field
Michael Viers, Track & Field
Laura Wiggin, Track & Field
Matthew Wiggin, Track & Field
Carl Williamson, Soccer

UBC's student athletes play the field and hit the books



Steve Chan photo

A formidable opponent on UBC's men's volleyball team, Mike Dalziel maintains high grades as he works towards his degree in Mechanical Engineering.

Catch the action

Thunderbird Home Events 1997

For times and locations, call the 24-hour T-Bird hotline at 822-BIRD.

Oct. 17
- Football vs. Alberta

Oct. 18-19
- Women's Field Hockey Tournament

Oct. 21
- Men's Basketball vs. Trinity Western

Oct. 24-25
- Ice Hockey vs. Calgary
- Men's/Women's Volleyball vs. Winnipeg

Oct. 25
- Men's/Women's Soccer vs. Lethbridge

Oct. 26
- Men's/Women's Soccer vs. Calgary

Oct. 31
- Men's Basketball vs. Manitoba
- Football vs. Manitoba

Nov. 1
- Men's Basketball vs. Seattle Blue Angels

Nov. 1-2
- Men's/Women's Volleyball vs. Alberta

Nov. 4
- Women's Basketball vs. Trinity Western

Nov. 7-8
- Ice Hockey vs. Lethbridge

Nov. 8
- Men's Basketball vs. Seattle Pacific

Nov. 14-15
- Ice Hockey vs. Manitoba
- Men's/Women's Volleyball vs. Victoria

Nov. 21-22
- Men's/Women's Basketball vs. Calgary

Nov. 28-29
- Men's/Women's Basketball vs. Victoria
- Ice Hockey vs. Brandon

Dec. 6
- Women's Basketball vs. SFU

Dec. 27-29
- Women's Ice Hockey Evelyn Lett Tournament

Dec. 28-30
- Ice Hockey Father Bauer Hockey Classic
- Men's Volleyball Rucanor Thunderball XII

Program counts on more than cheers

by Stephen Forgacs

Staff writer

UBC Thunderbird Mark Nohra recently broke the UBC football record for rushing and receiving yardage in a single game, covering a total of 297 yards that included four catches and two touchdowns.

Bob Philip, director of Athletics and Recreation at UBC, was in the stands with hundreds of other fans cheering on Nohra and the T-Birds as the team trampled the Calgary Dinosaurs on the way to victory.

Philip, like Nohra, has been a forceful player in the success and well-being of athletics at UBC.

UBC's varsity teams have won 37 national championships, second in Canada only to the University of Toronto, and compete nationally and internationally, sometimes dominating a sport at the Canadian university level for years in a row. The department's Recreation and Intramurals programs draw student participants by the thousands — Philip estimates as many as 15,000 to 20,000 UBC students participated in events or programs organized or associated with the department last year.

Philip

Participation in the Athletics and Recreation programs at UBC extends well beyond the student body, as members of the Lower Mainland community take part in a range of summer camps and programs offered through Community Sports, and use campus facilities such as the Aquatic Centre and Thunderbird Winter Sports Centre. Hundreds of UBC faculty and staff also make use of Athletics and Recreation programs and facilities daily.

The Student Recreation Centre now hosts as many as 1,500 students per day during peak periods, dropping to 1,100 daily in the off season. The Bird Coop fitness facility boasts a mostly student membership of 7,000, while the recently opened tennis centre has 2,500 members. New programs, such as the Changing Aging and Executive Fitness which will begin next month, reflect the department's efforts to provide services for faculty and staff as well as students.

"We really want to make sure that there are things for people to do on campus," says Philip. "Particularly people who live on campus."

Athletics and Recreation is a UBC ancillary and within two years will operate without any subsidy from the university's operating budget. This year that subsidy accounts for a small percentage of the department's $10-million budget. Student fees make up about one-third of the budget and the balance is raised through programs such as the summer camps. Renting facilities such as Thunderbird Stadium for events which this year included pop concerts like singer Sarah McLachlan's Lilith Fair, Edgefest and Another Roadside Attraction, contribute further to the budget.

"It's very much a business now. We're not in a situation where somebody says 'Here's some money, make some programs.' We spend a lot of time trying to be marketable," Philip says. "We're very successful in Intramurals and Recreation in providing programs that are cost effective."

The success of the recreation programs helps defray the costs of other programs and varsity sports such as football. Golf, on the other hand, is completely self-sufficient thanks to outside supporters.

"Varsity sports in Canada are highly subsidized," Philip says. "Some sports, like men's basketball would break even with an average attendance of 1,500 per game, so making a profit is not out of the question. But football, with four or five home games, could not cover its costs even if you filled Thunderbird Stadium every game."

Philip is active in fund raising, working with Bryce Matheson, the department's full-time fundraiser, UBC alumnus and volunteer Marty Zlotnik, and the university's Business Relations Office to raise both awareness of and support for UBC athletics. Vancouver, says Philip, is a tough market when it comes to getting spectators out to games, thanks to the presence of National Hockey League and National Basketball Association franchises and other entertainment options. Television, he adds, is also a major competitor for sport audiences.

On the recruiting front, UBC has been successful in bringing many of the country's best young athletes — some of Olympic calibre — to campus. But, bound by Canadian Interuniversity Athletic Union (CIAU) rules regarding entrance scholarships, UBC often has trouble competing against American schools for students. Philip finds it ironic that Canadian students are drawn to U.S. schools with big sports scholarships when, in reality, the relatively low cost to students of education at a Canadian university means students who accept scholarships to compete in the U.S. do not necessarily come out any further ahead financially.

There is room for changes in the regulations regarding recruitment, scholarships and eligibility, and change, says Philip, may come. In the meantime, UBC will continue to provide students with an opportunity to compete nationally and internationally at the highest possible level.

"We do have a number of advantages when it comes to recruiting Canadian students," Philip says. "One of those is the range and reputation of our athletic programs. Another is UBC's excellent academic reputation. UBC remains the first choice of a lot of students."

Calendar

October 19 through November 1

Sunday, Oct. 19

Dance Performance
Bangra With PAAR. Punjabi Artist Association of Richmond. MOA from 2:30-4pm. Call 822-5087.

Concert
Il Giardino Armonico Baroque Ensemble. Chan Centre, Chan Shun Concert Hall at 8pm. Tickets $18-28 available through Ticketmaster 280-3311, Chan Centre box office info line 822-2697 or at the door.

Green College Performing Arts Group
Pieces For Piano. Elanor Avalof, pianist. Green College at 8pm. Call 822-1878.

Monday, Oct. 20

Dow Lecture in Analytical Chemistry
Ion/Ion Reactions In The Paul Trap: Fundamental And Applied Considerations For Bio-Analysis. Scott McLuckey, Oak Ridge National Laboratory. Chemistry D-225 (centre block) at 11:30am. Call 822-3266.

Distinguished Medical Research Lecture
Sports Medicine In The 21st Century. Dr. Douglas Clement. IRC #5 from 12:30-1:30pm. Call 822-8633.

Faculty Development Seminar
Departmental Roles In The Everyday Life Of Your Graduate Program. Various speakers. Faculty Development Seminar Rm, David Lam Bsmt from 2:30-4pm. Call 822-9149.

IAM Distinguished Colloquium Series
Inverse Boundary Problems. Gunther Uhlmann, Mathematics, U of Washington. CSCI 311 at 3:30pm. Call 822-4584.

Mechanical Engineering Seminar
UBC Engineering Physics: Our Outreach To Industry. Ed Auld, Engineering Physics. CEME 1202 from 3:30-4:30pm. Refreshments. Call 822-3770.

Biochemistry and Molecular Biology Discussion Group
The Soft Kinase, Protein Phosphatase 1, And Transcriptional Control In Yeast. Marian Carlson, Medicine, Columbia U. IRC #4 at 3:45pm. Refreshments at 3:30pm. Call Dr. Sadowski 822-4524.

Astronomy Seminar
Using The James Clerk Maxwell Telescope To Find Out What's Cool In The Universe. Lorne Avery. Hennings 318 at 4pm. Refreshments at 3:30pm. Call 822-2267 or 822-2802.

Green College Resident Speaker Series
R.V. Cuerrier, AIDS, And The Erosion Of Consent. Craig Jones, Law. Green College at 5:30pm. Call 822-1878.

Science And Society
What Do We Measure When We Measure Behaviour? Recent Debates About Aggression. Helen Longino, Women's Studies, U of Minnesota. Green College at 8pm. Call 822-1878.

Tuesday, Oct. 21

Faculty Development Seminar
Time And Stress Management. Ingrid Price. Faculty Development Seminar Rm, David Lam Bsmt from 9am-noon. Call 822-9149.

Faculty of Medicine and Dept. of Pediatrics Seminar
Muscle Cell Adhesion in Mouse Muscle Dystrophy Models. Dr. Eva Engvall, La Jolla Cancer Research Center, The Burnham Institute. Research Institute for Children's and Women's Health, 202-950 W. 28th Ave from noon-1pm. Call Zoe Gavureau 875-2315.

Seminar
Storage Lipid Metabolism In The Marine Diatom Phaeodactylum Tricornutum. Tony Larson, Botany. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

Seminar
Some Issues In Scientific Reasoning: A Research Case Study Involving Cyclosporine In Renal Transplant Patients. Marc Levine, Pharmaceutical Sciences. IRC #3 from 12:30-1:30pm. Call 822-4645.

Lectures in Modern Chemistry
Understanding Gaseous Bio-Polymer Ions: Intellectual Challenges With Practical Implications. Scott McLuckey, Oak Ridge National Laboratory. Chemistry B-250 (south wing) at 1pm. Refreshments from 12:40pm. Call 822-3266.

Faculty Development Seminar
Marking And Grading. Janice Johnson. Faculty Development Seminar Rm, David Lam Bsmt from 2-5pm. Call 822-9149.

Science and Society
Discussion: Behaviour, Measurement And Understanding. Helen Longino, Women's Studies, U of Minnesota. Green College at 3:30pm. Call 822-1878.

Faculty of Medicine and Gairdner Foundation Seminar
Cell Adhesion In Cancer. Dr. Errki Ruoslahti, The Burnham Institute. Vancouver Cancer Centre John Jambor Rm, 600 W. 10th Ave from 4-5pm. Call Zoe Gavureau at 875-2315.

Green College Speakers Series
Birthdays And Success: The Relative Age Effect. Roger Barnsley, VP Academic, St. Thomas U. Green College at 5:30pm. Reception Graham House from 4:45-5:30pm. Call 822-1878.

Video Screening And Comedy Improvisation
Dreams Of The Night Cleaners (video). Mental Floss (comedy group). MOA from 7-8:30pm. Call 822-5087.

First Nations Discussion Circle
A Talk About His Art. Laurence Paul Yuxweluptin, painter. Green College at 8pm. Call 822-1878.

Wednesday, Oct. 22

Orthopedics Grand Rounds
Lateral Retinacular Release And Complications. Dr. J.P. McConkey, Dr. Jordan Leith. Vancouver Hosp/HSC, Eye Care Centre Aud. at 7am. Call 875-4192.

Concert
Wednesday Noon Hours. Eric Wilson, cello; Edward Norman, organ. Music Recital Hall at 12:30pm. $3 at door. Call 822-5574.

Faculty Development Seminar
Writing Reference Letters That Work. Rosemary Redfield; Laurie Ricou. Faculty Development Seminar Rm, David Lam Bsmt from 1-3pm. Call 822-9149.

Obstetrics and Gynaecology Research Seminar
Canadian Early Amniocentesis Trial: Preliminary Results. BC Women's Hosp. 2N35 at 2pm. Call 875-3108.

Ecology, Evolution and Centre for Biodiversity Research Seminars
Patterns On The Plate: Founder Events And Adaptive Radiation In Hawaiian Spiders. Rosemary Gillespie, U of Hawaii. Family and Nutritional Sciences 60 at 4:30pm. Refreshments Hut B-8 at 4:10pm. Call 822-3957.

The Interdisciplinary Seminar
Conversations About Creating Understandings Of The Land. Jo Ann Archibald, moderator; panel discussion. Green College at 5pm. Call 822-0549.

Thursday, Oct. 23

Reading
The Underpainter. Jane Urquhart. Frederic Wood Theatre at 12:30pm. $10; students/seniors $8. Call 822-2514.

Earth and Ocean Sciences Colloquia
Methane Hydrates In The Deep Sea Floor: Implications For Global Change. Bruce A Buffett. Geological Sciences 330-A at 12:30pm. Call 822-3278.

Seminars in Biological Conservation
Insular Conservation: The Hawaiian Islands As An Extreme. Rosemary Gillespie, U of Hawaii. MacMillan 166 from 2:30-3:30 pm. Call 822-9695.

