

## University proposes tuition fee guidelines

UBC President David Strangway has presented tuition fee and financial aid guidelines to the university's Board of Governors that set fee increases for a three-year period and bolster financial aid for students in need.

The guidelines propose that tuition increases in 1991-92, 1992-93 and 1993-94 be set at the annual Vancouver Consumer Price Index, plus 4.5 per cent. The CPI would be set as of

Dec. 31 of the preceding year.

The full text of the proposal is contained in an insert beginning on page 5 of this issue of UBC Reports.

Strangway said the university is seeking campus comment on the guidelines, which will be voted on by the Board of Governors at its February, 1991 meeting.

"We believe that guidelines on tuition fees and financial aid must be re-

sponsive to financial needs so that no otherwise admissible student is denied the opportunity to attend university solely for financial reasons," he said.

"By phasing in changes over a number of years, we will ensure that tuition fees and financial aid will be reasonably predictable."

The proposal designates a portion of the tuition increase for enhanced

student aid and another portion for an enhanced teaching and learning environment.

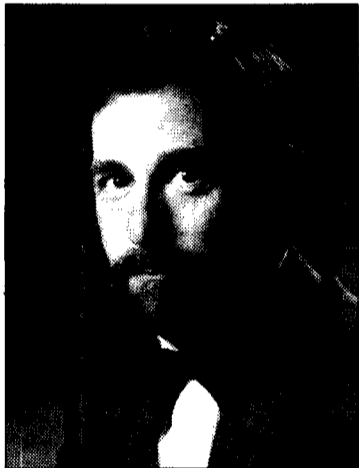
UBC already provides substantial aid for students through endowment, operating and research funds and by ensuring that students compete for awards offered outside of the university.

About 5,500 students receive \$27 million annually in provincial and fed-

eral student loans and grants. Over the past three years, the government of B.C. has increasingly met education costs through its student assistance program, Strangway noted.

Tuition fees now account for about 15 per cent of UBC's general purpose operating revenue, Strangway said, adding that the costs of operating universities will rise above inflation rates for the next few years.

## Goldberg appointed new Dean of Commerce and Business Administration



Goldberg

By ABE HEFTER

Michael Goldberg, Professor of Urban Land Policy in the Faculty of Commerce and Business Administration, has been appointed dean of the faculty.

Goldberg begins his six-year term on July 1, 1991. He replaces Peter Lusztig, who has headed UBC's business school for 14 years, the longest-serving dean in the faculty's

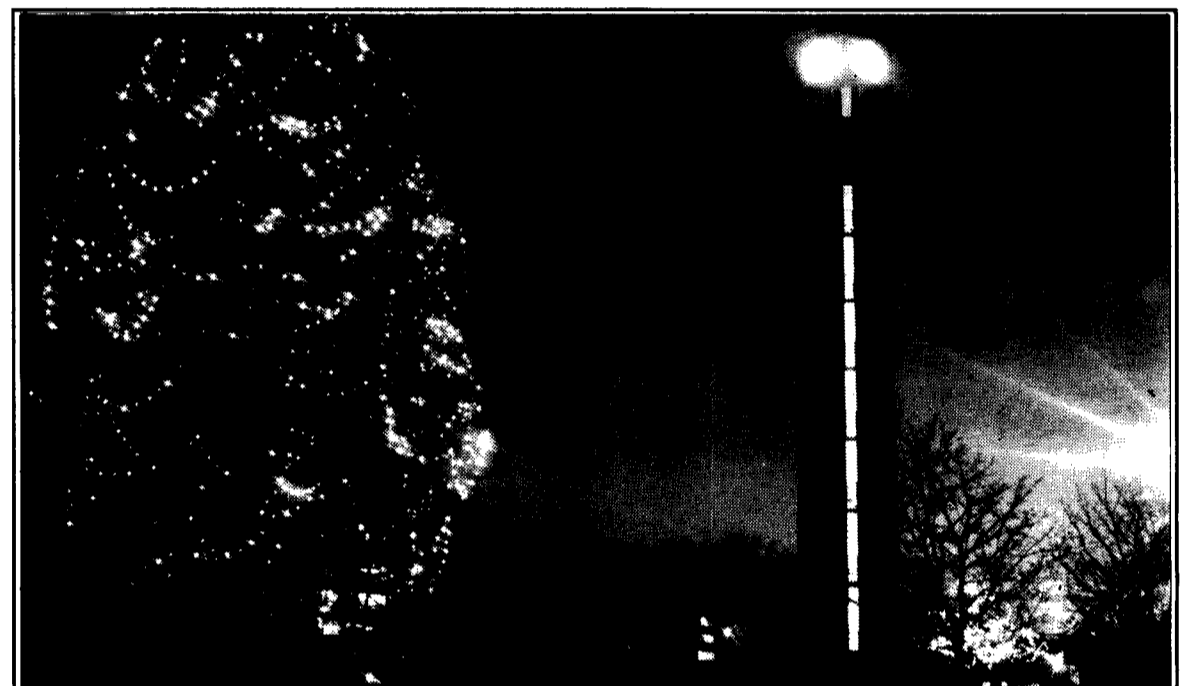
history.

"Dr. Goldberg is a distinguished scholar with an international reputation in the field of housing and urban land economics," said President David Strangway. "He has made the UBC urban land economics group one of the preeminent groups in the world and has served the community very well."

Goldberg, 49, was the Director of Development in the Faculty of Commerce from 1986-88 and Associate Dean from 1980-84. He is currently a member of the board of directors of UBC's Women's Resource Centre. His areas of research include housing economics, urban land markets, globalization of real property markets and the development of international financial centres.

Goldberg is currently executive director of I.F.C. Vancouver, a non-profit, provincially chartered society that promotes Vancouver as an international finance centre.

Dan Birch, Vice President Academic and Provost, said Goldberg's work on Vancouver as an International Finance Centre is only the most recent



Happy Holidays!

Giant Sequoiadendron tree beside the Main Library, dressed up for the season, with the Clock Tower in the background.

### Time out

Times change. Especially during holidays. Here is an update of the revised hours of operation for UBC buildings and services this holiday season.

UBC libraries are operating on extended hours throughout the exam period. All branches and divisions will be closed Dec. 22-23, Christmas Day, Boxing Day, Dec. 29-30, New Year's Day and Jan. 5-6. People are asked to check hours posted at each library or call 228-2077 for more information.

Coffee connoisseurs should be aware that Arts 200 and Roots closed Nov. 30; I.R.C. Snack Bar, Subway Cafeteria, and Yum Yums, Dec. 20; Edibles Snack Bar, Dec. 14; and Underground (Sedgewick) closes Dec. 19. All these food service outlets re-open Jan. 7. For more information call 228-2616. See CAMPUS on Page 2

example of his ability to relate to the international business community and to governments.

"These are abilities essential to the effective exercise of the deanship," said Birch.

During his 22 years at UBC, Goldberg has been invited to lecture in over 20 different courses in seven departments. He is currently Chair of the British Columbia Real Estate Foundation and a Commissioner of the B.C. Housing Management Commission.

## Supreme Court of Canada ruling upholds mandatory retirement

By CHARLES KER

UBC President David Strangway welcomed a Supreme Court decision which validates the university's retirement policy.

The Supreme Court of Canada ruled last week that mandatory retirement at age 65 is legal.

The landmark ruling overturned a judgment made earlier by the B.C. Court of Appeal regarding a case involving two former UBC employees.

"The judgment ends a period of uncertainty which was detrimental to the whole university community," said Strangway. "With that insecurity

removed, the university can move forward in a positive manner with its academic and financial planning."

Strangway added that the planning process will continue to foster and improve relations with retired staff and faculty.

"UBC is very appreciative of the service given by its retired staff and values the link which exists between them and the university after they retire."

In a 5-2 vote, Supreme Court justices said mandatory retirement places a legitimate limit on the constitutional

rights of the elderly.

The issue was taken to Canada's highest court by several university professors in Ontario and two UBC employees, all of whom wanted to work past the age of 65.

While conceding that forced retirement does violate the Charter right against age discrimination, the justices said the charter does not apply directly to universities, colleges and hospitals.

UBC's policy, which requires all academic and non-academic staff to retire by the age of 65, follows guidelines set out in the B.C. Human Rights

Act. The act applies to all provincial employees and permits mandatory retirement at age 65.

The Supreme Court decided that although the act's mandatory retirement provision was discriminatory on the basis of age, it was justifiable under Section 1 of the Charter.

"We're very pleased with the court's ruling as it backs our original position on the mandatory retirement issue," said Albert McClean, Associate Vice-President, Academic.

Mandatory retirement has been abolished in Quebec, Manitoba and the United States.

### Inside

**ROYAL COMMISSION:** Submissions by UBC call for greater collaboration between universities and hospitals in the area of health care. Page 2

**HEALTH RESEARCH CENTRE:** Centre for Health Services and Policy Research approved by UBC Senate and Governors. Page 10

**STUDENT RECRUITMENT:** Ways in which university seeks to attract the best students to UBC. Page 12

# University seeks portion of provincial health budget for medical research

By **CONNIE FILLETTI**

UBC President David Strangway has called for greater collaboration between the university and its affiliated teaching hospitals to help improve the province's health care system.

In a written submission to B.C.'s Royal Commission on Health Care and Costs, Strangway said that by working together in a complementary partnership, the university and the hospitals could greatly enhance standards in patient care, education and research in the health sciences.

"These functions are inextricably linked and the effectiveness of each institution depends on the mutual recognition of complementary roles and responsibilities," Strangway said.

"Facilitating the potent collaboration of the University of British Columbia and its affiliated teaching hospitals will secure unexcelled health care in this province, while simultaneously reducing demands on the public purse."

Most of the doctors on staff at the seven teaching hospitals affiliated with the university have UBC clinical faculty appointments. As well, several full-time professors in the Faculty of Medicine and others in the School of Nursing and Faculty of Dentistry, combine their teaching duties with clinical services to hospital patients.

Strangway told the commission that while the teaching hospitals have the

primary responsibility for patient care, UBC's contribution to clinical services is underfunded by an estimated \$9 million on an annual recurring basis.

He said this level of subsidy is an unacceptable burden to the university, and he called on the province to reimburse UBC for the clinical services it provides to the teaching hospitals and to the health care system.

In a separate submission to the commission, Dr. Martin Hollenberg, UBC's Dean of Medicine, asked the provincial Ministry of Health to allocate two per cent of its budget for research in the health sciences, specifically aimed at the reduction of health care costs.

The health care budget for B.C. currently stands at \$4.8 billion a year.

"Only a very small part of the Ministry of Health's annual health care budget has ever been allocated to the kind of research that we in the Faculty of Medicine believe is essential to improve the quality of life for British Columbians and for controlling the associated costs," Dr. Hollenberg said.

"We believe that the Ministry of Health must recognize that a central part of its mission is to provide funds for research in the health sciences."

He added that it is not sufficient for the Ministry of Health simply to provide funds for health care.

"It must continually evaluate what it is doing and seek to improve the

system through better disease prevention, diagnosis and delivery of health care," Dr. Hollenberg said.

UBC's submission further suggests that this two per cent be specifically applied in ways that will lead to real savings in health care costs.

UBC, in conjunction with its affiliated teaching hospitals, receives almost \$42 million annually in direct funding for research, mainly from sources outside the province.

The Royal Commission on Health Care and Costs is holding a series of public meetings throughout the province to examine the structure, organization and effectiveness of the B.C. health care system. It is expected to deliver its report by September, 1991.

## G.S.T. will bring increase in costs

By **ABE HEFTER**

Overall expenditures at UBC will rise approximately 0.7 per cent as a result of Bill C-62, the Goods and Services Tax, which is scheduled to be implemented by the federal government Jan. 1.

This figure represents the difference between the current overall average of 1.6 per cent federal sales tax paid in 1989-90 and the net 2.3 per cent payable under the G.S.T.

Keith Bowler, the director of purchasing, said the increase does not take projected construction costs into account. Bowler, who has chaired a technical committee which was set up to address the impact of the G.S.T. on the university, said the university spent \$158 million last year on items that would now attract G.S.T.