CICSR Distinguished Lecture Series
Software Engineering - Are We There Yet? Philippe Kruchten, Rational Software Corp. CICSR/CS 208 from 4-5:30pm. Refreshments. Call 822-6894.

Medieval and Renaissance Lecture
Criticism As Contamination. Edward Pechter, English, Concordia U. Green College at 4:30pm. Call 822-1878.

Alumni/Sports Dinner
Alumni Achievement And Sports Hall Of Fame Dinner. President Martha Piper, guest speaker. Hyatt Regency at 6pm. $125/ticket $1000/table of 8. Tax receipts available. Call 822-3313.

Green College Special Lecture
The Crisis Of Liberality: A Plea For Civic Capitalism. John O'Neill, Sociology, York U. Green College at 7:30pm. Call 822-1878.

Marion Woodward Lecture
Nursing Care Makes A Difference — Rhetoric Or Reality? Ellen Hodnett, Nursing, U of Toronto; Heather M. Reisman, director, Mt. Sinai Hosp. Perinatal Nursing Research Unit. IRC #6 at 8pm. Call 822-7749.

Friday, Oct. 24

Rounds
Organizational Justice. Dr. David Matheson, B.C.'s Children's Hosp. Mather 253 from 9-10am. Call 822-2772.

Grand Rounds
Rewards And Challenges Of Pediatric Renal Transplantation. Dr. Robert B. Ettenger, Pediatric Nephrology, UCLA Centre Health Sciences. GF Strong Aud. at 9am. Call 875-2307.

Reunion
Class Of '42 Reunion. Cecil Green Park House from 12-3pm. Call Doreen Walker 738-8519.

Occupational Hygiene Program Seminar
Exposure To Wood Dust And Micro-organisms Among Sawmill Workers. Paul Demers, Susan Kennedy. Vancouver Hosp/HSC, UBC, Koerner G-279 (ground floor) from 12:30-1:30pm. Call 822-9861.

Reading
Daphne Marlatt, poet and novelist. Buchanan Penthouse at 12:30pm. Call 822-4225 or 822-6636.

Reading
Reading From Her Latest Work And Discussion. Pieke Biermann, German novelist. Buchanan B-212 at 12:30pm. Call 822-6403.

United Nations' Day Seminar
Can The UN Meet The Challenges Of the 21st Century? Robert Fowler, ambassador. Curtis 101, from 2:30-3:30pm. Call 732-0448.

Weekly Seminar
Fluid Mechanics of Hydrocyclones. Sheau-Ling Ho, Chemical Engineering. ChemEng 206 at 3:30pm. Call 822-3238.

Mathematics Colloquium
Maximum Principle And Symmetry For PDEs. Changfeng Gui, Mathematics. Mathematics 100 at 3:30pm. Refreshments Math Annex 1115 at 3:15pm. Call 822-2666.

Physical Chemistry Seminar
Third Derivatives Of The Gibbs Free Energy In Aqueous Solution. Dr. Yoshi Koga, Chemistry, Chemistry D-225 (center block) at 4pm. Call 822-3266.

Concert
Opera In Concert. UBC Opera Ensemble with UBC Choral Union. Chan Centre at 8pm. Call 822-5574.

Saturday, Oct. 25

Concert
Opera In Concert. UBC Opera Ensemble with UBC Choral Union. Chan Centre at 8pm. Call 822-5574.

Vancouver Institute Lecture
Urban Countryside - Rural Metropolis. Dean Moura Quayle, Agricultural Sciences. IRC #2 at 8:15pm. Call 822-4636.

Sunday, Oct. 26

Film Screening
First Generations. Iswar Lal, director. MOA from 2:30-4pm. Call 822-5087.

Green College Performing Arts Group
The Attic. Natalie Meisner, writer and director. Green College at 8pm. Call 822-1878.

Concert
European Union Chamber Orchestra. Chan Centre, Chan Shun Concert Hall at 8pm. Tickets $18-$28 through Ticketmaster 280-3311 or at the door. Chan Centre box office 1pm on performance days or Saturdays from noon-5pm. Call 822-2697.

Monday, Oct. 27

Faculty Development Breakfast Seminar
University-Wide Policies For Graduate Supervision. Graham Kelsey. Faculty Development Seminar Rm, David Lam Bsmt from 8-9am. Call 822-9149.

Bio-Mega Bochringer Ingelheim Lecture
Methodological Developments In Organic Synthesis. Andrew Myers, Chemistry, California Institute of Technology. Chemistry D-225 (centre block) at 11:30am. Call 822-3266.

Mechanical Engineering Seminar
Engineering Challenges At TRIUMF. Ewart Blackmore, Head Accelerator Technology Division, TRIUMF. CEME 1202 from 3:30-4:30pm. Refreshments. Call 822-3770.

Biochemistry And Molecular Biology Discussion Group Seminar
Regulation Of The Structure And Function Of Protein Kinase C. Alexandra Newton, Pharmacology, U of California. IRC #4 at 3:45pm. Refreshments at 3:30pm. Call Michelle Illing 822-5097.

Green College Resident Speaker Series
Date With A Witch: A Philosophical And Historical Journey Into The Origins And Significance Of Halloween. David Lertzman, Community and Regional Planning. Green College at 5:30pm. Call 822-1878.

Green College Special Lecture
Bengali Poets In Translation. Sukanta Chaudhuri, Jadavpur U, U of Alberta. Green College at 7:30pm. Call 822-1878.

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 October 30 issue of UBC Reports — which covers the period November 2 to November 15 — is noon, October 21.

THE UNIVERSITY OF BRITISH COLUMBIA

REPORT OF THE VICE-PRESIDENT ADMINISTRATION AND FINANCE 1996-97

THE YEAR IN REVIEW

The 1996/97 fiscal year saw many significant initiatives and achievements at UBC.

Student Community

Despite government cutbacks, the University achieved increases in both undergraduate and graduate student enrollment. Undergraduate enrollment increased by 6.2% and graduate student enrollment increased by 1.3%. Scholarships and bursaries awarded from University funds totaled $20.8 million, an increase of $2.0 million, or 14%, over the 1995/96 fiscal year.

The University has also been active on the international front during the year. International students indicated overwhelming interest in UBC at several educational fairs held throughout Asia earlier this year. UBC was the largest draw at fairs in Taiwan, Thailand, Singapore, Malaysia and Indonesia, attended by about 8,100 students in total. Student demand for information on English language programs, engineering, business and computer science was particularly high. The University's goal is to expand spaces for full fee paying international students in undergraduate and first professional programs to a maximum of 10% above established enrollment quotas. Increasing the number of international students on campus will raise the University's profile in the international community and enrich the UBC experience for all students. It is intended that increased international enrollment will put no additional strain on existing resources. International students will be charged market-based fees, established with consideration given to program costs and market conditions. No student from British Columbia or Canada will be displaced to accommodate international enrollment and admission standards will be at least as high for international students as for Canadian students.

Research

The University holds equity in 28 knowledge-based companies, 27 of which were created from UBC research. The market value of these holdings at March 31, 1997 was $6.9 million, a 17% increase from the same time in 1996 when the University carried shares in 23 companies. The formation of new high technology companies is a natural progression of UBC's research activities and represents an important stream of revenue. This revenue takes the form of related research contracts, royalties and equity, and in turn supports ongoing research.

UBC participates in Discovery Parks Inc. (DPI) in collaboration with Simon Fraser University, the University of Victoria, the British Columbia Institute of Technology and the Science Council of B.C. In 1994, DPI built the Gerald McGavin Building at UBC to house newly formed companies engaged in the commercialization of UBC technology. These companies pay market based rent, the proceeds of which are funneled back into UBC research programs. DPI is now upgrading the former Agriculture Canada building on campus to provide expansion space for these rapidly growing companies. The University is also actively considering construction of additional facilities to house other small companies whose entrepreneurship is primarily based on UBC technologies.

Community Planning

During the year, the Greater Vancouver Regional District, in conjunction with UBC, introduced the first Official Community Plan (OCP) for the University. The OCP envisages the development of a vibrant, attractive university community over a 35-40 year period and focuses on transportation, housing and community service issues. The Official Community Plan is intended to facilitate the utilization of the University's land resource to support academic activities and to continue to build an endowment to sustain the University's margin of excellence.

UBC is emerging from an unprecedented development boom which has added over 50 buildings during the past 10 years. Most recently, the Chan Centre for the Performing Arts, through the generous donations of the Chan Shun family, opened in May, 1997 to unanimous acclaim for its superb acoustics and outstanding architecture. The Chan Centre was made possible through a partnership of individuals, corporations, the University and the Government of British Columbia and sets a precedent for future collaborations of this kind.

The new Walter C. Koerner Library, a state-of-the-art facility wired for the future, opened in March, 1997. In addition to providing desperately needed space for UBC's rich and diverse collections, this library provides on-line access to information from around the globe. The $24.0 million project is the first stage of a long-term redevelopment plan for the UBC library system. Future phases will allow the relocation of all material currently housed in the Main Library, the third largest research library in Canada. UBC's library holdings comprise more than nine million items, ranging from rare Babylonian clay tablets to CD-ROMS and on-line resources.

Alumni and Friends

An increasing number of UBC alumni and friends realize the vital role that they play in the life of the University. Their contributions provide key support for UBC's commitment to service through excellence. Donations from the private sector play a significant role in building on UBC's strengths and providing opportunities for new initiatives. In 1996/97, donations totaling more than $66 million were received in operating, capital and endowment funding for projects across the campus.

Infrastructure

The UBC Infrastructure plan was implemented during the year. This plan is a comprehensive strategy to provide funding for municipal infrastructure services, such as exterior lighting, roads, pathways, landscape, sewers and community services to the greater university community. Under the plan guidelines, the University and its ancillary enterprises and campus tenants contribute towards the cost of providing infrastructure services. The plan is being phased in over ten years, beginning with 1996/97, and provides for an appropriate level of investment to maintain and sustain the infrastructure over the long term.

Administrative Systems

In order to address changing technological requirements and provide the University community with significantly improved access to planning and management information, the University has embarked upon a major administrative systems development project. Better distribution of information will be facilitated through re-development of administrative applications in four major areas: Finance (including Budgeting and Purchasing), Human Resources, Student Services and Alumni/Development. The technology component of the project will see a migration from a mainframe computer to a distributed operating environment, and this migration will result in savings sufficient to fund the project.

Accounting Changes

Over the past two years, UBC has modified and augmented its financial statements to provide more useful information to readers and to conform with the new standards of the Canadian Institute of Chartered Accountants. Although adoption of these standards is not mandatory until the fiscal year ending March 31, 1998, UBC has taken a leadership role by implementing these changes beginning with last year's financial statements.

FINANCIAL STATEMENT HIGHLIGHTS

Total revenues for the 1996/97 fiscal year increased by $9.0 million over 1995/96. Provincial support to the University's general purpose operations initially remained frozen at the 1995/96 level. However, late in the fiscal year, government informed the universities of a one-time clawback amounting to $1.3 million for UBC. Federal government research grants received also fell by $9.5 million. This drop was partially offset by increases in provincial and industry research support. As well, sales and service revenue increased by $14.1 million. Sales and service revenue includes revenues from ancillary enterprises and revenue earned by the UBC Real Estate Corporation of $16.0 million, up by $9.5 million from 1995/96. Tuition fee revenue also increased by $4.1 million, or 4.8% over 1995/96, attributable solely to enrollment increases. Tuition fees have been frozen by the provincial government for the 1996/97 and 1997/98 academic years. Despite funding reductions, the University remains committed to continuing to provide excellence in education and research.

The University's Statement of Revenue, Expenses and Changes in Operating Equity shows an excess of revenues over expenses of $15.7 million for the 1996/97 fiscal year. After allocations, transfers and reserves, operating equity is in a deficit balance of $1.8 million for the year.

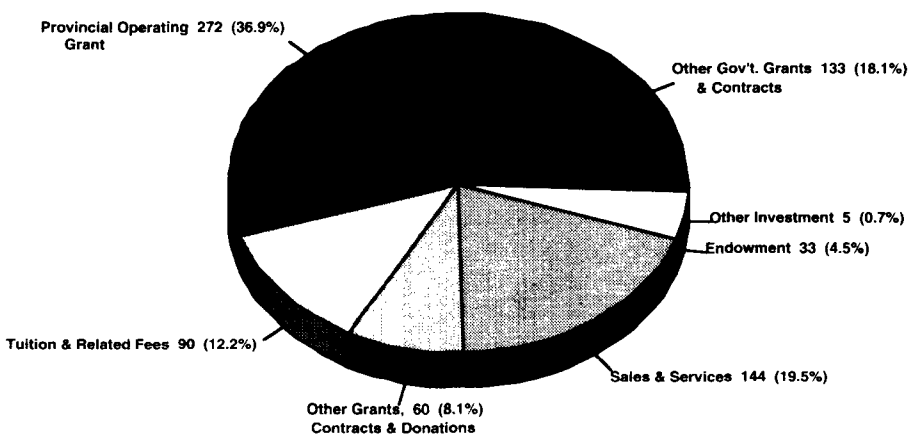
The following charts provide a visual representation of total revenues by source and total expenses by type for the year ended March 31, 1997.

TABLE 1

Total Revenue by Source

for the year ended March 31, 1997

(millions of dollars)



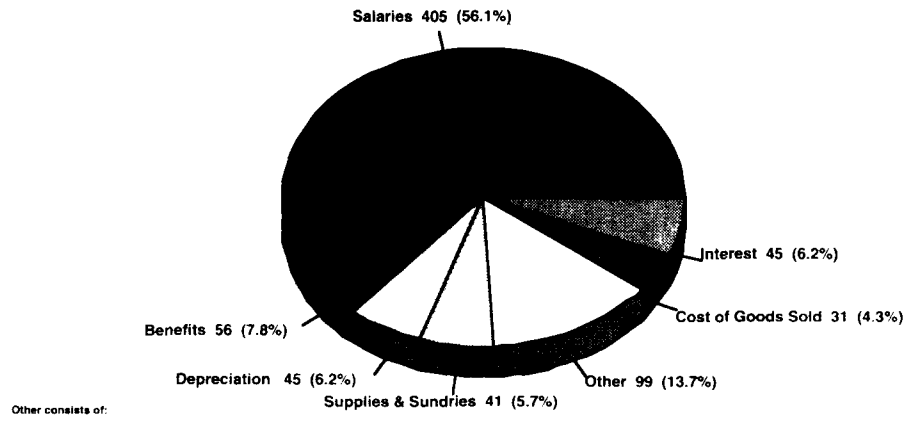
Total Revenue $737

TABLE 2

Total Expenses by Type

for the year ended March 31, 1997

(millions of dollars)



Other consists of:

Renovations & Alterations	11
Travel & Field Trips	21
Scholarships, Fellowships and Bursaries	21
Grants to Other Agencies	11
Utilities	21
Professional Fees	14
Total:	99

Total Expenses $722

THE UNIVERSITY OF BRITISH COLUMBIA

REPORT OF THE VICE-PRESIDENT ADMINISTRATION AND FINANCE 1996-97

FUND HIGHLIGHTS

General Purpose Operating Fund

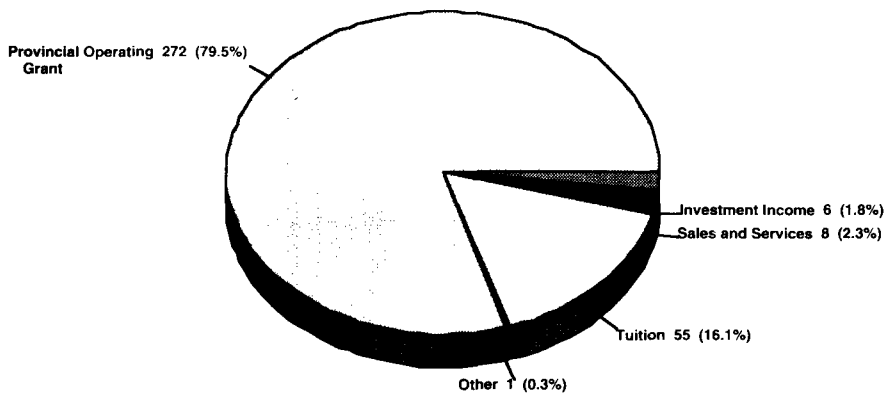
The general purpose operating fund includes the operating grant from the province, credit course tuition fees and other central revenues. These revenues are used to support the core academic purpose of the University. The following charts summarize revenues by source and expenses by category.

TABLE 3

General Purpose Operating Revenue by Source

for the y ear ended March 31, 1997

(millions of dollars)



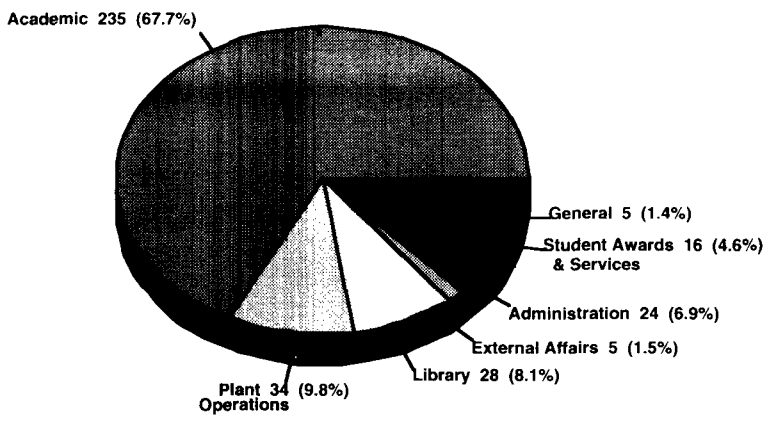
Total Revenue $342

TABLE 4

General Purpose Operating Expenses by Category

for the year ended March 31, 1997

(millions of dollars)



Total Expenses $347

Specific Purposes Fund

The Specific Purposes fund accounts for monies received for specific purposes as stipulated by the donors or granting agencies and includes income earned on the Endowment Principal. This fund also includes fee-for-service operations and continuing studies.

(a) Fee-For-Service:

Fee-for-service activities provide additional revenue to faculties to support their academic and research initiatives. Fee-for-service revenues account for $58.9 million or 8% of total University revenues. These activities ended the year with an excess of revenues over expenditures of $1.7 million. Tables 5 and 6 outline revenues by faculty and expenses by category.

(b) Continuing Studies

Credit and non-credit courses are offered through UBC Continuing Studies which is comprised of the departments of the Centre for Continuing Education (CCE), UBC Access and the Office of Extra Sessional Studies (OESS). Non-credit courses are also offered by the Office of the Coordinator of Health Sciences, the Faculty of Commerce and Business Administration and several other faculties.

CCE offers non-credit courses in such diverse subjects as computer information technology, environmental studies, and English and foreign language skills. Educational travel is available to students interested in widening their knowledge in a practical way.

Distance education credit courses are offered through UBC Access which designs, produces and delivers programs throughout the province. The UBC Access office coordinates their expertise with faculties to provide credit courses. As part of B.C.'s Open University, UBC Access courses are applicable towards an Open University degree, thus providing more flexible study options for students.

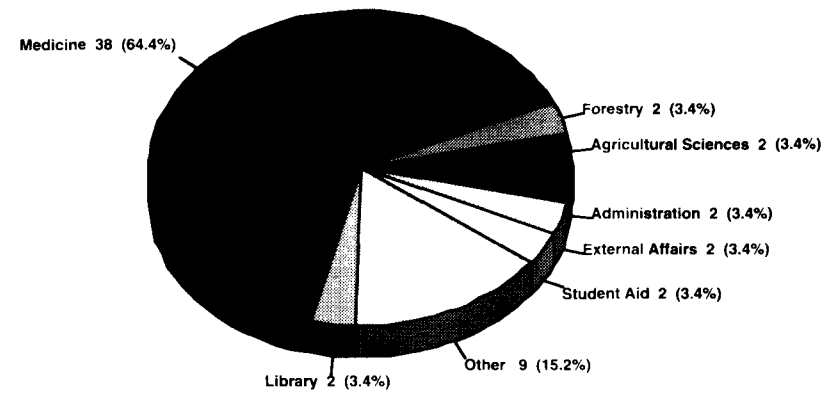
The Faculty of Commerce offers continuing education in two main areas - Real Estate Programmes and Executive Programmes.

TABLE 5

Fee-For-Service Revenue by Faculty

for the y ear ended March 31, 1997

(millions of dollars)



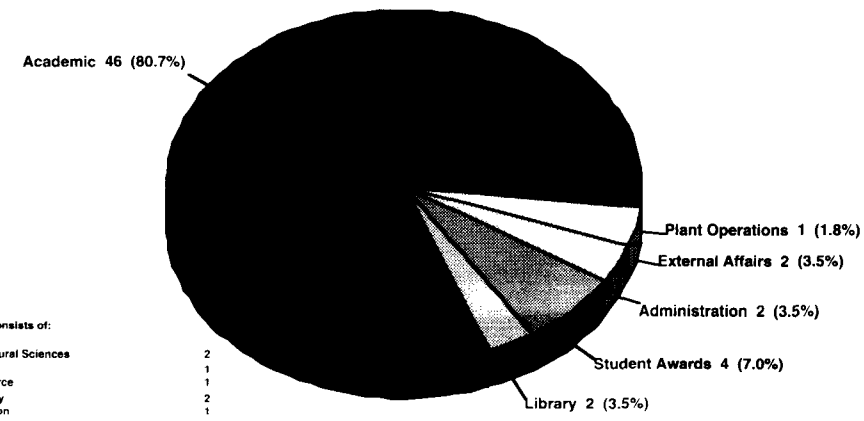
Total Revenue $59

TABLE 6

Fee-For-Service Expenses by Category

for the y ear ended March 31, 1997

(millions of dollars)



Academic consists of:

Agricultural Sciences	2
Arts	1
Commerce	1
Dentistry	2
Education	1
Forestry	2
Graduate Studies	1
Medicine	36
Total:	46

Total Expenses $57

Real Estate Programmes offer distance education for licensing and professional designation for individuals in the real estate industry. Executive Programmes offer management seminars in a variety of delivery formats ranging from corporate seminar offerings to a three-week residential program and programs targeted for offshore students.

Health Sciences' non-credit programs include continuing dental, pharmacutical, nutritional and medical education for members of the health care community.

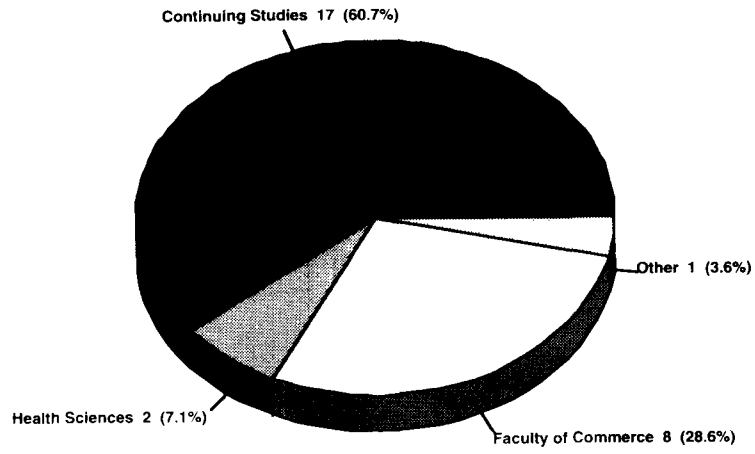
The following charts (Tables 7 and 8) outline continuing studies revenues by source and expenses by category.

TABLE 7

Continuing Studies Revenue by Source

for the y ear ended March 31, 1997

(millions of dollars)



Total Revenue $28

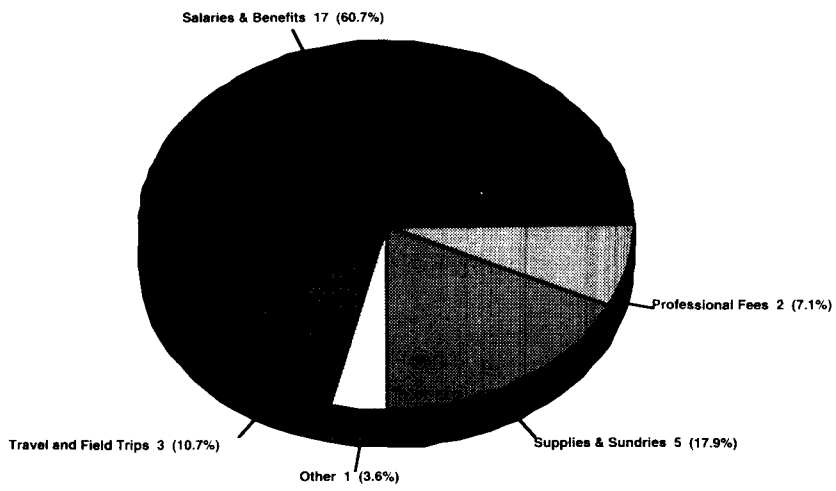
THE UNIVERSITY OF BRITISH COLUMBIA

REPORT OF THE VICE-PRESIDENT ADMINISTRATION AND FINANCE 1996-97

TABLE 8

Continuing Studies Expenses by Type

for the y ear ended March 31, 1997
(millions of dollars)



Total Expenses $28

(c) The University's Endowment

Endowments consist of restricted donations to the University and internal allocations, the principal of which is required to be maintained intact in perpetuity. The investment income generated from endowments must be used in accordance with the various purposes established by the donors or the Board of Governors. University policy stipulates that the economic value of the endowments must be protected by limiting the amount of income that may be expended annually.