"Of that \$158 million, \$23 million went toward construction costs," added Bowler.

"UBC has embarked on a 10-year construction phase, with the major expenses to be incurred over the next two or three years. In the past, construction at the university level was basically exempt from federal sales tax. However, as a result of the G.S.T., the university will be hit with a 2.3-per cent increase in construction costs at a time when construction will form a major expense portion of the university's capital budget."

The average academic unit will see costs go up by 2.3-per-cent, and not the seven per cent that will be levied on Canadians as a whole—because of an agreement reached between the federal government, the Association of Universities and Colleges of Canada and the Canadian Association of University Business Officers. Under the terms of the agreement, universities should pay no more sales tax under the G.S.T. than they do now under the federal sales tax. As a result, universities will receive a rebate of 67 per cent of the G.S.T. paid.

The majority of the university's activities fall under this classification, although there will be variations, said Bowler.

Overall, university faculty, staff and students appear to be in store for a mixed bag when the new tax takes

effect.

Bowler said university research, which was exempt from the federal sales tax in the past, will be hit with an increase of approximately 2.3 per cent in non-salaried expenses, such as materials and equipment, as a result of the G.S.T.

"Research-intensive universities like UBC will be slightly worse off than other universities because of the balance of research and teaching expenses versus non-teaching and research expenses."

For UBC students, the G.S.T. will strike at the very heart of education: books. It will also hit them right in the breadbasket.

"The cost of books and supplies will rise by seven per cent," said Bowler. "And buying the occasional meal on campus will also cost an additional seven per cent. Parking fees will also attract G.S.T. unless parking is included in the residence fees."

However, there is some good news for students on the G.S.T. front. Tuition fees will be tax exempt, as will ancillary fees for students enrolled in academic programs. These ancillary costs include residence fees, as long as the stay is for a period of greater than one month, and meal plans, as long as the plans cover at least 10 meals per week, for a period of at least one month.

Bowler said although the G.S.T. does hurt the university, it's a system of taxation that is fairer than the federal sales tax and more straightforward.

"Once the university gets over the initial hump of implementing the new tax, it'll become easier to administer than the outgoing federal sales tax. One significant way of offsetting any tax or inflationary cost is for the university to maximize its buying power. This will require continued close co-operation between end users and purchasing to consolidate purchases with fewer vendors."

Bowler's efforts to bring the G.S.T. on line will continue as the impact of the new tax is closely watched. In addition, a series of meetings will be set up with different sections of the academic community within the university to monitor the situation.



Participants light candles in a vigil held on campus last Thursday. A minute of silence was observed in commemoration of the slaying of 14 women students at L'Ecole Polytechnique in Montreal one year ago.

## Campus hours change during holiday season

Continued from Page 1

Hours at the Museum of Anthropology will stay the same during the holidays. The museum is open Tuesdays from 11 a.m. to 9 p.m. and Wednesdays through Sunday from 11 a.m. to 5 p.m. The museum is closed Mondays and will be closed Christmas Day and Boxing Day.

The Thunderbird Winter Sports Centre will close for Christmas Eve, Christmas Day, Boxing Day, New Year's Eve and New Year's Day.

Swimmers should note that the Aquatic Centre will be closed Christmas Day and Boxing Day, Jan. 1 and Jan. 6. There will be public swimming Jan. 2-5 from noon to 4 p.m. and 7 p.m. to 10 p.m.

The Pit Pub, Gallery Lounge, Tortellini's, SubCetera and Box Office will be closed from Dec. 19 to Jan. 7. For more information call 228-3965.

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**UBC Media Services Photography 228-4775**



## Letters to the Editor

Editor:

According to an article in the UBC Reports of November 29, for Dr. Thomas Perry Sr. the nuclear bombing of Hiroshima and Nagasaki "meant the end of World War II and his return home to his wife and a comfortable medical practice in Los Angeles."

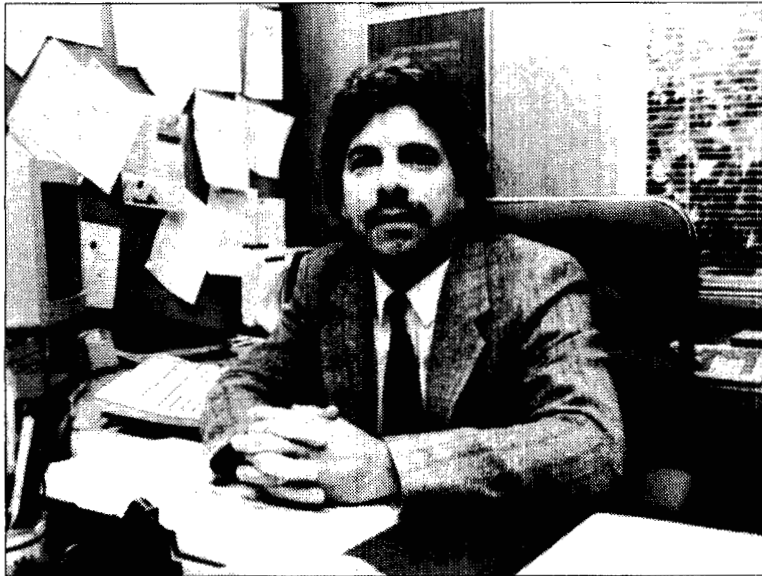
Let us not forget that for thousands of infantrymen who had fought the Japanese the bombing meant something more basic: It meant that they would not be killed in action; it

meant that they would return home alive.

Let us also not forget that there was even more destruction and loss of life in Dresden and Tokyo than there was in Hiroshima and Nagasaki. The bombings of Hiroshima and Nagasaki were awesome and dramatic, but they were not the worst things that happened in World War II.

**Robert R. Christian**  
Department of Mathematics  
Retired

# Many B.C. women infected with HIV virus: UBC study



Dr. Martin Schechter found HIV infection among blood samples of women.

By **CONNIE FILLETTI**

Several hundred women in B.C. are likely infected with the HIV virus but are not receiving treatment, a UBC study concludes.

HIV antibody testing was performed on unidentified leftover blood specimens obtained from 22,512 women. The women, aged 15-44, were receiving prenatal care in British Columbia and the Yukon during a six-month period in 1989.

The highest observed rates of HIV infection were in women aged 15 to 29 in the urban areas of Vancouver and Victoria.

Of that group, approximately one in 1,300 pregnant women, aged 20-29, was HIV positive.

When these rates were projected over all women aged 15-44, as many as 400 women in the metropolitan areas of the province were HIV positive in 1989. Only six have ever received zidovudine (a drug used in the treatment of AIDS previously known as AZT) through a distribution program available to patients with advanced HIV infection.

The study concluded that because few women have sought zidovudine treatment, the spread of HIV infection to them has occurred only recently and is likely to be on the rise.

"It may also be that the failure of eligible women to receive treatment

may be compounded by a combination of other factors including misdiagnosis of other-related illness in women, and a lack of knowledge regarding available therapies by women and their physicians," explained UBC epidemiologist Dr. Martin Schechter, who directed the study.

He added that women may also be unwilling to enter into AIDS therapy programs or may deny that they are HIV infected.

"Unfortunately, unless special steps are taken to target women, these problems will likely only increase as larger numbers of infected women progress from the early silent phase to the later phases of HIV infection," Dr. Schechter said.

Dr. Penny Ballem and Dr. Noel Buskard, of UBC's Faculty of Medicine, also collaborated on the study which appeared in the Dec. 1 issue of the Canadian Medical Association Journal.

The study received prior ethical approval from UBC's Clinical Screening Committee for Research and other Studies Involving Human Subjects and from the B.C. Civil Liberties Association.

Funding for the study was provided by the Canadian Red Cross Society Blood Transfusion Service (Vancouver Centre), the Canadian Federal Centre for AIDS and Health and Welfare Canada.



Photo by Media Services

UBC Chancellor Leslie Peterson and President David Strangway confer honorary degree on Helen Belkin in a special fall congregation held on Nov. 29, celebrating the university's 75th Anniversary.

## Forum

# Montreal, one year later: A time for reflection, a time for change

by **MARSHA TREW**  
DIRECTOR, OFFICE FOR WOMEN STUDENTS

This is the end of a thoughtful time for Canadians. We've listened to radio and television news reports and read newspaper articles in an attempt to understand the brutal murder of 14 women students in Montreal a year ago. Along with their analyses, interviewers and commentators reported a widespread fear among Canadian women.

What does this pervasive sense of fear have to do with this seemingly random killing?

Was the massacre the mindless act of a madman? A number of commentators have offered this explanation, but not everyone shares this view.

We have also heard some startling statistics in the past few days. One random sample of San Francisco women found: 44% had been raped (or been the target of attempted rape), 38% were sexually abused as children, 14% had been raped by their partners and 21% had been the victim of marital violence. We also know that 100 Canadian women are killed each year by their male partners. Which of these acts are the terrorist acts of mindless madmen? Where is the line that distinguishes between pathology and normalcy?

Last Oct., 20 men housed in the Vanier residence at UBC wrote notes to about 300 women also living in Vanier. The notes attracted national media attention when their contents became known. They ranged from invitations to be "f--- in the mud" to "f--- her, killing her afterward, and giving her a penalty for screaming." The press quoted some of these men as saying the notes were just jokes.

And, last spring, the Engineering Undergraduate newsletter carried abusive messages about women, First Nations people, and gay people. The authors were reported as offering the same rationale.

Each week, the Office for Women Students and the Sexual Harassment Office are told of abusive and degrading language used in the classrooms on our campus and of sexual harassment.

Are these events related? At what point do we see such events as symptomatic of cultural pathology, rather than random acts of violence or humorous jokes? Diana Russell, a sociologist, sees acts of these kinds along a continuum of terror that women are forced to live with every day of

our lives. The national columnist Don McGillivray recently wrote "Lepine's slaughter of women was not the act of a madman but arose out of a society that tolerates male sneers, discrimination and violence against women." This may explain why 60% of Canadian women living in cities feel unsafe walking alone at night.

As women, where are we safe? The CBC recently aired a film called No Safe Place to commemorate the Montreal massacre. The title poignantly describes a statistical reality for those of us who have been abused as children and/or adults by immediate male family members in our own homes. Neither street nor home is safe for most Canadian girls and women.

North American universities have just begun to examine their responsibility in establishing acceptable standards of physical and emotional safety for their students. The University of Alberta could hardly be proud of the students who chanted "Shoot the bitch" at a woman student who had protested sexism among the engineering faculty. Nor can UBC be proud of the students who wrote the Vanier notes.

Such issues need very clear responses. We must apply the same standards we would use if the target group were Asian students, Jewish students or male students.

It is not enough to ignore hatred and ignorance; they will not go away. In fact, they become more dangerous in a tolerant climate. It is not enough to hope male university students will grow out of it; violence occurs across all age, educational and income levels.

Young women students need role models among faculty and administration to demonstrate that women are capable and achieve excellence among the best and brightest. They also need women faculty and administrators to publicly acknowledge the seriousness of sexist comments and behavior as Mary Bryson did in the Globe and Mail. Women need to be heard.

Young men students also need role models but for a very different reason. Every time a man walks into a classroom as a teacher, he has an opportunity to demonstrate respect, cooperation and compassion. Every time he uses sexist humor or degrades or devalues women, he shows his acceptance of a very frightening cultural pathology.


McGillivray wrote that real change will only come when men refuse to tolerate ridicule of women and accept women as equals. It is a time for reflection and a time for vigorous change. Each of us must do our part in eliminating this continuing sadness.

# Calendar

December 16 –  
January 12

## MONDAY, DEC. 17

**Paediatrics Research Seminar**  
Structure-Function-Relationship Of Human Apolipoprotein And A-1. Roger McLeod, Pathology, UBC Research Centre. University Hospital, Shaughnessy Site D308 at 12pm. Call Gail or Dr. Skala at 875-2492.

**Cancer Research Seminar**  
 Liposomal Doxorubicin Pharmacokinetics Seminar. Leanne Embree, Ph.D., Advanced Therapeutics Unit, BCCRC. BC Cancer Res. Centre Lecture Theatre from 12-1pm. Call 877-6010.


## TUESDAY, DEC. 18

**Medical Genetics Seminar**  
Molecular Regulation Of Hemopoiesis In Human Long Term Cultures. Donna Hogge, Terry Fox Lab; Assistant Professor, Medicine, UBC. Hennings 202 at 8:30am. Coffee at 8:15am. Call 228-5311.

## WEDNESDAY, DEC. 19

**Orthopaedics Grand Rounds**  
No conference today. Call the academic office at 875-4646.

## FRIDAY, DEC. 21

**Obstetrics/Gynecology Weekly Grand Rounds**  
 Shaughnessy Hospital Gynecological Service Morbidity And Mortality Review. Dr. M. Stephenson. University Hospital, Shaughnessy Site Lecture Theatre at 8am. Call 875-2171.

**Pediatrics Resident Case Management**  
Hypoglycemia In Neonates. Dr. Carolyn Davies, Dr. Karen Lannon. G.F. Strong Rehab. Centre Auditorium at 9am. Call A.C. Ferguson at 875-2118.

## WEDNESDAY, DEC. 26

**Orthopaedics Grand Rounds**  
No conference today. Call the academic office at 875-4646.

**UBC Reports is the faculty and staff newspaper of the University of British Columbia. It is published every second Thursday by the UBC Community Relations Office, 6328 Memorial Rd., Vancouver, B.C., V6T 1W5. Telephone 228-3131. Advertising inquiries: 228-4775. Director: Margaret Nevin. Managing Editor: Steve Crombie. Contributors: Ron Burke, Connie Filletti, Abe Hefter, Charles Ker, Paula Martin and Gavin Wilson.**




## CALENDAR DEADLINES

For events in the period Jan. 13 to Jan. 26 notices must be submitted by UBC faculty or staff on proper Calendar forms no later than noon on Wednesday, Jan. 2 to the Community Relations Office, 6328 Memorial Rd., Room 207, Old Administration Building. For more information call 228-3131. The next edition of UBC Reports will be published Jan. 10. Notices exceeding 35 words may be edited.


## MONDAY, JAN. 7

**Paediatrics Research Seminar 90/91 Series**  
Topic To Be Announced. Dr. Judith Hall, Head, Paediatrics, UBC. University Hospital, Shaughnessy Site D308 at 12pm. Call Gail or Dr. Skala at 875-2492.


**UBC Percussion Ensemble**  
 John Rudolph, director. Free admission. Music Recital Hall at 12:30pm. Call 228-3113.

## THURSDAY, JAN. 10

**Pharmacology Seminar**  
Hypercholesterolaemia: "Why All The Confusion". Dr. David Seccombe, Pathology, UBC. IRC #1 from 11:30am-12:30pm. Call 228-2575.

**Physics Colloquium**  
 Squeezed Vacuum, Wiggly Light Beams And Other Oddities. Mark Levenson, IBM, San Jose, California. Hennings 201 at 4pm. Call 228-3853.

## FRIDAY, JAN. 11


**Economics Departmental Seminar**  
 Explaining Patterns Of Unionization: Canada And The US. Chris Robinson, U. of Western Ontario. Host: Prof. Craig Riddell. Brock 351 from 4-5:30pm. Call 228-2876.

## MONDAY, JAN. 14


**Cancer Research Seminar**  
Regulation Of The Human Alpha-fetoprotein Gene In Hepatoma. Dr. Taiki Tamaki, Medical Biochemistry, U. of Calgary. BC Cancer Res. Centre Lecture Theatre from 12-1pm. Call 877-6010.

## NOTICES

**Shop-In-The-Garden Christmas Sale**  
New from the UBC Botanical Garden: table centres and wreaths (dried or green) made by Friends of the Garden; seeds from its plants, dried flower bouquets, books, baskets, pots, tools and some gifts for children. Open 11am-5pm at 6804 SW Marine Drive. Parking adjacent. Call 228-4529.

**Carpool Matching**  
 Send both your home and work addresses and both telephone numbers; your working hours; whether you have a car and if you smoke while driving, to Karen Pope, Dean's Office, Applied Science. When a carpool match is found, the information will be sent to you. Call 228-0870.

**UBC Speakers Bureau**  
Would your group like to know more about topics ranging from Women in Engineering to Small Boat Safety? More than 500 topics to choose from; most speakers are available free of charge. Call 228-6167, Mon., Wed., Fri., 8:30am-12pm.


**Our Chiefs And Elders**  
 Portraits of BC Native leaders, chiefs, chief counselors and elders by Kwaguitl photographer David Neel. Continues at the Museum of Anthropology. Call 228-5087.

**Fine Arts Gallery Exhibition**  
 Strange Ways Here We Come. Works by New York artists Donald Moffet and Felix Gonzalez-Torres continues until Dec 22/90. Tues-Fri from 10am-5pm/Sat from 12-5pm at UBC Fine Arts Gallery. Call 228-2759.

**Sports Medicine Study**  
Volunteers, female, age 18-35 needed to participate in study on Exercise and the Menstrual Cycle. Fit, healthy, having normal menstrual cycles and not currently on oral contraceptives. Physiological testing provided. Allan McGavin Sports Med. Centre, John Owen Pavilion, UBC. Call Dr. Connie Lebrun 228-4045 or 980-6355.

**School of Nursing Study**  
Volunteers needed for study of couples/family adjustment to a breast cancer diagnosis. Women and partners. Involves interviews/response to questionnaire. Call Dr. Ann Hilton at 228-7498.


**School of Nursing Study**  
Couples are needed who are both in paid employment (over 20 hrs/wk) and have at least one child under eighteen months of age. Involves filling out a questionnaire twice (10 minutes each time). Call Wendy Hall at 228-7447.


**Psychiatry Depression Study**  
 Participants needed for research study using new antidepressant medication. Depression sufferers, 18-65 years. Call Doug Keller at 228-7318.

**Psychiatry Personality Questionnaire Study**  
Volunteers needed to complete two 90-minute sessions. Stipend, \$20. Call Janice at 228-7895/7057.

**School of Family/Nutritional Sciences Nutrition Study**  
Energy Metabolism. Female volunteers needed, age 27-38 with no history of dieting. Must be able to attend UBC clinic monthly for a short follow-up visit, for 1 year. Call Sara Pare 228-2502.

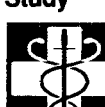
**Counselling Psychology Retirement Preparation**  
Volunteers interested in planning their retirement needed for research project. Discussion on retirement-related issues included. Call Sara Comish 228-5345.

**Diabetic Clinical Study**  
 Diabetics who have painful neuropathy affecting the legs needed to volunteer for 14-week trial of an investigational new drug. Call Dr. Donald Studney, Medicine, University Hospital, UBC Site at 228-7142.

**Daily Rhythms Study**  
 Volunteers needed to keep a daily journal (average 5 min. daily) for 4 months, noting patterns in physical/social experiences. Call Jessica McFarlane at 228-5121.


**Psychiatry PMS Study**  
University Hospital, Shaughnessy site. Volunteers needed for a study of an investigational medication to treat Pre Menstrual Syndrome. Call Dr. D. Carter at 228-7318.


**Sleep Disorders Study**  
Volunteers 18-45 years suffering from Chronic Insomnia needed for a study on sleep-promoting medication (hypnotics). Must be available to sleep overnight at a lab for five nights. Call Carmen Ramirez at 228-7927.

**Hypertension in Pregnancy Study**  
 Pregnant women, concerned about their blood pressure, are invited to participate. The study compares relaxation training with standard medical treatment (own physician). Call Dr. Wolfgang Linden at 228-4156.


**Post Polio Study**  
Persons with polio needed for functional assessment and possible training programs. Call Elizabeth Dean, Ph.D., School of Rehabilitation Medicine, 228-7392.

**Multiple Sclerosis Study**  
Persons with mild to moderately severe MS needed for study on exercise responses. Call Elizabeth Dean, Ph.D., School of Rehab. Medicine, 228-7392.

**Statistical Consulting and Research Laboratory**  
 SCARL is operated by the Department of Statistics to provide statistical advice to faculty and graduate students working on research problems. Forms for appointments available in Room 210. Ponderosa Annex C. Call 228-4037.


**Surplus Equipment Recycling Facility**  
 All surplus items. Every Wednesday, 12-3pm. Task Force Bldg., 2352 Health Sciences Mall. Call 228-2813.

**Sexual Harassment Office**  
Two advisors are available to discuss questions and concerns on the subject. They are prepared to help any member of the UBC community who is being sexually harassed to find a satisfactory resolution. Call Margaretha Hoek or Jon Shapiro at 228-6353.

**Submissions On Race Relations At UBC**  
 Have you had special experiences which will help identify areas to promote sound race relations? Are there any special recommendations that you or your department, unit or group may have devised which will serve as effective models for reference? Submission deadline is Dec. 15/90. Call Kogila Adam-Moodley, Chairperson, Race Relations Committee at 228-4315.

**Volunteering**  
 To find an interesting and challenging volunteer job, get in touch with Volunteer Connections, Student Counselling and Resources Centre, Brock 200. Call 228-3811.

**Narcotics Anonymous Meetings**  
Every Tuesday (including holidays) from 12:30-2pm, University Hospital, UBC Site, Room 311 (through Lab Medicine from Main Entrance). Call 873-1018 (24-hour Help Line).

**Badminton Club For Faculty/Staff**  
 Thursdays from 8:30-10:30pm and Fridays from 6:30-8:30pm in Gym A of the Robert Osborne Centre. Club dues, \$15 plus library card. Call Bernard 228-6809 or 731-9966.

**Duplicate Bridge**  
Every Wednesday except Dec 19/26. Informal game open to all. Admission of \$2 per person includes coffee/snacks. Faculty Club at 7pm. Call 228-4865.

**Fitness Appraisal**  
Physical Education and Recreation through the John M. Buchanan Fitness and Research Centre, administers a physical fitness assessment program. Students \$25, others \$30. Call 228-4356.

**Neville Scarfe Children's Garden**  
 Located west of the Education Building. Free admission. Open year round. Families interested in planting, weeding or watering the garden, call Gary Pennington at 228-6386 or Jo-Anne Naslund at 434-1081.

**Botanical Garden**  
Open every day from 10am-3pm until Mar. 15/91. Free admission. Call 228-3928.

**Nitobe Garden**  
 Open Monday to Friday, 10am-3pm until Mar. 15/91. Free admission. Call 228-3928.

## Advertise in UBC Reports

Deadline for paid advertisements for the Jan. 10 issue is 4 p.m. Jan. 2

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# REPORT ON TUITION RECOMMENDATIONS

PREPARED BY DAVID W. STRANGWAY, PRESIDENT

**To: The Board of Governors**

In June, 1989, the Senate and the Board of Governors of The University of British Columbia adopted a Mission Statement. This was accompanied by a Strategic Plan that laid out a planning framework within which each unit of the university would develop its plans.

The document was entitled "Second to None: Service through Excellence." The objectives laid out in the Strategic Plan clearly indicate that the university is committed to maintaining and strengthening its position as one of a limited number of national universities in Canada and to reinforce its role as one of the best universities in North America.

One of the stated objectives was to "work for the equality of opportunity for qualified candidates by enabling them to overcome non-academic barriers, whether they be social or financial limitations, or barriers of disability."

The tuition recommended has explicit goals i) to ensure that qualified students are not precluded from attending the university because of financial limitations and ii) to ensure that the university maintains and enhances its support of the teaching and learning environment.

As we address the question of university tuition fees, we consider first the principles that should be reflected. The following are the governing principles for the proposed UBC tuition fee increase.

1. Tuition fees and financial aid must be responsive to financial needs so that no otherwise admissible student is denied the opportunity to attend university solely for financial reasons.
2. Any substantial increase in tuition fees must be accompanied by commensurate attention to financial aid policy and to enhancing the quality of education available to students in the university.
3. Students and their families benefit from a university education and can be expected to bear a reasonable proportion of the cost of that education.
4. Any substantial change in the proportion of the cost to be borne by students should be phased in over a period of years.
5. Tuition fees and financial aid should be reasonably predictable for a student entering a program at UBC, at least for the normal duration of the program.