The endowments have grown significantly over the past ten years from a book value of $117.8 million to $423.2 million (see graph below). The market values of all endowments held for the benefit of UBC total $483.9 million at March 31, 1997. The growth in the endowment is attributable primarily to the University's major fund raising campaign, the leasing of university property for the construction of market housing and return on investments.

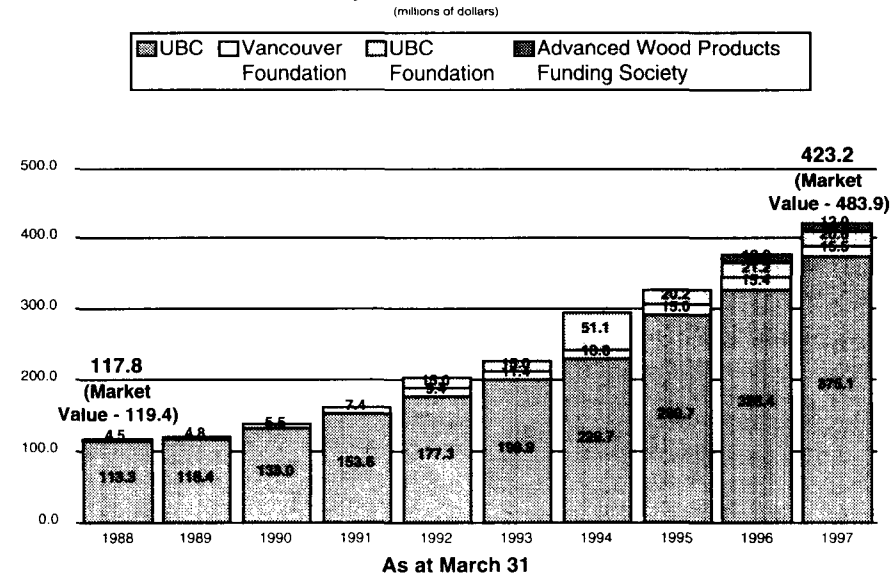
Of the total endowment funds, $95.6 million is designated for scholarships and bursaries (1996 - $83.7 million).

The University, through its investment managers and associated foundations, invests in a balanced portfolio of securities including short term instruments, bonds, mortgages and equities. Income from these investments totaled $35.3 million in 1997, one of the best earning years in UBC's history. Of this, $14.3 million was reinvested in the endowment fund. An additional $16.8 million was expended on student awards and academic and research programs as specified by donors. Endowment income includes returns on investments held by UBC and those held by the Vancouver Foundation, the UBC Foundation and the Advanced Wood Products Funding Society for the benefit of the University.

TABLE 9

Schedule of Endowment Funds

for the y ear ended March 31, 1997
(millions of dollars)



Sponsored Research Fund

New research awarded to UBC during the year was $134.0 million (1995/96 - $139.0 million). Research awards are recorded as revenue when the monies are received, rather than when the award is announced. This creates a difference between research revenue, as reported in the schedule, and research awards.

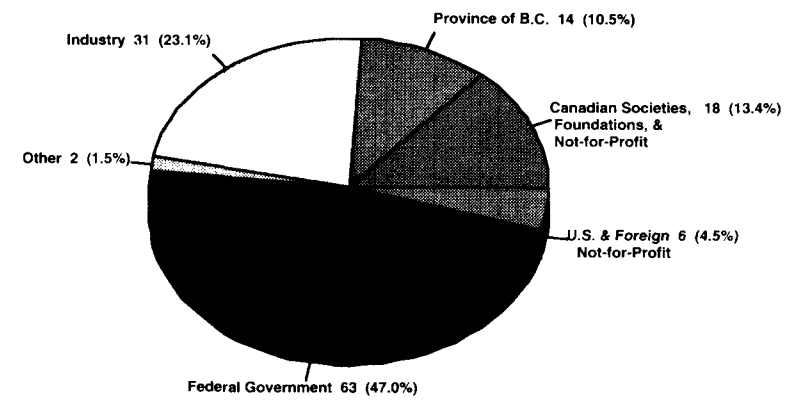
Increases in provincial research funding through Forest Renewal BC, and industry research awards partially compensated for a drop of $9.5 million in federal government funding. UBC researchers continue to be well supported in peer-reviewed grant funding at the national level, where UBC ranks in the top three in every competition.

The following charts (Table 10 and 11) show research awards by source and by faculty. Figures reported exclude funds transferred to other institutions for collaborative and networked research but include funds administered by affiliated hospitals for UBC faculty members ($7.1 million).

TABLE 10

Research Awards by Source

for the y ear ended March 31, 1997
(millions of dollars)

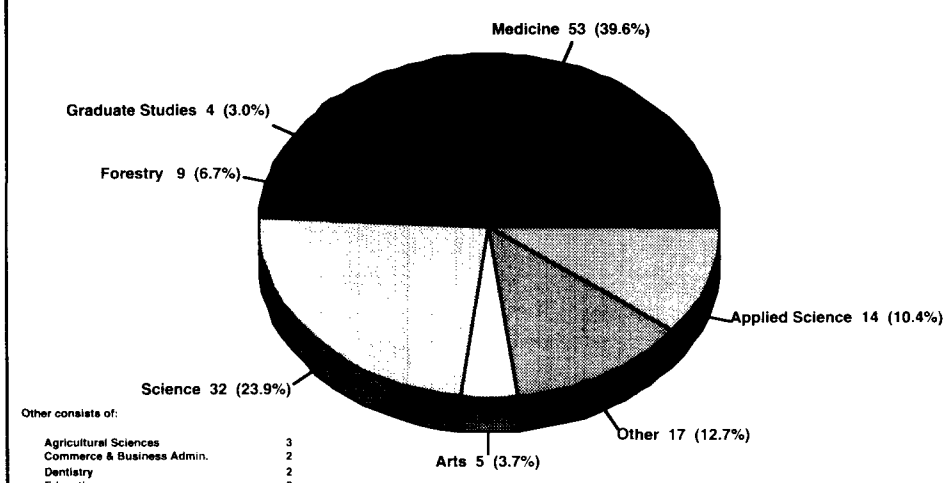


Total Research Awards $134

TABLE 11

Research Awards by Faculty

for the y ear ended March 31, 1997
(millions of dollars)



Other consists of:

Agricultural Sciences	3
Commerce & Business Admin.	2
Dentistry	2
Education	2
Health Sciences	2
Law	1
Pharmaceutical Sciences	2
Other	3
Total:	17

Total Research Awards $134

Ancillary Enterprises Fund

Ancillary enterprises provide goods and services to the University community. They are financially self-sufficient enterprises, operating without subsidies from the University. The following departments of the University function as ancillaries:

- Bookstore
- Food Services
- Housing and Conferences
- Parking and Transportation
- Athletics and Recreation
- UBC Press
- Media Services
- Applied Research and Evaluation Services
- University Computing and Telecommunications
- Green College (housing and residence component)
- Biomedical Communications
- Plant Operations (utilities component)

Biomedical Communications and the Utility division of Plant Operations became ancillaries during the year. The entire Plant Operations department will be operating as an ancillary commencing with the 1997/98 year.

Total revenue for all the ancillaries increased in 1997 to $130.0 million from $110.0 million in 1996, primarily due to the addition of the two new ancillaries. Table 12 demonstrates the relative size of each ancillary operation based on annual revenue.

Capital Fund

In addition to the Chan Centre, made possible by the generous donation of $10 million from the Chan family, the University is home to a number of significant capital projects which are currently under construction.

The first phase of the future Creative Arts Centre is scheduled for completion in November 1997. Phase one will house the new Sing Tao School of Journalism, which will be accepting its first students in September 1998. The school will offer an integrated program that combines graduate study in academic disciplines with advanced training in the profession of journalism. It will be the first graduate school of journalism in Western Canada and the only one in Canada to emphasize advanced academic studies. Graduates of the program will receive the Master of Journalism (M.J.) degree. This project has been funded entirely through the private sector.

THE UNIVERSITY OF BRITISH COLUMBIA

REPORT OF THE VICE-PRESIDENT ADMINISTRATION AND FINANCE 1996-97

The opening of phase one of St. John's College UBC in September 1997 provides residential and resource space for graduate students and post doctoral fellows. The total cost of the project is estimated at $14.8 million, $9.0 million of which was raised through the private sector with the balance funded through the operations of St. John's. The mission of St. John's College UBC is to create an atmosphere that encourages the interaction of graduate students from many countries and to enhance international understanding and cooperation.

The new Forest Sciences Centre, currently under construction, will place UBC in a world class position in forestry and related sciences. The $49.0 million facility will house the Faculty of Forestry and associated research centres. Funded primarily by the Province of British Columbia, the facility will accommodate a new undergraduate co-operative education program, a new professional master's program and other continuing education programs designed to meet the training needs of the forestry industry.

The first phase of the Continuing Studies building opened in Sept. 1997 providing language labs, classrooms, seminar space and teaching support areas. This $8.7 million facility is designed to support the expanding Continuing Studies department and to allow increased enrollment in the English Language Institute programs. The project is funded entirely by Continuing Studies.

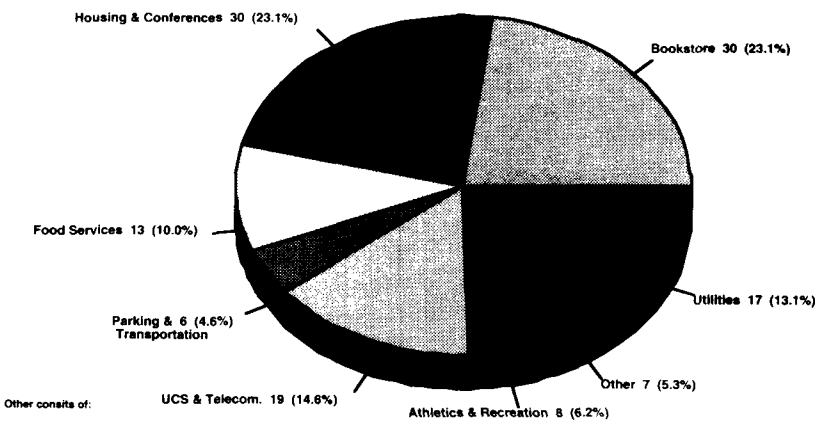
Capital fund expenses, totaling $100.8 million, cover the cost of new construction, renovations and equipment, and interest and principal payments on capital borrowings.

TABLE 12

Ancillary Enterprises Revenue

for the y ear ended March 31, 1997

(millions of dollars)



Other consits of:	
Applied Research & Evaluation Services	1
Biomedical Communications	1
Green College	1
Media Services	2
UBC Press	2
Total:	7

Total Revenue $130

Forum

Cutting top bracket tax rates makes economic sense

by Jon Kesselman

Jon Kesselman is a professor of economics and director of the UBC Centre for Research on Economic and Social Policy. An earlier version of this article appeared in The Financial Post.

Now that the election campaign rhetoric is behind us, we can consider the real needs for tax policy in Canada.

It is increasingly recognized that broad tax cuts will be possible in two or three years, but the wisdom of cutting taxes now to stimulate demand has not been settled. Government deficits have not yet been vanquished, and pressures are building to restore public funds for health care and other services.

Nevertheless, a special type of tax cut would be justified immediately to stimulate supply, improve incentives, and enhance economic efficiency. It is a cut in the marginal tax rates faced by top bracket taxpayers. While this change is not the end-all for tax reform, it is a pressing need that can be achieved at modest if any revenue cost.

Top bracket taxpayers — those with taxable incomes above roughly $75,000 — are relatively small as a group but highly influential in the economy's performance. They face marginal tax rates exceeding 50 per cent in all provinces except Alberta, which has a top rate of 46 per cent. B.C. has the highest combined federal-provincial marginal tax rate, at 54 per cent.