## Financial Aid Policy

Credit tuition fees account for about 15% of UBC general purpose operating revenue. Consequently, students contribute a modest proportion of the cost of their education. A significant proportion of students and their families are able to afford a greater share of the actual cost of a university education. However, some students are unable to afford even the current level of tuition fees let alone an increase. A university financial aid policy must ensure that this group is not disadvantaged and, if possible, that access is improved rather than compromised.

Some years ago the Australian government eliminated tuition fees at universities in an attempt to ensure that students from all socioeconomic backgrounds could more

easily attend universities. The results of this change were analyzed and monitored at intervals of several years. Remarkably, the elimination of tuition fees had no effect whatsoever on the socioeconomic mix. What became clear was that the system of relatively low tuition was explicitly a benefit to the more affluent since they were the ones that continued to attend university in disproportionate numbers. Sweden has no fees, but students from high income families are more likely to choose university courses than are those from low income families who often choose non-university courses.

It is well established from this experiment that the socioeconomic mix of students does not vary much from among those jurisdictions that have no tuition, to those that have low tuition to those that have moderate tuition such as most Canadian universities. Significant differences from province to province, for example, are not a determinant of the participation rate in any significant way. A sharp rise in tuition fees in Quebec universities in 1990/91 has not deterred students from attending university and it was already known that there would be a further sharp rise in 1991/92. A higher tuition fee paid by those who can afford it, with a portion of the tuition income used to support those who cannot afford it, can ensure better equality of opportunity. Our policy on financial aid will be that no student who is otherwise admissible to UBC will be unable to attend because of financial reasons alone.

The principal financial barrier to attending university is not the tuition, but is the need to live away from home and to incur substantial living and transportation costs. For this reason in particular, UBC is proud to be a supporter (and in some cases a partner) of degree-granting opportunities in Kelowna, Kamloops, Nanaimo and Prince George. In this action alone, the provincial government has made local access readily available to more than half a million residents who will no longer have to leave home to attend university.

The implication of the foregoing is that enforcement of financial aid policy should be concurrent with any major change in tuition

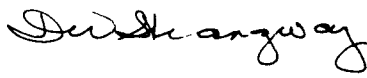
December 13, 1990

Dear Colleague:

The following report, submitted to the Board of Governors for consideration, recommends tuition fee and student aid guidelines for 1991/92 through 1993/94.

I urge you to discuss the report with your colleagues and feel free to forward any questions or comments.

Yours sincerely,



David W. Strangway  
President

fees, particularly if the change entails a large increase in fees. Financial aid at UBC is substantial and is administered ably by conscientious staff members. Nevertheless, it cannot be said to constitute a comprehensive and coherent program (see Appendix 1).

It is always a difficult problem to determine financial need. However, both the federal government and the provincial government have developed sophisticated approaches to making this determination. These are described in Appendix 2 and the university policy will build on these well established procedures rather than create a new and independent approach. The university will continue to press for fair and reasonable changes to the parameters used by government in making these assessments.

## Recommendation

In support of goals noted above, we, therefore, recommend that the tuition increase in each of the years 1991/92 to 1993/94 be set at the year over year Vancouver CPI (as at December 31 of the preceding year) plus 4.5%. The selection of a three-year planning horizon is important to the university and the student.

## Rationale for Recommendation

The basis for this recommendation is as follows:

### A. Operating Costs

There has been much restructuring at UBC in the past few years as a result of effective cuts in operating grants in the early to mid-1980s. The effect of this has been to lead to improved efficiency in many areas such as telephones, energy savings, custodial services and many others. But, there has also been a reduction in the quality of the teaching, learning and research environment. Operating grants in the past two to three years have led to improvement in this environment, but there are still many things to be

done to be sure that students, both undergraduate and graduate, have the best possible environment for learning.

The overall cost of operating universities will, for the next few years, be above inflation. The cost above inflation results from four causes:

i) The bulge of hiring of new faculty in the 1960s, in response to government pressure, has led to few retirements in the intervening years. This pattern will be unchanged until late in the 1990s.

When faculty members retire, their salary is used for two purposes: i) to hire a junior professor at a lower starting salary and ii) to create a pool of funds to provide the merit driven increases that are used in universities in lieu of promotional increases. In an equilibrium, this component would be fully funded. But, like all universities across North America, retirements will remain low for the next few years and there is a severe income shortfall to fund the merit increases. With a faculty of 1,800 we would expect a normal retirement rate of 60-90 a year. We will not reach that level until the turn of the century.

At present, it costs 2% of the faculty salaries and benefits budget (50% of the university operating budget) to make up this shortfall. Since this item is 50% of our operating budget, it alone accounts for a need for a 1% increase in the operating budget above inflation in the immediate future.

ii) The goods and services that are used by the university have costs that can also be shown to be above normal inflation rates. This includes items such as library books, equipment which is becoming increasingly sophisticated, supplies used, for example, in laboratories, increased need for access to computers, and legal fees.

iii) Non-academic salaries and benefits account for about 32% of our operating expenditures. Many of these salaries, because of low or no increases during the restraint period, are below their appropriate comparative marketplace group.

iv) There are steady increases in the regulatory environment in which we must operate. This includes items such as occupational health and safety, employment equity and the creation of an office to handle the effect of the GST.

For the university to continue to operate and provide its present level of service requires support at CPI + 2% for 1991/92 and 1992/93, but we expect at a decreasing rate over the following years.

The restructuring of the past decade has been extensive. A stable operating environment would permit individual units, especially academic units, to have an incentive to carry out further adjustments without fear of giving up any improvements made to meet overall university-wide reallocations.

### B. Enhanced Student Aid and Improved Teaching and Learning Environment

A further need seen by the university is to substantially increase its bursary support to be sure that good students who would not otherwise be able to attend or to remain at UBC is provided. At present, there is a very good provincial student aid package but there

# REPORT ON TUITION RECOMMENDATIONS

are still needs over and above these that need to be dealt with. The following recommendation is based on the continued existence and improvement in the provincial plan. It should be noted that a student completing his/her four year program within five years will be forgiven all but \$12,000 of any outstanding provincial loan. (See Appendix 2 for a description of the policy.)

The university already provides substantial aid through a combination of endowment funds, operating funds, and research funds as well as ensuring that students compete fully for awards administered outside the university (see Appendix 1).

The following steps will be taken in this connection:

i) Increase the overall student tuition as shown in the table each year. Of this, a portion will be used to enhance student aid for students needing the assistance and a portion will be used to enhance the teaching and learning environment.

ii) The present emergency bursary fund (which was funded two years ago and is being enhanced by a return of a share of parking fines) will be administered on a simple, fast turnaround, short- and medium-term loan basis. A steering committee of the director of student aid, the two student members of the Board of Governors and the immediate past student members of the board will form a steering committee.

iii) University support through increasing its need-based bursary program will be enhanced to provide the difference between the BCSAP loan and the total assessed need. The effectiveness of this will be part of each year's budget submission and each year the incremental amount allocated will be rolled into the base budget on a continuing

basis.

iv) A task force will be struck immediately to recommend a process by which all student part-time employment opportunities on campus are offered to those in greatest need of even further financial aid, assuming, of course, they are effective employees. This recommendation will be presented to the administration by August 31, 1991 with full implementation scheduled for the 1992/93 academic year.

The objective of the financial aid policy is to ensure that no student who otherwise meets the high admission standards of UBC is denied the opportunity to attend for financial reasons.

The following table shows the breakdown of how the fund will be used in each year.

This amount is over and above the Vancouver CPI as determined December 31 of the preceding year.

In 1991/92, we have recommended a move to a more broadly based unit tuition fee. This unit fee will greatly simplify tuition management, but will in itself lead to a redistribution in the fees otherwise collected. We will, therefore, increase some fees while reducing others to cover this cost, but with no net income or loss to the revenue.

As in the case of the student aid fund, the enhancement fund will be budgeted each year and presented to the board for approval and directly reflect teaching needs. Each year, this amount will then be added into the continuing base budget in the following year. These needs can be in any of a wide range of areas (faculty positions, libraries, undergraduate equipment and supplies, department supplies and expenses, etc.).

## Non-academic and Non-financial Barriers to Access

Even with the availability of extensive financial aid, many apparently able students do not choose to attend university. In some cases, this is the outcome of a thoughtful consideration and the alternative is fulfilling to the individual and socially and/or economically productive. In other cases, it is the outcome of social barriers, of the lack of encouragement from family or community, the lack of direct experience or any basis on which to identify with the university. All of this may be exacerbated by the perception that insuperable financial barriers exist.

In adopting the Mission Statement, we made a commitment to "work for equality of opportunity for qualified candidates by enabling them to overcome non-academic barriers, whether they be social or financial limitations, or barriers of disability." In addition to enhancing financial aid, we have created units designed to deal with social and physical barriers to participation. These include the School and College Liaison Office, the Office of Women's and Gender Issues, the Disability Resource Centre, the Multicultural Liaison Office, and the First Nations House of Learning. A diversified base of support has been essential to these developments.

### Recommendation

The credit course tuition level for the period 1991/92 to 1993/94 be increased annually by CPI in Vancouver (based on the annual increase to the previous December 31) plus 4.5%.

It is intended that this approach be used as guidelines for tuition determination beyond the initial three-year period since it will take some years to fully develop the needed enhancements to the student aid fund and to the teaching and learning environment enhancement fund.

TABLE

### % Distribution

	1991/92	1992/93	1993/94
Above inflation GPO expenses	2.0	2.0	1.5
Student Aid Fund	1.0	1.0	1.5
Enhance Teaching and Learning Environment Fund	1.5	1.5	1.5
TOTAL	4.5	4.5	4.5

## APPENDIX I

### CURRENT STUDENT FINANCIAL AID

The university's financial aid presently includes the following elements:

- 5,500 students receive \$27 million in federal and provincial student loans and grants.
- 1,700 students receive \$2.2 million in scholarships.
- 1,400 students receive \$1.4 million in bursaries.
- 500 students receive loans (This is in addition to the AMS Emergency Loan Program which serves approximately 50 students).
- 750 students receive part-time employment through the disbursement of \$1 million in a work-study program.
- 500 graduate students receive \$4.5 million in fellowships.
- More than 1,000 graduate students earn over \$6 million in program-related employment as Graduate Teaching Assistants.
- Many graduate students obtain program-related employment as research assis-

tants funded by faculty members' research grants. This totals \$8.8 million.

- Many students, particularly undergraduates, obtain part-time employment in such units as the library, housing, food services, athletics and recreation, the bookstore, and the AMS.

Financial support for students comes from many different sources: federal and provincial governments; University General Purpose Operating Funds; endowed scholarships, fellowships and bursaries; research grants and contracts; and campus ancillary enterprises.

- The university has more than 800 specific purpose trust and endowment accounts for scholarship and bursary awards.
- As of March 31, 1990, endowment capital totalled \$40.5 million, \$17 million for graduate awards and \$23.5 million for undergraduate.
- Endowment for financial aid is growing through the fundraising campaign, other gifts and bequests and through a special board decision to allocate \$100,000 annually from parking fine revenue to build a \$1 million endowment for emergency aid to students.

## APPENDIX II

### FINANCIAL ASSISTANCE FOR STUDENTS

Over the past three years, need based student aid from all sources has increased by slightly more than four million dollars. Measured against BCSAP assessed need, this represents an increase in support from 89% of assessed need in 1987/88 to 93% of assessed need in 1989/90. It is anticipated that this ratio will increase to approximately 95% in the current session. This represents a 19% increase in total support/BCSAP recipient from \$4,830 in 1987/88 to \$5,742 in 1989/90. Detailed information is provided below.

#### 1. B.C. Student Assistance

The following is a summary of Winter Session data with respect the B.C. Student Assistance Program:

Academic Year	Assessed Need	\$BCSAP	%Need Met	BCSAP#
1987/88	\$29,716,278	\$23,634,540	79.5%	5489
1988/89	\$31,195,309	\$25,824,661	82.8%	5546
1989/90	\$32,999,854	\$27,918,280	84.6%	5328

Over the past three years, the B.C. Government has increased many of the BCSAP living allowances, and, at the same time, increased the award ceilings for individual students. The impact of increased allowances (including increased tuition) is reflected in the column headed "Assessed Need". Increases in the "\$BCSAP" column largely reflect the effect of the increased award ceilings. To the extent that Assessed Need is reflective of student costs, the program has made some significant

Continued on page 7

# REPORT ON TUITION RECOMMENDATIONS

## APPENDIX II cont'd

gains in meeting education costs. This is reflected in the column "% Need Met". The BCSAP figures do not include students who are applying for assistance through other provinces. It is estimated that there are approximately 750 out-of-province aid recipients receiving an additional \$2.8 million.

Although the Awards Office uses Assessed Need as the basis for determining eligibility for other forms of assistance such as bursaries and Work Study, a note of caution is required. It must be recognized that for many students, the BCSAP allowances reflect a minimum standard of living, and the program anticipates allowances such as parental contribution and summer savings which are frequently not forthcoming. In addition, many of the allowances for married students or students with families are established by the federal government and have not been increased since 1984/85. The federal government has hired a consultant to review the allowances and other matters affecting their program.

### 2. Other Assistance

#### a) Bursaries

Bursaries are funded from three sources (operating funds, income from endowments, and annual donations), and individual awards are subject to change from year to year. Historically, operating funds have been used as a buffer to ensure that need based assistance from all sources is delivered in a planned manner, one that does not fluctuate radically from year to year.

Over the past three years, the number of bursary applicants has decreased from 1,988 in 1987/88 to 1,368 in 1989/90. The lower number of bursary applications reflects in part, the improvements to BCSAP. There appears to be a slight increase in the number of applications received in the current session. For several years, bursaries have been allocated under a formula which attempted to meet a total of 85% of the student's assessed need in a combination of BCSAP and bursary funds. In 1989/90, this figure was increased to 90%. It is anticipated that this ratio will increase to approximately 95% in the current year.

While for the past three years the average bursary has remained at slightly over \$1,200, the average BCSAP award has increased from \$4,305 to \$5,240. (The average BCSAP award for the current session is \$5,643.)

#### b) University Loans

Although generally known as "Emergency Loans", this name is really a misnomer. Approximately half of the university loans are used to provide short term (60 days) funding pending receipt of government assistance documents. The demand for this assistance depends largely on the ministry's turnaround time for BCSAP documents and the activity is concentrated at the beginning of each term. (The BCSAP turnaround time ranges from 6 to 12 weeks for "regular" applications and is frequently

considerably longer for appeals and cases requiring special consideration.) The remaining loans are of a longer duration and may be repaid over the summer or following graduation, depending on the students' circumstances. Due to increased BCSAP turnaround times, the number of advancements against government assistance documents appears to have increased significantly in the current session. The university loan summary is as follows:

YEAR	\$	#
1987/88	\$558,848	744
1988/89	\$453,133	625
1989/90	\$429,650	533

#### c) Work Study

Work Study is largely a provincially funded program, but operating funds have been used to fund a small program for out-of-province aid recipients who do not qualify for B.C. assistance. Work Study is used to offset the lack of student and/or parental contribution, meet costs which are not adequately recognized by BCSAP, and meet need over the BCSAP ceilings. The Work Study Summary is as follows:

YEAR	\$	#
1987/88	\$ 867,000	760
1988/89	\$ 992,633	792
1989/90	\$1,016,654	738

#### d) Turnaround Times

As indicated above, students frequently experience long delays in connection with BCSAP and the other aid programs. Delays of up to 12 weeks in processing documents are not uncommon. In addition, the programs have become increasingly complex both for the students and the Awards Office staff. Students often need to see an advisor in order to determine the appropriate funding options. Advising staff is limited, and the front counter enquiry staff is often unable to deal with the complexity of the individual student's situation. This year the Awards Office was able to reduce some of the pressure for short-term assistance by deferring tuition fees for all students who applied for BCSAP by June 30th. (Although the first disbursement coincides with the first day of the term, financial institutions can take as long as ten days to release funds to the students.)

This, of course, will be resolved in the coming year since all fundraising aspects of this office have been transferred to the Development Office, thus freeing up two positions which have been explicitly designated to fill this need.

## APPENDIX III

### BACKGROUND ON PARENTAL CONTRIBUTION

The parental contribution concept was incorporated into the Canada Student Loans Program (CSLP) shortly after it was initiated in 1964. Although in the ensuing years the expected levels of parental support have been adjusted, the criteria for establishing Group B status or "independent" have not been altered in any significant way. In general, all applicants are classified as Group A ("dependent") except those who meet at least one of the criteria established for Group B ("independent") status. Students establish Group B status by meeting one or more of the following criteria:

- The applicant will be married before the last day of the month in which classes begin. Applicants who are separated, divorced, widowed, or single parents are included in this category.
- The applicant has been out of secondary school for 48 months.
- The applicant has spent two periods of twelve consecutive months each in the full time labour force.
- The applicant has no parent, guardian or sponsor (parent, guardian or sponsor has died or disappeared).
- The applicant is a ward of the court.

Approximately one-third of the UBC applicants for BCSAP fall into Group A category.

The principal elements in the determination of the amount of expected parental support are the income of the parent(s), the size of the family unit, the number of students attending post-secondary institutions and whether the federal table in the same area as the post-secondary institution the student will attend. The federal table does not consider the age of the parents (i.e., proximity to retirement) nor does it consider the differences in the cost of living from one part of the country to another.

The CSLP establishes basic levels which the provinces must use in assessing students for federal loans. The provinces have always been permitted to adopt more stringent rules for assessing eligibility for CS Loans, and are able to adopt different rules for their own provincial assistance programs. The 1984 Provincial Task Force recommended that the concept of Parental Contribution and the amounts of assistance expected be reviewed.

Although the CSLP parental contribution policies permit the consideration of assets, the final determination for this issue rests with the provinces, and there is little consistency. B.C. assesses an additional contribution if the net assets (excluding the family home) exceed \$150,000.

While the criteria for independence are frequently challenged, from my perspec-

tive the real problem is the unrealistic levels of parental support which are expected. Unfortunately, many parents seem to feel that the expected contribution is something that the university has developed and this misconception causes a real strain on our front counter staff and others. At the present time, appeals against parental assessment are the largest single issue in connection with BCSAP.

The parental contribution tables were last revised in 1984/85. The following examples of expected parental contribution may be of assistance. All examples are based on 8 month term. Income figures represent gross income.

- Single income of \$30,000; 3 persons in family; Student attending an institution away from home community - the expected parental contribution is \$1,122.
- Single income of \$40,000; 5 persons in family; Student attending an institution away from home community - the expected parental contribution is \$1,666.
- Double income of \$50,000 (\$35,000 and \$15,000); 4 persons in family - two students in post-secondary; both students attending an institution away from home community - the expected parental contribution is \$2,975 for each student.
- Single income of \$60,000; 5 persons in family; Student attending an institution away from home community - the expected parental contribution is \$7,684.
- Single income of \$20,000; 3 persons in family; Student living at home - the expected parental contribution is \$0 with an educational expense of \$816 allowed as a contribution towards room and board at home.
- Single income of \$30,000; 3 persons in family; Student living at home - the expected parental contribution is \$0 with the family being expected to provide room and board at home.
- Single income of \$40,000; 5 persons in family; Student living at home - the expected parental contribution is \$374 with the family also being expected to provide room and board at home.
- Double income of \$50,000 (\$35,000 and \$15,000); 4 persons in family - two students in post-secondary; both students living at home - the expected parental contribution is \$1,173 for each student with the family also being expected to provide room and board at home.
- Single income of \$60,000; 5 persons in family; Student living at home - the expected parental contribution is \$6,392 with the family also being expected to provide room and board at home.



# REPORT TO THE ROYAL COMMISSION ON HEALTH CARE AND COSTS

SUBMITTED BY DAVID W. STRANGWAY, PRESIDENT

This Royal Commission has been asked to examine many aspects of our provincial health-care system. My focus is the relationship of the University of British Columbia with its affiliated teaching hospitals, and the contribution we and they, working together in complementary partnership, can make to patient care and to education and research in the health sciences. My goal is to reinforce this partnership, thus improving our health-care system by facilitating what each of the partners does best.

As President of a University where every kind of health professional is trained, where the faculties of Medicine, Dentistry, Pharmaceutical Sciences and the School of Nursing have forged formal affiliations with hospitals in the Lower Mainland and created co-operative relationships with others more distant, I envision a time when British Columbia will be increasingly known around the world as the home of a great health-care and health-caring centre.

Academically driven and clinically fuelled, such a centre will be deeply and inextricably linked with the needs of the immediate community and the entire province. It will embrace the finest of general and specialized medical care. It will offer superb education for physicians and other health-care practitioners. And it will foster world-calibre research in the health sciences, leading to life-saving medical interventions, to life-enhancing care of the disabled and, in the long run, to an understanding of the societal and environmental factors that determine the health of our people.

When current UBC research is clinical reality, patients will come here for injections of engineered genes to control or conquer inherited diseases. Others will come for artificial organ transplants for which they will need no toxic drugs to suppress their immune systems. Still others will receive revolutionary liposomal drugs targeted to specific sites, such as cancerous cells.

In these research areas, to select only three of many possible examples, UBC is already in the forefront nationally and internationally. The fundamental techniques of genetic engineering now in use around the world were developed by UBC scientists. Canada's first formal university centre devoted to organ transplant research combines a network of basic science laboratories at the Vancouver General Hospital campus site and at the UBC campus. And a UBC scientist has been a key figure in the research on liposomes and in the development of their commercial applications.

While we are working for a tomorrow when basic science research will prevent disease, we live in a today made better by UBC initiatives. Hospital stays for burn patients, for example, have been reduced by the use of a cultured-autograft technique researched in our Division of Plastic Surgery. As the result of research in the Division of General Surgery, the incidence of failure following kidney transplantations here in B.C. is one-third that of the American average.

December 13, 1990

Dear Colleague:

The following report has been submitted to the Royal Commission on Health Care and Costs on behalf of UBC.

I encourage you to read the report and consider the important issues that have been put forward.

Yours sincerely,

David W. Strangway  
President

Our Divisions of General Surgery and Radiation Oncology have developed new techniques for conservative surgery and radiation therapy for early breast cancer. Since most of these treatments can be done on an out-patient basis, hospital costs for mastectomies are reduced.

My vision of a major health centre is rooted in reality. The essential elements are already in place in British Columbia. The province has a university, UBC, that as well as operating faculties of Medicine, Pharmaceutical Sciences and Dentistry and a School of Nursing, has schools of Rehabilitative Medicine, Audiology and Speech Sciences, Family and Nutritional Sciences, and Social Work. Beyond these evident resources, the University has numerous other departments that contribute significantly to teaching and research related to health care: Clinical and Counselling Psychology, Chemical and Electrical Engineering, Economics, Food Science, Chemistry, Botany, Microbiology and Zoology.

Many inter-disciplinary undertakings draw on the expertise in these departments. Our newly formed Biotechnology Laboratory funded by provincial funds for excellence is a joint venture of five faculties (Science, Medicine, Applied Science, Agriculture and Forestry) and is already recognized as the best biotechnology program in Canada. Magnetic Resonance Imaging, built to a large extent upon the outstanding work in the field in the Chemistry Department, has moved from this base to clinical application.

Teachers and researchers in these faculties, schools and departments share our dedication to achieving international stature. It is UBC's aspiration and theirs to become, in the words of our recent mission statement, Second to None.