Cutting tax rates for upper earners poses obvious political difficulties, even for right-of-centre parties. In the last B.C. election campaign, the Liberals proposed a 15 per cent cut in provincial income taxes, but remarkably, they would have left the top marginal tax rate unchanged. Ontario's Tory income tax cuts are being offset in part by a new surcharge on those at higher incomes, which will still leave the top marginal rate at nearly 50 per cent when fully implemented.

Economic analysis for Canada and the U.S. has found the costs of imposing high marginal tax rates to be very large. With B.C.'s income surtaxes, for example, the loss of valued economic activity has been estimated at $65 or more for each extra dollar of tax revenue. Using plausible assumptions about behavioural responses, the costs are found to be infinite; that is, tax revenues would actually be increased by cuts in the top bracket marginal rates.

These strong results can be explained by individuals' actions to curtail their taxable incomes when confronted with very high tax rates. They will reduce their work effort, substitute untaxed production of home services for taxed market work, take more compensation in untaxed fringe benefits, decline promotions, postpone the sale of appreciated assets, invest in legal tax shelters (including home equity), and find ways to evade taxes.

Clearly, no one benefits if tax rates are set so high that revenue is actually decreased. Even short of these rates, the costs to the economy in reduced supply of productive labour and capital services and entrepreneurial activity is high. Employment is reduced for other individuals at more modest wage and skill levels, which in turn reduces the income and sales taxes that they pay.

High tax rates on upper incomes further discourage the location and expansion of business in Canada as opposed to lower taxed locales. Canada becomes less attractive to potential immigrants with special skills, business acumen, and high wealth. B.C. has lost immigrants and their economic stimulus from our high income tax rates combined with the new reporting rules for foreign assets.

Why can't politicians appreciate these economic truths and moderate the top tax rates? They are captives of rhetoric about "tax equity," which in common usage assumes that ever higher tax rates on upper earners is necessarily equitable. But if those higher rates do not produce greater revenues, or if they do so only at great cost to the economy, we are all victims of the rhetoric.

A desirable target for top marginal tax rates would be in the low 40 per cent range. This could be achieved by cuts in the federal top tax rates, along with elimination of the high income surtax rates applied in provinces such as B.C., Ontario, and Saskatchewan. These moves would place Canada in the company of other major Western economies.

The top U.S. marginal tax rate is 39.6 per cent, though this arises only for taxable incomes above $264,000 US, or about $370,000 Cdn—five times the threshold for top rates in Canada. (Most states also impose an income tax but at much lower rates than the Canadian provincial taxes.) In Britain the top marginal income tax rate is 40 per cent. New Zealand cut its top rate from 66 to 33 per cent, with beneficial effects on productivity and real wages.

Even egalitarian, heavily taxed Sweden has come to appreciate the damaging effects of high tax rates. Its top marginal rate on labour earnings is now down to 51 per cent, and capital incomes face a flat tax rate of just 30 per cent. Germany's plans to cut its top tax rate from 53 to 39 per cent were scuttled this year by the Social Democratic opposition on the grounds of "tax equity."

For those concerned about the loss of equity from reducing the top tax rate, the response is twofold.

First, since taxing at very high rates is generating little if any incremental revenue, the loss of equity would be more symbolic than substantive.

Second, if there were much revenue loss, other taxes could be applied to those at upper income and wealth levels — such as taxes on higher valued homes, cars, and estates — with significantly less damage to the economy.

The burden of high tax rates on managerial, professional, and technical workers is shifted partially into higher prices for the goods and services they produce. Cutting those tax rates will increase their productive supply and thereby yield price cuts that benefit consumers at all income levels. Lower dental and legal fees, for example, will be welcomed by moderate income families.

High marginal tax rates also cause upper earners to press the political process for special tax preferences. Moderating top tax rates would enhance the ability of governments to apply a broadly based income tax. Hence, reducing high tax rates may itself be a prerequisite to more fundamental tax reforms to accompany the broader tax cuts that will become feasible in the coming years.

Calendar

October 19 through November 1

Tuesday, Oct. 28

Seminar
Positive Interactions In Plant Communities. Ray Callaway, U of Montana. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

Seminar
Your Will: Leaving Nothing To Chance. Gail Black, Black & Benjamin. Vancouver Hosp/HSC, UBC, Koerner McLeod Boardroom at 12:30pm. Call 822-7384 or 875-4917.

UBC Humanists' Society Lecture
The History Of Humanism. Glenn Hardie. Buchanan D-205 at 12:30pm. Doughnuts. Call 739-9822.

Lectures In Modern Chemistry
Mechanistic And Synthetic Studies Of The Enediyne Antibiotics. Andrew Myers, Chemistry, California Institute of Technology. Chemistry B-250 (south wing) at 1pm. Refreshments from 12:40pm. Call 822-3266.

Graduate And Faculty Christian Forum
The Impact Of Friedrich Schleiermacher On Contemporary Thought. Olav Slaymaker, Geography. Buchanan Low Rise Penthouse at 4:15pm. Coffee at 4pm. Call 822-4351.

Statistics Seminar
An Introductory Survey To Uniform Design. Dr. HM Ngai, Statistics. CSCI 301 from 4-5:30pm. Refreshments, bring your mug. Call 822-0570.

Green College Speakers' Series
The Name Of The Game: Methodological And Philosophical Implications Of The Metaphor Of Games In The Social Sciences. Vinay Gidwani. Green College at 5:30pm. Reception Graham House from 4:45-5:30pm. Call 822-1878.

Multimedia Presentation
From History To Story. Sarjeet Jagpal; Phinder Dulai; Sadhu Binning. MOA from 7-8:30pm. Call 822-5087.

Theatre at UBC
Aunt Dan And Lemon. Charles Siegel, director. Frederic Wood Theatre at 7:30pm. Continues to Nov 15. Call 822-2678.

Wednesday, Oct. 29

Orthopaedics Grand Rounds
Long Bone Fracture Stabilization In Polytrauma Patients. Dr. P. Blachut, Orthopaedics; Dr. John Harper, Anaesthesia; Dr. Robert Meek; Orthopaedics; Dr. Paul Vaidya, Orthopaedics; Dr. Richard Simons, Trauma Service. Vancouver Hosp/HSC, Eye Care Centre Aud. at 7am. Call 875-4192.

Concert
Wednesday Noon Hours. Joan Rowland, piano. Music Recital Hall at 12:30pm. $3 at door. Call 822-5574.

Obstetrics And Gynecology Research Seminar
Fetal Lung Liquid With Fireproof Slides. Dr. Anthony Perks, Obstetrics/Gynaecology. BC Women's Hosp 2N35 at 2pm. Call 875-3108.

Ecology, Evolution And Centre For Biodiversity Research Seminars
Competition And Character Displacement In Sticklebacks: Experimental Tests Of Prehistoric Interactions With The Ancestral Marine Form. John Pritchard, Zoology. Family and Nutritional Sciences 60 at 4:30pm. Refreshments Hut B-8 at 4:10pm. Call 822-3957.

19th Century Studies
Flatland Revisited, Or, The Return Of The Fourth Dimension. Richard Cavell, English, Green College at 8pm. Call 822-1878.

Thursday, Oct. 30

Science First Lecture Series
Molecular Secrets Of Life. Dr. George Spiegelman, Microbiology/Immunology. IRC #4 from 12:30-1:30pm. Refreshments at door bring your lunch. Call 822-5552.

Science And Society
Making Connections: The Politics Of Neurosciences In The Connectionist Revolution. Bill Keith, Communications, Oregon State U. Buchanan 218 at 12:30pm. Call 822-1878.

Science And Society
From The Perfect Language To The Ideal Machine: The Rhetoric Of Logic In Artificial Intelligence. Bill Keith, Communications, Oregon State U. Green College at 4pm. Call 822-1878.

Invited Speaker Seminar
Unifying The User And Kernel Environments. Dr. Richard Draves, Microsoft Corp. CICSR/CS 208 from 4-5:30pm. Refreshments. Call 822-0557.

Law And Society Seminar
Emergence Of Family Discourse And Charter Jurisprudence. Hester Lessard, Law, U of Victoria. Green College at 8pm. Call 822-1878.

Friday, Oct. 31

Grand Rounds
New Approaches To Fetal Alcohol Syndrome Diagnosis And Treatment. Dr. Sterling Clarren, Dr. Robert A. Aldrich, U of Washington. GF Strong Aud. at 9am. Call 875-2307.

Comparative Literature
Estonian Literature After (Regained) Independence. Jeuri Talvet, U of Tartu, Estonia. Green College at noon. Call 822-1878.

Concert
Band Festival. UBC Jazz Ensemble, Fred Stride, director. Music Recital Hall at 12:30pm. Call 822-5574.

Seminar
Cytochrome P450 Peroxide/Peroxygenase - Dependent Metabolic Activation of Xenabiotics. Dr. M Reza Amari, Pharmaceutical Sciences. Cunningham 160 from 12:30-1:20pm. Call 822-4645.

Occupational Hygiene Program Seminar
Prevention And Early Intervention For Back Injuries. Annalee Yassi, U of Manitoba. Vancouver Hosp/HSC, UBC Koerner G-279 (ground floor) from 12:30-1:30pm. Call 822-9861.

Weekly Seminar
Effect Of Tertiary Coagulation And Flocculation Treatment On Bleached Kraft Mill Effluent Quality. Andrew Hodsgon, Chemical Engineering. ChemEng 206 at 3:30pm. Call 822-3238.

Mathematics Colloquium
Fractures And Frontiers. Anthony Peirce, Mathematics. Mathematics 100 at 3:30pm. Refreshments Math Annex 1115 at 3:15pm. Call 822-2666.

Physical Chemistry Seminar
Chemical Equilibria In Capillary Electrophoresis. David Chen, Chemistry. Chemistry D-225 (center block) at 4pm. Call 822-3266.

Concert
Band Festival. 15th Field Artillery Band, Richard van Slyke, director; Pacific Wind Ensemble, David Branter, director. Chan Centre at 7:30pm. Call 822-5574.

Next calendar deadline: Oct. 21

Saturday, Nov. 1

Concert
Band Festival. UBC Symphonic Wind Ensemble, Martin Berinbaum, director. Chan Centre at 7:30pm. Call 822-5574.

Cecil And Ida Green Lecture
From Homosexual To Bisexual: Erotic Dissonance At The End Of The Century. Jonathan Dollimore, Graduate Research Centre for the Humanities, Sussex U. IRC #2 at 8:15pm. Call 822-4636.

Notices

Volleyball
Faculty, Staff and Grad Student Volleyball Group. Every Monday and Wednesday, Osborne Centre, Gym A from 12:30-1:30pm. No fees. Drop-ins and regular attendees welcome for friendly competitive games. Call 822-4479 or e-mail: kdcs@unixg.ubc.ca.

Morris and Helen Belkin Art Gallery
Theodore Géricault. The Alien Body: Tradition In Chaos. Masterworks from the Louvre, Ecole des Beaux-Arts, Bibliotheque Nationale, Paris. Continues to Oct. 19. Adults $5, seniors/students $3.50. Faculty/students/staff, free. Morris and Helen Belkin Art Gallery, Tues-Fri from 10am-5pm, Sat-Sun from noon-5pm. Call 822-2759.

Surplus Equipment Recycling Facility
Weekly sales of furniture, computers, scientific etc. held every Wednesday from noon-5pm. SERF, Task Force Building, 2352 Health Sciences Mall. Call 822-2582.

Faculty Development
Would you like to talk with an experienced faculty member, one on one, about your teaching concerns? Call the Centre for Faculty Development and Instructional Services at 822-0828 and ask for the Teaching Support Group.

UBC Zen Society
Each Monday during term (except holidays) Meditation Session. Asian Centre Tea Gallery from 1:30-2:20pm. All welcome. Call 228-8955.

Parents with Babies
Have you ever wondered how babies learn to talk? Help us find out! We are looking for parents with babies between four to 15 months of age to participate in language development studies. If you are interested in bringing your baby for a one-hour visit, please call Dr. Janet Werker's Infant Studies Centre, Psychology, 822-6408 (ask for Monika).

UBC Medical School
Needs male and female volunteer patients of any age, either healthy or ill to help students learn how to interview and complete a physical examination (external only). The total time for each teaching session is between two-four hours, Tues-Thurs. p.m. Travel expenses will be paid. Call Vancouver Hospital/HSC 875-5943.

Do You Have Patellar Tendinitis (Jumper's Knee)?
Subjects are required for a study that will be using a nuclear medicine technique to examine the presence of inflammatory cells at the patellar tendon. Subjects aged 20-35 years with unilateral patellar tendinitis symptoms are encouraged to contact Dr. MacIntyre at 822-0799.