The University has recently taken

the initiative to create a number of important units as a result of perceived need. Among them are:

- An inter-faculty program in Occupational Hygiene — a campaign project supported by the Workers' Compensation Board and B.C. government matching funds.
- A planned centre for neuroscience based on campaign gifts and government matching funds.
- A Centre for Applied Ethics based on campaign gifts and matching funds.
- A Centre for Health Services and Policy Research, including a Technology Assessment Unit, under a director reporting to the Academic Vice President and building on multi-disciplinary strengths at UBC.
- A Disability Resource Centre and The Rick Hansen National Fellow to ensure equality of opportunity and access for the disabled — supported as a campaign project by the federal and provincial governments and by private donors.
- A number of endowed chairs and professorships in related areas (Arthritis, Cardiology, Health Promotion, Clinical Pharmacy, Special Education, Dyslexia, Medicine, Surgery, Pediatric Infectious Diseases, Viral Diseases of Children and others) — funded as campaign projects by private donors and B.C. government matching funds.

#### COMPLEMENTARY INSTITUTIONS — A PARTNERSHIP

The province also has three general and four specialized teaching hospitals that are affiliated with the University. These hospitals provide first-rate, technologically advanced patient care, as well

as offering health-care professionals rich opportunities to teach and undertake applied research in the delivery of health services. We are proud of successful joint University-hospital ventures: the Eye Care Centre at Vancouver General Hospital; the Vaccine Evaluation Centre at Children's Hospital; the Pulmonary Research Centre at St. Paul's Hospital, among so many others. As a province we can be proud of hospitals where the first successful in-vitro fertilization in Canada was accomplished; where a leading North American bone marrow transplantation program has been established; and where, for the first time in the world, robotics were used in a surgical procedure.

This University and B.C.'s tertiary-care hospitals function in symbiosis. Each needs the other, but each has its own mandate. While hospitals play a part in teaching and research, they have the responsibility for and lead the way in patient care. While the University plays a part in patient care, it has the responsibility for and leads the way in teaching and research in the health sciences.

In order to fulfil their roles, University and hospitals have forged a complex collaborative arrangement. Of the 17 department chairmen in our Faculty of Medicine, 11 are based in a hospital where they direct both the hospital's and the University's activities in their specialized fields. Most teaching-hospital staff doctors have UBC clinical faculty appointments. Many full-time professors in the Faculty of Medicine and others in the School of Nursing and the Faculty of Dentistry combine their teaching duties with clinical services to hospital patients.

The contribution to health care that UBC makes by providing clinical services has not been recognized in this province as it has in other Canadian jurisdictions. Universities in Ontario, for example, are reimbursed by the Ministry of Health for treatment and rehabilitation services provided in hospitals by their faculty members. Because we are not reimbursed for our contribution to clinical services, it has been estimated that the University has been underfunded for its contribution to patient care by \$9 million on an annual recurring basis. This level of subsidy from the University is an unacceptable burden to the University.

UBC and the teaching hospitals are a geographically distributed, co-operative, collaborative unit in which the hospitals are responsible for patient care and the University is responsible for education and research. The provision of teaching and research space in hospitals must be set within the priorities for hospitals. In order to achieve the greatest complementarity and the least duplication among the teaching hospitals, each must plan its space for education and research within the framework established by the University's plan for programs of education and research.

#### TEACHING AND RESEARCH — THE UBC MANDATE

Our teaching mandate in the health



# REPORT TO THE ROYAL COMMISSION ON HEALTH CARE AND COSTS

sciences is unquestioned. At our several campuses, at the Point Grey site and in various hospitals, we teach doctors, dentists, pharmacists, nurses, audiologists, and occupational and physical therapists — the professionals most clearly associated with the direct delivery of health-care services. We teach psychologists, social workers, and nutritionists — those who provide complementary services to the public. We teach chemical and electrical engineers, and basic scientists — who go on to make fundamental contributions in research and development. And we teach economists, epidemiologists, sociologists and biostatisticians whose research in health policy and population health evaluates present services and practices and examines ways of enhancing health outside the health-care system.

Our research mandate is also indisputable. No other institution in the province does as much health-sciences research nor does it excel as well. UBC has dedicated itself to excellence in research. Of the \$90 million in grants and contracts the University received last year, more than half went to biomedical and health-care research. Subjected to rigorous peer review, research projects at UBC rate highly on national and international scales. Certain basic-science projects have been selected for special national recognition:

- The Federal Government has established National Centres of Excellence, which are cross-country, inter-disciplinary networks of scientists whose projects, reviewed by an international jury, represent the very best in Canadian research. Six of these networks involve the health sciences. UBC investigators were chosen to work in all six and to lead the research on Bacterial Diseases, the Genetic Basis of Human Disease, and Protein Engineering.

- The most prestigious award given by the Medical Research Council of Canada is a group grant. The MRC has funded only 13 groups in the country, one of which is the five-member Regulatory Peptide Group in UBC's Department of Physiology, which is demonstrating the vital importance of peptides in the control of gastroentero-pancreatic function.

While the Medical Research Council funds many individual UBC investigators, it has selected three inter-disciplinary undertakings at UBC for five-year program grants:

- Co-investigators in the Faculty of Pharmaceutical Sciences and the Faculty of Medicine have received \$2.7 million to study the kinetics, effects and toxicology of drugs during pregnancy, the newborn period and childhood.

- Awarded \$6.1 million, a UBC/TRIUMF team is using Positron Emission Tomography to study the mechanisms of pathogenesis in neurological diseases with the hope of discovering and finding ways to treat pre-clinical abnormalities.

- Three investigators in the Faculty of Medicine and the Faculty of Arts have \$2.1 million to study the biology of the neurotransmitter dopamine as it relates to diseases such as Parkinson's and schizophrenia.

## HELP FOR THE DISABLED — HEALTH FOR THE PEOPLE

While it is tempting to focus on the high-tech interventions of curative medi-

cine, research at UBC also proceeds on behalf of the chronically ill, the disabled and the institutionalized. Such efforts often originate in disciplines other than medicine. Electrical engineers at UBC, for example, are Canadian leaders in designing portable, computerized warning devices for the hard of hearing, and are helping to develop a phonetic computer keyboard for the blind and dyslexic. Practitioners in our Faculty of Dentistry have made it a priority to study and teach the management of oral diseases in the aged, the hospitalized and the medically compromised patient.

At the same time, UBC scholars in various fields seek an understanding of the relationship of lifestyle, environment and even national character to illness, while evaluating health policy and developing methods of promoting health. In order to bring together the many disciplines needed to take on these tasks, we have created an Institute of Health Promotion Research, which is funded in part by the provincial government.

In addition, the Canadian Institute for Advanced Research's Program in Population Health, which is seeking to develop a broader intellectual framework for appropriate questions about the determinants of health, is led by a UBC health economist and has three other UBC scholars on a 17-member team.

## GOOD RESEARCH — GOOD BUSINESS

Health-sciences research is a major industry that supports the provincial economy. Our faculties of Medicine, Dentistry and Pharmaceutical Sciences, and our School of Nursing generated nearly \$45 million in sponsored-research funds last year. (It is interesting to note that the cost of the University allocation to these areas is roughly the same amount.) The Faculty of Medicine alone has averaged a 12 per cent annual growth in research funds in each of the past three years. It is our goal, as expressed in our Mission Statement, to double our research income from governments and the private sector by the year 2000.

Most research money comes from sources outside the province, and most of it is spent inside the province. A typical research grant earmarks 55 to 65 per cent for salaries, which are spent within B.C. on day-to-day essentials; another 20 per cent is spent on materials, half of which are purchased in the province.

The Science Council of British Columbia estimates that every dollar expended on research and development returns \$17 to the economy. Using that formula, we can project that last year our external research funding in Medicine, Pharmaceutical Sciences, Dentistry and Nursing will be amplified to roughly half a billion dollars for the province.

An example of the multiplier value of research is the potential for health-care and biomedical projects to create spin-off industries and on-going jobs. In the last decade alone, seven B.C. biomedical companies, which had their origins in research at UBC, have created 117 jobs and now have multi-million-dollar annual revenues. Our policies pertaining to the acquisition of patents and licences and to the creation of spin-off commercial companies have been the model for other universities. They should guide future health-sciences research in the province.

Our success in attracting research

money can be a mixed blessing. In Canada, grants from national agencies are given in aid of research, with no provision for indirect costs, such as space and staff. These costs, which are real and substantial, are often assumed by successful grant applicants to be something their university will cover. However, because of the way universities are funded in British Columbia, we have no source of income to cover costs created by research projects. At times we have had to consider if we could afford to accept a research grant. Ironically, the more successful we become in attracting grants, the more starved is our supporting infrastructure. Now, however, with the establishment of the National Networks of Centres of Excellence Program, a breakthrough has been made for research in this province. Our own Ministry of Advanced Education, Training and Technology has made \$20 million available for support of the research centres headquartered in this province. This is money well spent. If we can build an infrastructure to support research, we can become even more competitive in seeking grants, in the long run bringing more money into the province.

## CO-OPERATE AND DIFFERENTIATE — THE WAY TO EXCEL

If we in this province are to capitalize on the demonstrated ability of basic science research to enrich the economy and to cut health-care costs, we must focus the research that is conducted here. The Federal Government, industry and private individuals have recognized the importance of drawing geographically distributed scientific colleagues into co-operative units. In B.C., we must not allow health-sciences research to fragment. We cannot fritter away our precious research dollars on unco-ordinated and unreviewed projects. In simpler times, the pace of discovery was slower. But today, when knowledge is growing exponentially, no person or institution in B.C. can proceed alone. We have reached a level of sophistication where funding decisions are complex and peer-review is essential. If British Columbia is to become increasingly known for its great health centre, if we are to take advantage of the economic potential of health-care and biomedical developments, we must concentrate our efforts and give responsibility to those best suited for it.

I have spoken of the plethora of basic science research conducted at UBC. It is true that medical science still has many puzzles to solve. But it is apparent that medicine faces fresh challenges: over the next 10 to 20 years, its concerns will increasingly become environmental, social and economic. Our health-care systems will demand the expertise of epidemiologists, sociologists and economists to deal with such problems as changing hospital utilization patterns, environmentally caused cancers and the aging of the population. In many areas of social policy, we need to increase the participation rate, but the basic objective of a successful health-care system should be to reduce the participation rate by keeping people out of increasingly expensive hospitals. The range of programs, the intellectual ferment, the inter-disciplinary co-operation to solve these problems are resident at UBC. Only the University of British Columbia has the base necessary for the leadership that will place this province in the forefront of health-sciences research and keep it there.

## FRAMEWORK FOR ACTION

The University of British Columbia and its affiliated teaching hospitals form a constellation of institutions which must work together if British Columbia is to maintain and enhance its standards in patient care, education, and research in the health sciences. The teaching hospitals have the primary responsibility for patient care and the University has the primary responsibility for education and

research. Given the nature of teaching hospitals and the University, these functions will be linked inextricably. Nevertheless the effective functioning of each institution depends on the mutual recognition of complementary roles and responsibilities. Our plan to serve British Columbians more effectively suggests the following framework to ensure the necessary action.

1. The University of British Columbia must be reimbursed for all the clinical services it provides to the teaching hospitals and to the health-care system, as are universities in other Canadian jurisdictions.

2. In planning capital construction, the University is pleased to work with the teaching hospitals that incorporate in their spending plans and within hospital priorities the necessary space for education and research. Operating costs for such space have already become the responsibility of the hospitals. The provision of such space should become a hospital priority for which the hospital provides the necessary capital funding. This capital planning must be consistent with the University's plans for teaching and research in its multiple locations.

3. In order to ensure uniformly high and fully competitive standards, all research in the health sciences (whether on the UBC campus or in an affiliated teaching hospital), should be subject to University research policies and to the highest possible level of peer review.

4. Since research is the direct responsibility of the University, all research contracts whether on the campus or in an affiliated teaching hospital setting should include provision for indirect costs (overhead), and liaison with industry should follow the highly successful University policies and procedures, including those pertaining to the acquisition of patents and licences and to the creation of spin-off commercial development in order to ensure maximum return to the province.

5. An amount equal to two per cent of the provincial health-care budget should be set aside for research specifically aimed at the reduction of health-care costs. The continuation of such a program should be subject to periodic (quinquennial) review and conditional on proven savings in the health-care system that offset or more than offset the provincial investment (i.e. spend money to save money).