10th Annual B.C. HIV/AIDS Conference
HIV In Canada Today. Learning From Each Other. October 26-28, 1997. Westin Bayshore Hotel, Vancouver. Designed as a skills building format for individuals from a variety of backgrounds concerned about HIV and AIDS. Sponsored by Continuing Education in the Health Sciences, UBC. For further information call (604) 822-4965 or fax (604) 822-4835 or e-mail: elaine@cehs.ubc.ca.

Museum of Anthropology
Current Exhibits. Written In The Earth. An exhibit exploring the roots of Coast Salish Art. Continues to Dec. 31. From Under The Delta: Wet-Site Archaeology In The Lower Fraser Region Of BC. Continues to April 1/98. 6393 N.W. Marine Drive. Hours of operation are Wed.-Sun 11am-5pm. Tuesday 11am-9pm. Free 5-9pm. Call 822-5087.

Studies in Hearing and Communication
Senior (65 years or older) volunteers needed. If your first language is English and your hearing is relatively good, we need your participation in studies examining hearing and communication abilities. All studies take place at UBC. Hearing screened. Honorarium paid. Please call The Hearing Lab, 822-9474.

CRSG
The Clinical Research Support Group which operates under the auspices of the Department of Health Care and Epidemiology provides methodological, biostatistical, computational and analytical support for health researchers. For an appointment please call Laurel Slaney at 822-4530.

14th International Seating Symposium
Feb 26-28/98. Pre-Symposium Workshop, Feb. 25/98. Vancouver, B.C. Call (604) 822-4965. E-mail: elaine@cehs.ubc.ca.

Parents with Toddlers
Did you know your child is a word-learning expert? Help us learn how children come to be so skilled at learning new words! We are looking for children (two-four years old) and their parent(s) to participate in language studies. If you are interested in bringing your child for a forty five minute visit please call Dr. Geoffrey Hall's Language Development Centre, Psychology at UBC, 822-9294 (ask for Kelley).

Boomerang Family Research
The Counselling Psychology Department is looking for adults who have returned home to live. They and their parents are invited to participate in a study focusing on the experience, inter-personal relations and responses to this change in the family. Involves confidential interviews. Please call Michele at 269-9986.

UBC Campus Tours
The School and College Liaison Office offers guided walking tours of the UBC campus most Friday mornings. The tours begin at 9:30am and run for 90 minutes. Interested students must pre-register for the tours at lease one week in advance by calling (604) 822-4319.

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Botanist, chemists win top prizes for work in their fields

Botany Prof. Anthony Griffiths received the Genetics Society of Canada Award of Excellence.

In addition to his research on Neurospora plasmids, Griffiths is seriously concerned with teaching at the undergraduate level and in schools. He is senior author of the top-selling genetics textbook, *Introduction to Genetic Analysis*, now in its sixth edition. He is also on the board of directors of the Association for the Promotion and Advancement of Science Education (APASE), a non-profit organization that focuses on science and environmental education at the elementary level.

Griffiths is currently secretary of the International Genetics Federation.

Chemistry Prof. Brian James has received the E.W.R. Steacie Award in Chemistry for distinguished contributions to the field.

James' research interests focus on the utilization of cheap and abundant common gases such as hydrogen, oxygen, and carbon monoxide. In the presence of suitable metal-based catalysts in solution (so-called homogeneous catalysts), the gases react with organic compounds and can generate, for example, materials of value such as pharmaceuticals and agrochemicals.

Chemistry Prof. Don Douglas has received the Fisher Scientific Award for his contributions to analytical chemistry and particularly to mass spectrometry. He has also been elected a Fellow of the Chemical Institute of Canada. Douglas holds the NSERC-SCIEX Industrial Chair in the Dept. of Chemistry.

His current research interests include new techniques in mass spectrometry for determination of trace elements, new instrumentation for mass spectrometry and the development of new mass spectrometric methods for the study of structures of biomolecules.

UBC's own to play key innovation role

Prof. Keith Brimacombe, director of UBC's Centre for Metallurgical Process Engineering, has been appointed president and chief executive officer of the Canada Foundation for Innovation.

The foundation was created in the 1997 federal budget as an independent organization to support innovation and research. It will provide financial support for the modernization of research infrastructure at Canadian post-secondary educational institutions and research hospitals in the areas of health, environment, science and engineering.

Brimacombe forged his reputation in industry and academia by combining complex mathematical modelling with fundamental studies of physical and chemical phenomena, and direct measurement of industrial processes, particularly in Canadian steel mills.

Earlier this year he was awarded 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).

Foundation Chair John Evans also announced the appointments of nine new members of the foundation including UBC microbiology Prof. Julia Levy, a founder of QLT Phototherapeutics Inc. UBC President Martha Piper was appointed as a member earlier this year.

Brimacombe will be responsible for developing and implementing policies and programs designed to modernize Canada's research infrastructure. They will also build partnerships with the private, voluntary and public sectors to invest in research infrastructure projects in Canadian institutions.

Whiplash education effort to hit the road

by Hilary Thomson

Staff writer

Whiplash is a pain in the neck.

It's responsible for more than 50,000 soft-tissue injury claims costing close to $500 million in B.C. every year.

And it hurts.

That's why this fall representatives from UBC's Continuing Medical Education began working with doctors in communities throughout B.C. to design a new education program focused on whiplash-related neck and back injuries.

Called the B.C. Whiplash Initiative, the program will be the largest continuing medical education effort in the province's history.

"Management of whiplash is evolving," says Dr. David Lirenman, director of Continuing Medical Education.

"We now recognize that prolonged bed rest and the use of neck collars may actually delay recovery. We're recommending early exercise for most whiplash injuries."

The program will set out the broad range of problems commonly referred to as whiplash and offer a system for classifying symptoms according to severity.

Neck and shoulder pain, headache and dizziness, nerve tingling in the arms, difficulty swallowing, and visual or hearing problems are just some of the symptoms that may be experienced following a whiplash incident.

The program will also cover therapy techniques, guidelines for writing medical-legal reports and suggestions for preventing chronic neck pain.

Organizers expect doctors who have been identified by their peers as effective educators will start conducting 25 half-day and one-day sessions late this fall.

The initiative will also include teleconferences for doctors in rural locations, an interactive Internet site, an expanded whiplash curriculum for undergraduate medical students and one-hour sessions presented by the B.C. branch of the College of Family Physicians of Canada.

The program was developed in association with the Faculty of Undergraduate Medical Education, the Dept. of Family Practice, and the College of Family Physicians of Canada. It is one of more than 40 different programs offered by Continuing Medical Education.

The initiative is supported through an educational grant from the Insurance Corporation of B.C.

on a sunday afternoon...

walking through the forest after a spring rain

playing a round of golf on your local course

cantering along the trails on horseback

a game of racquetball or tennis on campus

upping your pulse rate on a mountain bike trail

an afternoon matinee at the Varsity

meet friends at the beach for a sunset stroll

lazy sunday shopping on 10th avenue

curl up on the couch with a good book

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NEW HOME GALLERY MASTER BUILDER

Stephen Forgacs photo

Petrologists Prof. Kelly Russell and Maya Kopylova examine a sample from a diamond-bearing kimberlite in the Northwest Territories. Kopylova uses an electron microprobe to chemically analyse rocks carried from deep in the earth's mantle to the surface by kimberlite magma. Thermodynamic equations then provide clues to whether the kimberlite is likely to contain diamonds.

Diamond researchers first to publish findings

by Stephen Forgacs

Staff writer

UBC researchers are about to make diamond exploration history with the publication of evidence supporting claims that the Slave region in Canada's Northwest Territories may hold the biggest diamond find of the century.

What is most intriguing, however, is that the research results — critical to the diamond exploration industry — are being published, said Prof. Kelly Russell, head of UBC's Igneous Petrology Lab.

"Our discoveries and results on the Slave mantle are new to science. The irony is, however, that many industry labs have similar scientific results which will never be published," he said. "Our corporate sponsor, Canamara Geological, is remarkable in that they have provided us with valuable samples and are allowing us to publish the results more or less immediately.

"The major corporations won't give you the rocks. They're afraid of giving up a competitive edge. We're getting rocks that most petrologists would die for."

By analysing rock samples forced to the surface of the 2.6-billion-year-old Slave craton — a very stable portion of the earth's crust and upper mantle — in explosive torrents of molten rock called kimberlite, petrologist Maya Kopylova and Russell have constructed detailed geotherms—geological profiles of the earth's temperature with increasing depth and pressure. They are also gaining insight into the composition of the earth's mantle in the region beneath the Slave craton.

"We're changing the view of the Slave mantle. Rather than a homogenous region of the deep earth, we are showing it to be diverse in composition and highly disorganized," said Kopylova, who studied in Russia and Australia and did post doctoral work in South Africa before coming to UBC.

Information obtained by studying kimberlite samples and their xenoliths (chips of mantle material) suggests the kimberlite pipes in the region are characteristic of those in which diamonds can be found.

A kimberlite pipe is formed as kimberlite magma travels rapidly, from depths as great as 400 km, toward the earth's surface. From a depth of one or two kilometres, the molten material explodes violently through the earth's crust, carrying fragments of mantle rock that it has collected along the way and, in the right conditions, possibly diamonds to the surface. The magma falls back to earth forming a mound of rock on the surface at the top of the conical kimberlite pipe.

The geotherms show that at least some of the kimberlite pipes in the region, which originated between 52 and 400 million years ago, passed through depths and conditions in which diamond deposits are formed.

In South Africa, the world leader in diamond production, kimberlite pipes can be as large as 800 metres in diameter at the surface. In contrast, the kimberlite pipes in the Slave craton tend to be no larger than 100 metres in diameter.

Millenniums of glaciation and erosion have worn away the upper portion of the cone, leaving a progressively narrower portion exposed. Glaciers often carried material from the kimberlite pipes thousands of kilometres, leaving kimberlite debris along the way, before dumping their burdens of rock into the ocean.

The kimberlite samples Kopylova and Russell have examined came from a kimberlite pipe known as Jericho and held by Canamara Geological, a Canadian company that is one of several companies who have acquired land in the region.

Foreign rocks, pieces of the earth's mantle and crust carried to the surface with the molten kimberlite, have provided the researchers with valuable information. The rocks include primarily peridotite, which comprises the bulk of the earth's mantle, eclogite, which makes up the rest of the mantle, and limestone which provides clues as to age.

Kopylova uses the Dept. of Earth and Ocean Sciences' electron microprobe to perform chemical analysis of the minerals from mantle xenoliths. Using her findings, she has succeeded in mapping a "diamond window," where mantle pressures and temperatures are right for diamond formation.

And, by comparing geotherms derived from analysis of the Jericho pipe to geotherms from other kimberlite pipes in North America and South Africa, Kopylova and Russell can determine whether other Canadian pipes are likely to have visited diamond deposits, generally at about 120 km beneath the surface, on the voyage upwards.

This information might have made the search for diamonds undertaken by Charles Fipke somewhat easier.

Fipke, who graduated from UBC with a BSc in 1973, is credited with the initial discovery of the diamond-rich area. Fipke spent 20 years exploring the Northwest Territories, said Russell, before finding glacial mineral deposits that hinted at the presence of kimberlites and possibly diamonds at their point of origin. Using the direction of glacial flow as a guide, he then travelled 1,200 km up-ice to find the kimberlite pipes in the Slave craton region.

Forests earn passing grade, says report

A panel of experts led by Forestry Prof. Gordon Baskerville gave Canada's National Forest Strategy Coalition a passing grade after its first five years of operation.

Baskerville, head of the Forest Resources Management Dept., says Canada is making reasonable progress towards the coalition's goal of sustainable forest management.

"In 1992 it was clear that we were not making the most of forest resources. Now there are areas of tremendous progress, but there are still some big holes," he says.

While the panel is pleased that the total area of protected forests has expanded, they express some doubt as to whether the protected areas truly represent the full diversity of forest ecosystems.

The panel also lauds the development of a national framework of indicators and criteria for the sustainability of forest management. According to the panel, the framework helps address the urgent need for objective measures for testing and demonstrating sustainability.

Among the coalition's commitments that remain unfulfilled is the need for a complete ecological classification of forest lands to deal with the many different forest ecosystems in Canada. The panel notes progress in this area, but only in certain parts of the country.

Another of the coalition's unfinished tasks is the completion of forest inventories that include information about values other than timber, such as water resources, and wildlife and their habitats.The panel warns that without regular inventories, there is no way to quantify problems or to measure the progress of solutions.

The coalition, comprised of more than 90 organizations across Canada representing industry, governments, environmentalists, aboriginal groups and academics, formed in 1992.

At that time, they made some 100 commitments to form the five-year plan know as the Canada Forest Accord.

The four-member panel included: Al Davidson, assistant deputy minister, Parks Canada; Daniel Lamarre, former president of the National Forest Capital of Canada; and Hollis Murray, former assistant director general for the Forestry Dept. of the United Nations.

When the coalition presents its new five-year accord in February, Baskerville hopes several issues will draw special attention. He cites: creating ways to allow First Nations people to contribute more to sustainable forest management; finding effective ways to measure sustainable levels of valued forest components other than timber, such as wildlife populations; training foresters in the rapidly evolving knowledge base needed to attain sustainable forest management; and encouraging private woodlot owners to embrace sustainable forest management practices.

Genetic Centre of Excellence gets federal funding guaranteed to 2005

The Canadian Genetic Diseases Network (CGDN), a national Centre of Excellence based at UBC, has been awarded $18 million in research funding by the federal government.

The award allows the network to continue research into human genetic disease for the next four years, with renewed funding committed for an additional three years to 2005.

Funding was recommended by an international peer review panel.

"This award ensures that Canadian scientists remain at the forefront in international human genetic disease research," says network founder Prof. Michael Hayden of the Dept. of Medical Genetics. "It will also form a basis for strengthening our ongoing partnerships with Canadian industry and the scientific and academic communities nationwide."

Funding will be directed into an expanded research program, called From Genes to Therapies — a comprehensive and interdisciplinary approach to genetic diseases research.

The program's four interrelated research themes will focus on gene identification, gene function, development of clinical therapies and assessment of genetic susceptibility to disease.

Since its founding in 1990, CGDN research has discovered genes connected with diseases such as Alzheimer's, Huntington disease, and breast and ovarian cancer. The research has also led to the launch of six biotechnology companies, including NeuroVir Inc., which is located at UBC.

Seven network scientists are based in British Columbia — at UBC, B.C.'s Children's Hospital and the University of Victoria. They are part of a network of 50 members and their research teams, located at 18 universities, hospitals and research centres across Canada.

CGDN has provided an interdisciplinary training environment for over 300 scientists.

Approximately 60 per cent of Canadians will develop or die from a disease with a significant genetic component.

The recent award brings the federal government's total investment in CGDN to over $50 million.

News Digest

UBC scientists have received $5.5 million in grants from the Medical Research Council of Canada (MRC)—the fourth largest MRC funding award in Canada and the largest in Western Canada this year.

The funding includes 25 operating grants which support individual research over a one to five year period.

Investigations funded by the grants range from studies of posture and movement in Parkinson's disease to research on the effects of anesthetic on neurons in the front of the brain and include researchers in biochemistry, pharmaceutical sciences and rehabilitation sciences.

A five-year award totalling $152,950 was given to the Faculty of Medicine for a graduate student working on an MRC-funded research project.

Four fellowship awards of $90,000 each over three years have also been given to cancer researcher Carolina Abramovich, medical geneticist Abigail Hackam, zoologist Gordon W. Hiebert and biochemist Mark W. Paetzel.

The grants UBC scientists received were surpassed only by the universities of Toronto and Montreal and McGill University.

UBC research has created 71 spin-off companies during the last 12 years employing close to 1,500 people and attracting almost $634 million in private investment.

The MRC is the major federal agency funding health research and training at Canadian universities, research institutes and teaching hospitals.

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UBC alumnus and Chancellor Emeritus Donovan Francis Miller died Sept. 30. He was 80.

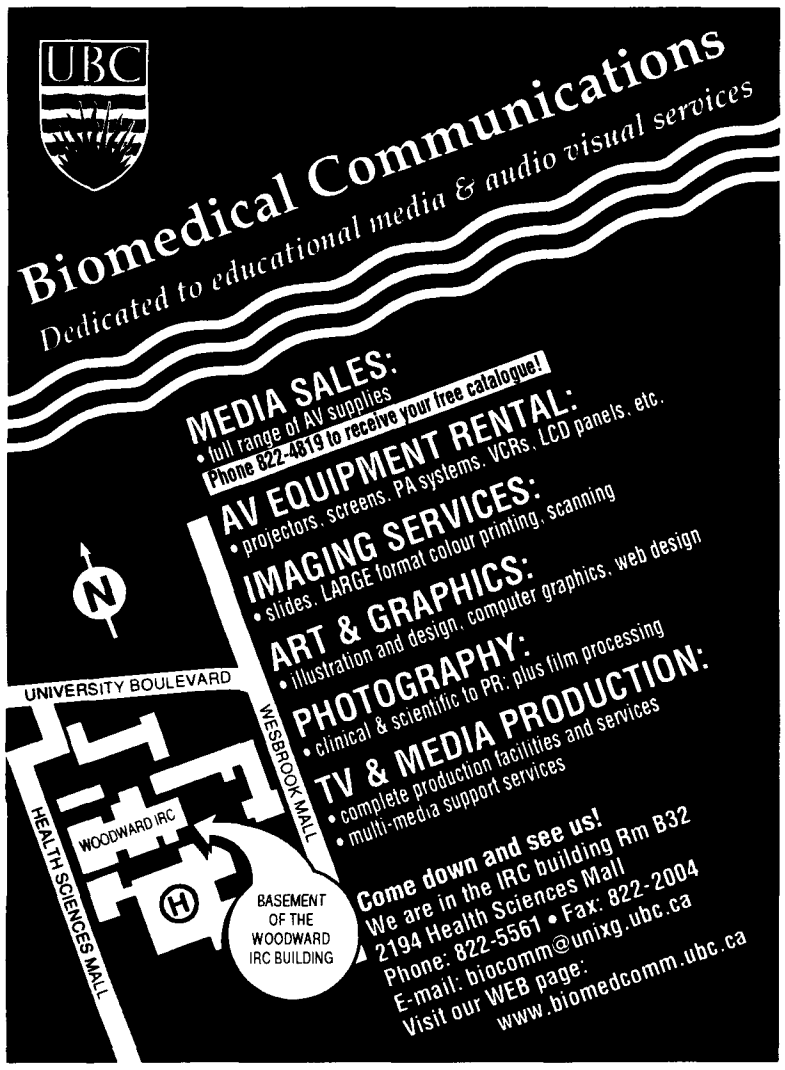
Miller, who served as chancellor from 1975 to 1978, had a long record of involvement with the university.

He attended UBC after serving with the Royal Canadian Naval Volunteers Reserve during the Second World War and graduated with a bachelor's degree in Commerce and Business Administration in 1947.

He joined the Canadian Fishing Company Ltd. the same year as manager of personnel and industrial relations and progressed through the company's ranks, becoming president and general manager in 1966 and vice-chairman of the board in 1974.

At UBC, he served as chair of the UBC Alumni Annual Giving Committee in 1958, president of the Alumni Association in 1960, and as a member of Senate from 1962 to 1970. He was a member of the Board of Governors from 1963-72.

He was awarded the Order of Canada and an honorary doctor of laws from UBC. He is survived by his wife Katherine Mary Miller, their four children and other family members.



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The deadline for the October 30, 1997 issue of *UBC Reports* is noon, October 21.

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ENGLISH COUNTRY GARDEN B & B. Warm hospitality awaits you at this centrally-located viewhome. Lg rms w priv bath, tv, phone, tea/coffee, fridge, full breakfast. Close to UBC, downtown & bus routes. 3466 W. 15th Ave. Call 737-2526.

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HAMPTON PLACE 2 BR suite available Jan 98. 1,000 sq ft, south facing on campus w facilities incl jacuzzi, gym, lounge, guest suites. $1400 unfurnished. $1700 furnished. Call 222-4496.

Next ad deadline
Oct. 21

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SMALL TOP FLOOR 2 BR fully furnished, fully equipped kitchenette, TV, VCR, telephone, linens available. Suitable for visiting adults from Nov to May. $1200/mo; $388/wk; $55/night. Call 738-2228.

UBC GATES Furnished heritage house. 3 BR, den, 2 bath, newly painted. Close to UBC, shops, schools, parks. Lease min 6 months. Avail Jan 1/98 to Dec 31/98 (end date flexible). NS/NP. $1975/mo incl. util and gardening. Call 228-9874.

BALFOUR HOUSE B & B Lg character mansion. Comfortable, clean, reasonably priced, direct bus to UBC. Set in historic Shaughnessy. From $45/night incl full breakfast. Free parking. Call 730-9927.

House Exchange

SABBATICAL YEAR 1998 - ENGLAND Professional couple wish to exchange 300 yr old cottage plus car in Devon for house in Vancouver. Norman and Miriam Wakefield, 2 The Mill, Landkey, Barnstaple, Devon EX32 ONS. Call 011-441-271-830277 or 454-9518 (Vancouver).

SABBATICAL SAN DIEGO Furnished 3 BR house 15 min Scripps Oceanography, beaches, UCSD. Avail Jan-Aug 1998. US $1200 (neg) or trade for Vancouver home same period. Call Bob Shadwick (619) 534-7973, rshadwick@ucsd.edu.

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Services

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For Sale

MAC LC475 20MB RAM/160MB HD, Stylewriter II. 14" monitor, radshield, ext keyboard, $950. Motorola StarMax 3000/200 mini-tower Mac clone, 200 MHz PowerPC 603e, 32MB RAM/2.5GB HD, 8XCD-ROM, 1MB VRAM, 256K L2Cache, 5PCI Slots. $1950. Call 731-4023

MACINTOSH POWERPC 6200 15" monitor, 20MB RAM/1.2GB HD, 4XCD-ROM, 14.4 fax/modem, tons of s/w. $1350. Motorola StarMax 4000/200 Desktop Mac clone, 200MHz PowerPC 604e, 16MB RAM/1.2GB HD, 8XCD-ROM, 2MB VRAM, 512K L2Cache, 3PCI Slots. $2250. Call 739-1907.

Events

ICONOGRAPHY COURSE 6 days at St. Mark's College. Taught by renowned Iconographer from Russia, Vladislav Andrejev and his assistant. Nov 10-15, 6 hrs per day. Call 874-0891.

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Violinist Marc Destrubé (left), Michelle Spellar and other members of the Pacific Baroque Orchestra will make music at the School of Music's Recital Hall Sunday afternoons this fall.

UBC's first resident ensemble goes for baroque this fall

The Pacific Baroque Orchestra, a professional Vancouver group recently named UBC's first ensemble in residence, will play a series of concerts on campus beginning Oct. 19.

The group performs 17th- and 18th-century music using period instruments and performance practices.

Their UBC appearances mark a new level of association with the School of Music. Faculty members John Sawyer, Doreen Oke and school director Jesse Read have been involved since the group's inception in 1991. They were joined recently by Marc Destrubé.

As well, several UBC music students have played in the orchestra after training in period instrument performance in the school's Collegium Musicum program, which Sawyer directs.

Last season, four UBC students — past and present— played with the orchestra, and over the past several years about nine students have been involved.

Pacific Baroque Orchestra was in residence for a week last summer during the annual Vancouver Early Music Workshop organized by Early Music Vancouver.

Future joint ventures could involve workshops for UBC students with international soloists engaged by the orchestra for its concerts.

The 1997-98 season features Sunday afternoon concerts at the School of Music's Recital Hall, which follow Friday or Saturday evening performances at St. Mark's Trinity Church in Kitsilano.

The first concert features concertos by J.S.Bach, with soloists Destrubé and oboist Sand Dalton, on Oct. 18 and 19.

For information on future concerts, call the School of Music at 822-3113.

Experts warn Fraser Basin on edge of ecological ruin

by Sean Kelly

Staff writer

A little more than a century ago the area extending from Vancouver to the town of Hope was a forest of giant trees with extensive swamps and wetlands along the river courses.

That area is now being swallowed by the growing metropolis of Greater Vancouver, and the newly released $2.4 million Fraser Basin Ecosystem Study warns that present trends are leading us directly away from environmental sustainability.

"The lower Fraser Basin exemplifies all the social, environmental and economic problems of modern industrial nations," says Prof. Michael Healey, principal investigator and an ecologist with the Institute for Resources and Environment.

"Rapid population growth, changing ethnic makeup, conflict between rural and urban lifestyles, and clashes with aboriginal peoples struggling to maintain traditional ways are problems which are not going away and it is high time that we faced up to them."

The researchers call for changes to the way we manage population, land and resources, consumption and waste management.

Indicators of serious environmental decline cited in the report include high nitrogen pollution in groundwaters and the presence of visible abnormalities on more than 90 per cent of the fish samples taken from the Fraser River.

As many as 50 streams in the greater Vancouver area that once supported runs of Pacific salmon have been turned into storm sewers, and many of the remaining streams are being degraded because of pollution from automobiles, agriculture and other sources.