6. There should be an increased emphasis on research, policy development and pilot projects in health policy and health promotion with the objective of reducing the incidence of hospitalization.

7. Incentives should be created to encourage hospitals and other health-care institutions and agencies to decrease admissions to hospital. This could include approaches such as increasing ambulatory care and out-patient clinics, and enabling people to take responsibility for their own health. Local and system-wide objectives and targets should be established to assist in achieving these goals.

8. Increased emphasis should be placed on education, research and practice in those health-care professions whose members provide therapy, training and counselling for the chronically ill and disabled, allowing them to lead more satisfying and productive lives.

With such a framework fully in place, the province can move towards truly world-calibre education and research in the health sciences. Facilitating the potent collaboration of the University of British Columbia and its affiliated teaching hospitals within this framework will secure unexcelled health care in this province while simultaneously reducing demands on the public purse.

# New institute will facilitate research on health promotion

By CONNIE FILLETTI

UBC is helping to write a new chapter in health care with the establishment of an Institute of Health Promotion Research.

The Institute will provide a focus for interdisciplinary research and development in health promotion, while accelerating the wide variety of related research efforts already in progress at UBC.

Health promotion, as defined by the Ottawa Charter for Health Promotion of 1986, is the process of enabling people to accept responsibility for and to increase control over the maintenance and improvement of their own health.

In addition, it will spotlight new work on the nature and determining factors of health, the epidemiology of health, the techniques of health education and the economics of health.

"The Institute will also be concerned with the appraisal of health risk, the training of health educators and the

modification of behavior," said Dr. John Milsum, acting director of the institute.

"Other goals for the institute are to foster ties to both the public and private sectors concerned with health promotion in Canada and abroad, and to be a resource for developing countries interested in promoting health and evaluating health promotion policies," he added.

Academic staff with interests that complement the goals of the institute will be drawn from several schools and departments on campus to serve as faculty associates.

Another major component of the institute is the multidisciplinary Masters and Doctoral programs currently being developed. Offering training in health promotion and research, these graduate programs will evolve from the consensus of needs among the disciplines involved with the institute, Dr. Milsum said.

Milsum said research into the phi-

losophical and spiritual aspects of health and healing, and the integration of traditional and innovative methods of health care, may also be featured.

"The concept of a natural healing force has been with us since antiquity," said Dr. Milsum. "As individuals, we and only we, have the power to self-heal, but we must have an underlying wish to do so. A robust will is necessary to stimulate our ability to heal ourselves."

Dr. Milsum said the institute represents UBC's continued commitment to excellence in health care, and he praised the university's leadership role in accepting this broader concept of health.

Core funding for the Institute of Health Promotion Research has been received from the B.C. Ministry of Health. Contributions have also been made to a Professorship in Health Promotion as part of the UBC fundraising campaign, A World of Opportunity.

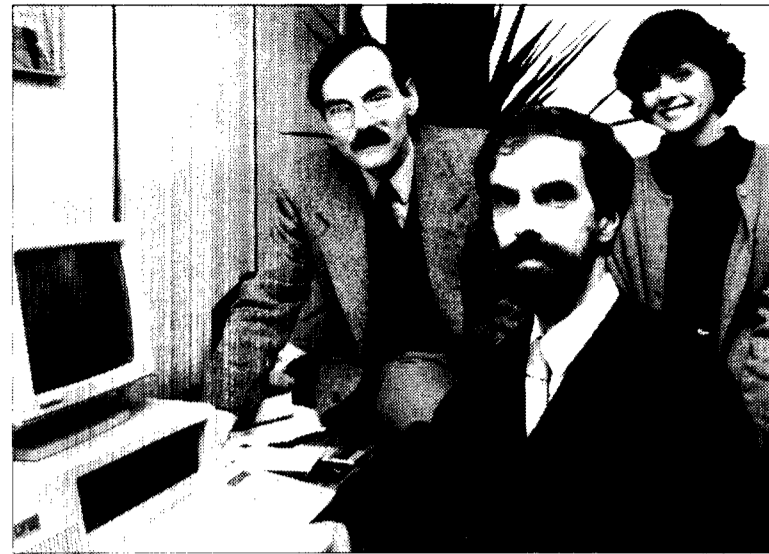


Photo by Media Services

Dr. Barer believes new centre will establish a focal point for research.

## Health Research Centre approved

By CONNIE FILLETTI

A Centre for Health Services and Policy Research has been approved by UBC's Senate and Board of Governors.

The centre will be a focal point for research at UBC on health policy, population health, health human resource planning, health services research and health care technology assessment.

"The centre's primary goal is to facilitate the development of first-class research teams, able to bring innovative, inter-disciplinary approaches to bear on questions in these increasingly important areas," said Morris Barer, director of the centre.

The centre will provide advice and assistance to provincial and federal policymakers, and will complement the educational and research activities of a variety of UBC departments—most notably, the Department of Health Care and Epidemiology.

"The centre's development represents expanded opportunity for our students to work with centre associates on research projects related to our degree programs," said Dr. Sam Sheps, head of Health Care and Epidemiology.

Other faculty associates are being drawn from the Faculty of Commerce and Business Administration, the Department of Economics, the School of Nursing, the School of Social Work and the Department of Pediatrics.

In addition, current research projects of the centre involve collaborators from other centres in Canada, the United States, Europe, Israel and Australia, as well as several provincial teaching hospitals and the Victoria Health Project.

Barer noted that there is increasing

provincial, national and international interest in the areas of interest and expertise in the centre.

"Establishing a clear focal point for research at the university will assist with attracting the faculty support necessary to enhance UBC's ability to serve as a provincial resource in these areas," said Barer. "A centre environment also facilitates the recruitment of first-rate researchers to UBC."

Funding sources for the centre include the B.C. Ministry of Health, the Woodward's Foundation, the National Health Research and Development Program, the Canadian Institute for Advanced Research, the B.C. Health Care Research Foundation, the Science Council of B.C., the Commonwealth Fund (U.S.), the National Centre for Health Services Research (U.S.), the Vancouver Foundation and the Federal/Provincial/Territorial Deputy Ministers of Health.

The centre is also part of the UBC fundraising campaign, A World of Opportunity, which has designated \$12 million for health research and teaching.

"A major objective will be the continued development of the databases resident in the centre, which are already recognized as one of the richest health-related research and planning resources anywhere in the world," Barer said.

The centre will also house Health Human Resource and Health Policy Research units and the B.C. Office of Health Technology Assessment. The latter will provide support for students interested in undertaking research in these areas and will co-host the 1992 International Conference on Health Technology Assessment.

### Study published in international journal

## Sex as exercise leads to good health

By CONNIE FILLETTI

UBC psychologist Susan Butt says sex as a form of exercise within committed partnerships may lead to good health, well-being and longevity.

But scientists are neglecting to examine parallels between sex and exercise, she said, delaying advances in the understanding and encouragement of good health and well-being.

Butt explains that this 'ostrich effect' is due largely to the marginalisation of sex research and sex researchers who have worked in the field.

"In the past, there was also concern of censorship and often great difficulty in publishing books on sexuality," Butt said. "And the authors themselves were often burdened by the distorting values of their times, passing on much inaccurate information."

Butt's study, based on a comprehensive review of the literature dealing with the subject, appears in a recent issue of *Sports Medicine*, an international scientific journal.

She said many couples pass through the first stages, or passionate love stage of relationships, in three or four years. As they enter a long-term committed partnership, compassionate love replaces passionate love and sexual



Photo by Media Services

Susan Butt holds copy of *Sports Medicine*.

activity may ideally continue as a form of exercise, recreation and fun, within the exclusive relationship.

"Sex may be the most basic, intense and frequent form of physical exercise," Butt said. "It is a biological response which has much in common with sport."

Canada's top-ranked female tennis player in the 1960s, Butt listed the similarities between fitness activities and sex as muscle tension, breathing control, rhythm and timing.

In particular, the muscle rigidity that occurs during orgasm is also necessary for outstanding athletic feats.

"Jumping, gymnastics, tennis, football—indeed almost all sports—require muscle tone, focus, strength and sometimes

strain, as does sex," Butt said. "They also require skill and technique."

Periods of rest and relaxation ideally follow both exercise and sexual activity. She notes that over-exertion in sex behaviour, just as over-training in sport, has been known to result in exhaustion or injury.

Butt recommends moderation and balance in both sex and all fitness activities.

## Pair of power problems plunge campus into darkness

By ABE HEFTER

Murphy's Law reared its unpredictable head on campus last month in the form of, not one, but two power outages which have left UBC's director of plant operations with his fingers crossed.

"The university is operating at 100-per-cent electrical capacity," said Chuck Rooney. "However, if we get hit with another power failure, we'll be in a vulnerable position because of a circuit breaker that is being repaired."

On Nov. 21, at approximately 11:40 a.m., electrical power was interrupted

to all campus buildings, with the exception of TRIUMF and some facilities in the south campus area. Work crews jumped into action and discovered that one of the two transformers that serve the campus had shut down.

"Under normal operating conditions, the second transformer would have kicked in automatically," said Rooney. "However, on that day, the second transformer was being serviced. To restore power to the university, the second transformer was energized and power was restored at ap-

proximately 12:45 p.m."

Rooney recalled that the last time the university was hit by a power failure was three years ago, on a Sunday, when the campus was quiet and the impact wasn't as evident. However, this was a Wednesday and as it turned out, Rooney and his plant operations staff weren't out of the woods yet.

After repairs were completed to the piece of equipment that caused the Nov. 21 power interruption, electricians worked to re-energize the transformer which had originally been affected by

the equipment failure. During that procedure, the transformer that was supplying power to the university shut down because of an electrical fault. The result: another blackout, this one on Nov. 26 at approximately 10:45 a.m. Partial power was restored within about two hours and all campus buildings were back on line by 4:00 p.m.

"When the lights go out, our immediate concerns are the safety of the campus population and the operations of the university as a whole," said Rooney.

The main problem Rooney and the plant operations team now face is a damaged circuit breaker. Because the parts required to complete repairs must be manufactured, it won't be until about Dec. 21 that the university has both transformers in operation. However, to guard against the possibility of an extended power interruption until repairs are completed, Plant Operations has made arrangements for the necessary materials to be on hand for temporary repairs to be made should they be required for emergency operation.

# Preliminary plans for Green College approved

By ABE HEFTER

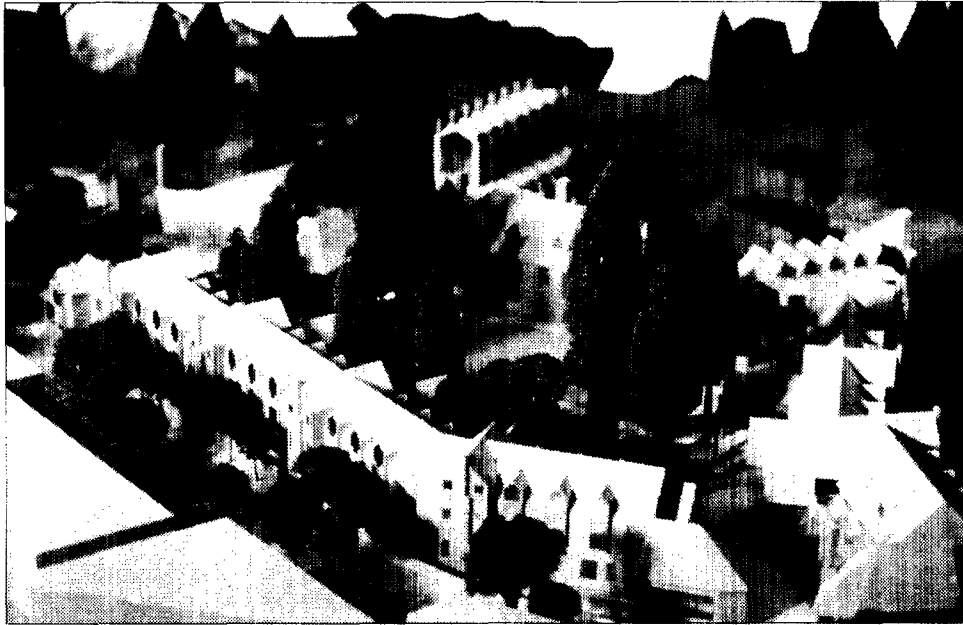
The preliminary design of Green College has been approved by the UBC Board of Governors. This is expected to lead to a residential graduate college at UBC named in honor of Cecil Green. Green's gift of more than \$7 million to UBC's fundraising campaign, A World of Opportunity, and matching funds from the provincial government, have made the college possible.