The study also indicates a high level of concern among British Columbians about environmental problems, but suggests concern doesn't always translate into action.

Only 14 per cent of people surveyed said they use public transit, even though that is the activity with the greatest benefit to the environment.

"The infrastructure isn't responsive to alternate kinds of behavior," explains Healey.

He suggests that the infrastructure would be improved if governments paid up front to improve rapid transit instead of waiting until ridership increases.

The four-year study involved 23 experts from 20 disciplines at the university, including planning, geography, sociology, fisheries, economics, commerce, biological sciences, social sciences and medicine. More than 40 graduate students took part.

The team makes 44 recommendations intended to help governments and individuals move towards sustainability, including:

- Each community should reduce its dependence on resources belonging to other communities and nations.
- The federal government should develop more effective indicators of environmental and social well-being. The indicators used now, such as gross domestic product, often misrepresent the costs of resource depletion as a benefit.
- Individuals should use their purchasing power to support environmentally and socially friendly products and manufacturing products.

Funding for the study was provided by the federal government's Green Plan.

Details of the report are available on the Institute's Web site at www.ire.ubc.ca/ecoresearch. Copies of the complete report are available from the Institute of Resources and Environment by calling (604) 822-4705.

People

by staff writers

Prof. **Herbert Rosengarten** has been appointed Executive Director in UBC's President's Office.

Rosengarten served as head of the English Dept. from 1987 to 1997, was president of the Faculty Association, and sits on Senate. He has also participated on many search, advisory and review committees at UBC and for various provincial bodies.

As executive director, he will be responsible for assisting the president and vice-presidents on a variety of strategic initiatives; interacting with external and internal constituents including students, faculty, staff, members of the Board of Governors and Senate, as well as with university visitors, government officials and members of the Canadian and international business community; overseeing projects, and undertaking research and analysis on a wide variety of issues.

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Max Cynader has been named head of the new Brain and Spinal Cord Research Centre.

A winner of the Science Council of B.C.'s Gold Medal in Health Sciences in 1995 for his research in visual development, Cynader is also a fellow of the Canadian Institute for Advanced Research.

Last year, he and fellow UBC scientists launched NeuroVir, a biotechnology company which provides gene therapy for brain tumours, other cancers and diseases of the nervous system.

Located at the Vancouver Hospital and Health Sciences Centre (VHHSC), UBC site, the centre will focus on researching central nervous system disorders including Parkinson's disease, multiple sclerosis, stroke, schizophrenia, spinal cord repair and vision impairment.

Cynader will continue to be director of research in the Dept. of Ophthalmology where he investigates how the brain processes visual and auditory information.

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Michelle Lamberson, a lecturer in the Dept. of Earth and Ocean Sciences and educational technology coordinator for the Faculty of Science, has been recognized by the Geological Society of America (GSA), in partnership with Educom, for her efforts to improve undergraduate teaching and learning through the effective application of information and communications technologies.

Lamberson

The 1997 Educom Medal Awards program winner was cited for her innovative uses of technology and for her efforts to disseminate her findings which have benefited the educational process within the field of geology.

Lamberson's pioneering work on World Wide Web resources for undergraduate geoscientists serves as a model for educators seeking to maximize the Web's teaching potential. The site Lamberson developed for Earth and Ocean Sciences (www.science.ubc.ca/~eoswr/) includes course Web sites, interactive learning modules, exercises, discipline-specific databases, and developer tools.

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Dr. **Lawrence Green**, professor of Health Care and Epidemiology and director of the Institute for Health Promotion Research, received the Advocacy Award from the Association of State and Territorial Directors of Health Promotion and Public Health Education at their recent annual meeting in Atlanta.

The association recognized Green for his contributions to the advancement of health promotion and education through scientific contributions to policy and practice.

The award is made jointly with the U.S. Centres for Disease Control.

• • • • •

Dr. **Charles Kerr** has been appointed to the Heart and Stroke Foundation Chair in Cardiology.

Funded by the foundation with assistance from individuals, organizations, and the B.C. government, the $1-million chair will focus on improving education and research into strokes and heart disease.

A specialist in irregular heart rhythm, or arrhythmia, Kerr has served as head of Cardiology since 1988. A graduate of UBC's Faculty of Medicine, he joined the faculty in 1981.

Kerr is currently chair of the Heart and Stroke Foundation's Cardio/Cerebrovascular Research Advisory Council.

CANADA'S YEAR OF ASIA PACIFIC 1997 L'ANNÉE CANADIENNE DE L'ASIE-PACIFIQUE

APEC '97 Update

Canada 1997

What is APEC and APEC '97?

Asia Pacific Economic Co-operation (APEC) is an economic forum at which issues such as trade initiatives, trade barriers and customs procedures are discussed. Meetings are held each year in one of the 18 APEC member economies. Canada is host for this year's meeting.

The Vancouver APEC meetings begin Nov. 19 with several days of meetings for senior officials and ministers responsible for trade and foreign affairs at the Vancouver Trade and Convention Centre (VTCC).

On Monday, Nov. 24, APEC leaders meet in the VTCC, followed by a meeting the next day, Nov. 25, at UBC in the Museum of Anthropology, with a luncheon at Norman MacKenzie House.

The reason for the one-day meeting is to provide a retreat setting where leaders and their senior advisers can meet in relative isolation. A similar retreat was held at APEC '96 in Manila. APEC '97 is being funded by the federal government and corporate sponsorships.

APEC initiatives at UBC

There is a strong academic link to APEC. A number of UBC's professors have provided essential background materials for ministerial meetings leading up to the leaders' meeting. Others are involved in related conferences on Asia Pacific issues. Students are also involved, with many acting as volunteers for the leaders' meeting. Other students are organizing conferences and forums to heighten awareness and understanding within the university community on issues ranging from trade liberalization to human rights.

Other benefits that will leave a lasting legacy include a number of initiatives which will be announced in coming weeks, such as an exhibit of Asian art at MOA, undergraduate and graduate scholarships, a chair in Buddhist Studies, a Centre for Contemporary Islamic Studies and a program in Australian-Canadian relations.

As well, about 20 UBC faculty and graduate students are involved in the People's Summit, an alternative, parallel conference to APEC.

UBC believes that APEC will give the university an international profile similar in scope to the global attention brought by Michael Smith's Nobel Prize and the 1993 Clinton-Yeltsin Summit. With about 3,000 media expected for APEC, media coverage will bring UBC to the attention of the world.

Impact on campus

An area of the north-west corner of campus will be most directly affected — especially from 6 p.m., Nov. 24, to 6 p.m., Nov. 25 — but within that area the impact will vary. For example, the Museum of Anthropology will be closed to the public beginning Nov. 19. More information on the exact nature of the effects will be available at the Nov. 6 public information meeting.

Traffic will be affected in several ways. Chancellor Boulevard traffic will be re-routed onto Wesbrook Mall. Approaching campus from the south, Marine Drive traffic will be re-routed through Gate 6.

The Rose Garden Parkade will be closed. Students whose parking passes restrict them to the Rose Garden Parkade will be given special allowances to park elsewhere. With the temporary loss of 900 parking spaces, it is strongly suggested that commuters use car pools or transit, or perhaps even avoid the campus if possible on Nov. 25.

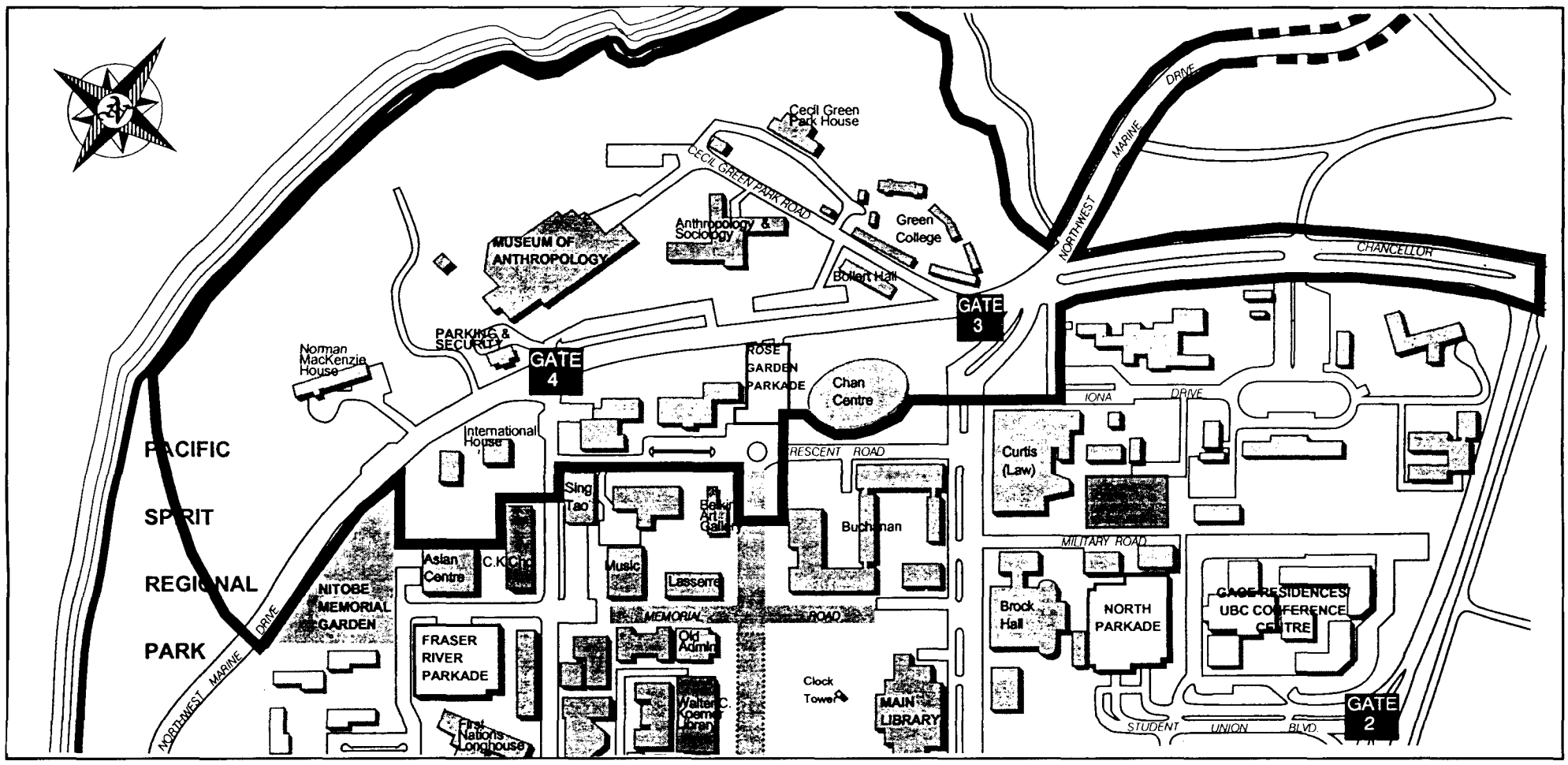
Residents of Green College will not be prohibited from entering or leaving their homes, although there may be some restrictions, such as when motorcades are passing by.

Site proposal overviews

At one time, it was hoped that one legacy of the APEC meeting would be an ethno-botanical garden at MOA. However, fund raising did not meet expectations, so now the focus is on maintenance and clean-up of the existing landscaping and pathways.

The reflecting pool at the rear of the museum will be filled with water for Nov. 25. Public Works Canada conducted seepage testing to ensure that this would not jeopardize the integrity of nearby slopes.

In Norman MacKenzie House, work is proceeding on renovations to the atrium. Interior walls which blocked views through the old atrium have been removed and the exterior glazing and walls replaced, providing a more open and functional space with ocean views. Funds for the atrium were donated by National Glass.



The boundary noted in the map above outlines the area of campus that will be affected by the APEC '97 leaders' meeting Nov. 25. Access in this area will be restricted or prohibited for the day. More details will be available at the public meeting to be held Thursday, Nov. 6 from 12:30-1:30 p.m. and 7:00-8:00 p.m. in Angus 104, 2053 Main Mall.

Find out more

THE UNIVERSITY OF BRITISH COLUMBIA

Public Meeting: More information about APEC and UBC's involvement will be available at a public meeting to be held Thursday Nov. 6 from 12:30-1:30 p.m. and 7-8 p.m. in Angus 104, 2053 Main Mall. For further information on the meeting call Carolyn McLean, UBC APEC Office, 822-2080; fax 822-1936; e-mail apec@unixg.ubc.ca.

Web page: Information can also be found on the Web at www.ubc.ca under "News, Events, and Attractions."