John Grace, Dean of Graduate Studies, who is chairing an advisory committee to establish policies for Green College, said he sees the project as an opportunity to attract graduate students from around the world in a way that will enrich the entire UBC campus.

"Green College should not be a place where just a few lucky people get to live," said Grace. "It must offer a sense of community, where the residents will be representative of the entire graduate student population of the campus, with a focus on interdisciplinary activities and close integration with the academic community as a whole."

Green College will also be the base of the Cecil and Ida Green lectures.

Although the university will look at other Graduate College models, like Green College,



Model of future UBC graduate college to be named in honor of benefactor Cecil Green.

Oxford and Massey College, Toronto, Grace stressed that Green College, UBC, would offer a "westcoast flavor," one that would be unique to

UBC.

"Green College will be a home for graduate students who possess both academic excellence

and a willingness to participate in the university community," said Grace. In addition, couples would be included if they could become part of the fabric of the college. To make this all work, however, fees should not be substantially higher than campus fees of regular residences."

Grace said the architecture should not only reflect the special nature of westcoast design, but also possess the qualities of grace, beauty and warmth.

Plans are for Green College to be situated at the northern tip of the campus, adjacent to Cecil Green House. The College grounds and those of Cecil Green House would form a single, integrated landscape. Entrance to both buildings would be from a realigned Cecil Green Park road. Pedestrian pathways would connect the College to East Mall and Main Mall.

Grace said if all stages of planning are implemented, Green College could open its doors in September, 1993. Two advisory committees are currently active, one focusing on academic policies, the other on architectural plans.

"Green College will strive for an openness that will bring an enriching, new dimension to UBC," said Grace.

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## You did it! Thanks

By CONNIE FILLETTI

We're over the top!

The UBC United Way campaign has surpassed its goal of \$240,000 and at press time, campaign workers were still counting the pledges coming in.

Jim Richards, Dean of Agricultural Sciences and chair of this year's drive, credited a team of 200 campus volunteers for the campaign's success.

"Our achievement is the result of the dedication and hard work of our loaned representatives, Cecelia Knowles and Edith Luck from the Development Office, our advisory-operations committee, our 18 area campaign coordinators and the many representatives and canvassers who made sure the message got out to individuals," said Richards.

He also thanked the 1,600 UBC faculty and staff who generously supported the campaign, and several student groups that donated through vari-



ous fundraising activities.

Richards, who is stepping down as chair, said it was a gratifying experience to head this year's campaign.

"I met and worked with so many caring and committed people from all segments of the campus community. It's also good to know that our contributions will have a real impact on the quality of life in the Lower Mainland. I

want to sincerely thank everyone who worked on or supported the campus campaign."

Dick Meyers, chair of the 1990 United Way Lower Mainland campaign, also extended his thanks and congratulations to everyone at UBC who helped make the campus campaign a tremendous success.

"Under the leadership of Jim Richards and his team, you set yourselves your most ambitious goal ever," said Meyers.

"Your great achievement in reaching that goal is a success our whole community will share, as your donations are translated into services for people who need them. Truly, you care about your community. Thank you again for an outstanding effort."

In all, UBC's participation rate was 20 per cent. A total of 235 new donors over the previous year pledged their support to the 1990 campus campaign.

The Photographic staff at UBC Media Services  
would like to wish all their valued customers  
best wishes for a very Happy & Peaceful  
Holiday Season.

**\$6.1 million from MRC****UBC gets largest ever medical research grant**By **CONNIE FILLETTI**

A UBC research team has been awarded \$6.1 million by the Medical Research Council of Canada to study Parkinson's disease, Amyotrophic Lateral Sclerosis—better known as Lou Gehrig's disease—and Huntington's disease.

It is the largest medical research grant ever received by UBC.

The multi-disciplinary team directed by Dr. Donald Calne, Head of Neurology at University Hospital's UBC site, will focus on the process of selective nerve cell death in the motor pathways of patients afflicted with these diseases.

Dr. Calne and his colleagues will also investigate why the same groups of nerve cells degenerate in normal aging.

"These diseases are becoming more frequent as life expectation increases," said Dr. Calne. "Their prevalence is also rising within the elderly population."

Parkinson's disease is a progressive, degenerative, neurological disorder with symptoms that may include tremor and muscular stiffness and rigidity. Patients can experience depression, slowness in movement and difficulty with balance, walking, speech and swallowing.

There are an estimated 100,000 Canadians suffering from Parkinson's disease.

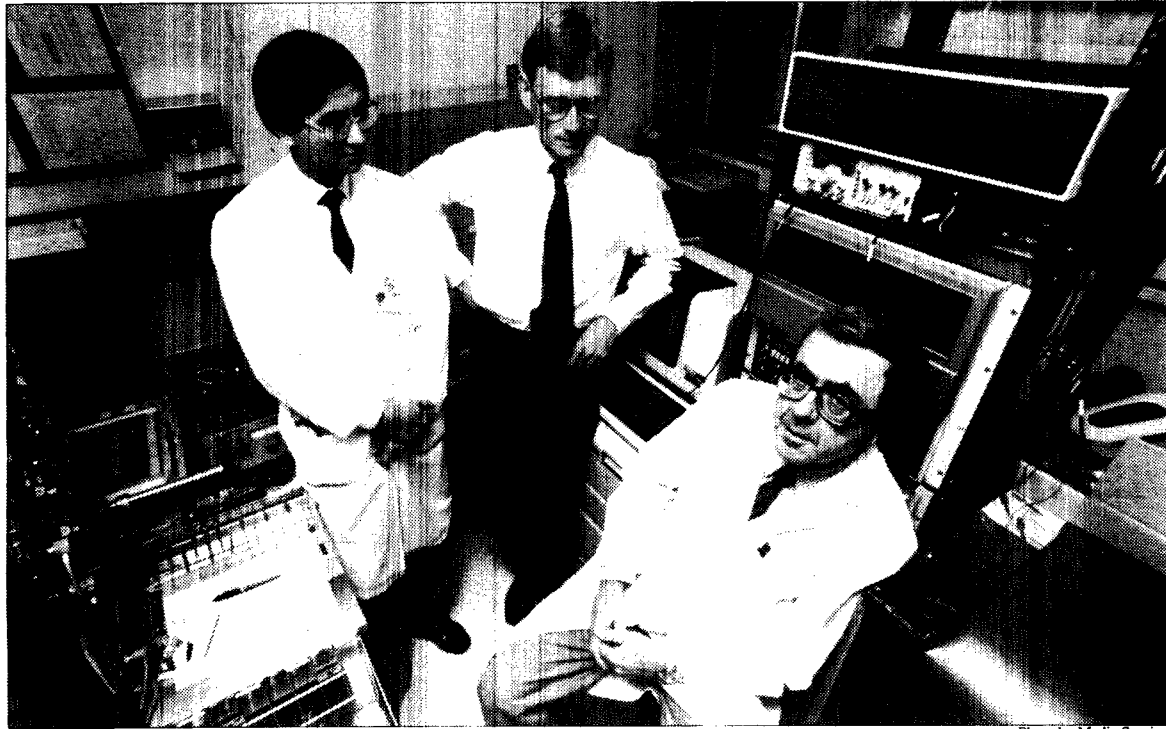


Photo by Media Services

**Dr. Donald Calne heads multi-disciplinary research team looking into several neurodegenerative disorders.**

Lou Gehrig's disease is characterized by muscular weakness and atrophy and is often accompanied by spasticity. Approximately 25,000 people across the country are afflicted with Lou Gehrig's disease.

Current medical research indicates that an environmental factor may be the cause for both Parkinson's disease and Lou Gehrig's disease. So far, there

is no cure for either disorder.

Another primary focus of the research will be on the early detection of degenerative disorders of the motor pathways.

Using Parkinson's disease as an example, Dr. Calne said there is reason to believe that the brain is damaged for many years, perhaps several decades, before the onset of symptoms. Latent

stages may also precede Lou Gehrig's disease.

In contrast to Parkinson's, Huntington's disease has a clearly defined genetic origin which produces abnormal movements and a progressive decline in mental function. About 50,000 Canadians have Huntington's disease.

Because of its known cause, its

onset in adult life and its steady, slow progression, Huntington's disease allows useful comparisons to be made with Parkinson's disease and Lou Gehrig's disease, said Dr. Calne.

"It is possible that in all three disorders, excessive excitatory activity occurs in the central nervous system," he explained. "Furthermore, such disturbed nerve cell activity may be amenable to new drugs which will be investigated during the study."

The team of 11 full-time and eight part-time researchers will work in a special administrative location provided by University Hospital President Wayne Keddy and UBC's Dean of Medicine, Dr. Martin Hollenberg. This major commitment to the study gives the group status comparable to a university department.

"It's wonderful that University Hospital has pledged the space," said Robert Miller, Vice-President, Research. "Mr. Keddy has been enormously supportive and cooperative on the entire project. He took time to address the MRC site committee, confirming his support for which I am very grateful."

The MRC grant covers a five-year term and has generated additional commitments of \$2 million from public and private sources.

The enterprise will be named the Neurodegenerative Disorders Centre.

**Liaison office works hard to bring students to UBC**

Photo by Media Services

**Mary Stott displays some materials used to attract students to UBC.**

By **CHARLES KER**

They are among the best that B.C. high schools have to offer. But offers from Canadian universities outside the province almost had these Grade 12 scholars heading east.

Instead, Steven Gribble, Matthew Rektor and Marko Riedel are UBC's first National Scholarship winners.

"We fully expect some good students from B.C. to choose universities outside the province," said Byron Hender, UBC's Director of Awards and Financial Aid. "But we also want a reciprocal flow of bright students from B.C. and across the country to consider us as well."

The National Scholarship Program was introduced this year as part of a new UBC initiative aimed at attracting bright students within B.C. borders and

beyond. But Hender added that while scholarships may provide some financial incentive, they are only part of a much bigger effort underway to make UBC a preferred choice among Canadian universities.

Enhancing UBC's public profile has been Mary Stott's job since 1987 when she was hired to direct the newly established School and College Liaison Office.

Stott said in many provinces there was a lingering notion that UBC was not interested in considering out-of-province students for admission. She added that, even in its dealings with B.C. students, the university was perceived as being indifferent.

"We now work very hard to convey our genuine interest in prospective students," said Stott. "The emphasis to-

day is on prompt, friendly, personalized service."

Earlier this month, Stott took UBC's personal touch out of province and spoke to a gathering of about 150 people from 49 selected schools in the Toronto area. She plans to hold similar information sessions with interested students and parents in Calgary and Edmonton in the new year. Apart from independent efforts made by the Faculty of Commerce and Business Administration, Stott's Toronto trip was UBC's first official foray east to spread the university's message.

And it would appear students in other provinces are getting the message loud and clear.

Scholarship applications from outside B.C. doubled to 140 from last year. Overall, the percentage of first-year students from outside B.C. has risen from just over seven to 12 per cent since 1987. Hender said the numbers will likely rise as scholarship and outreach programs expand to include university and college transfers and international students.

More than 300 first-year undergraduates accepted scholarships for 1990-91, in excess of \$600,000. However, this year is the first time UBC has mailed scholarship information to every high school in the country. In the past, inquiries from outside the province were handled on an individual basis.

It was also a first for UBC to target gifted students from other provinces for early admission. Among the first-year scholarship recipients were "outstanding" students from across Can-

**New rental housing facility for junior faculty by next fall**

A new rental housing project for junior faculty should be completed by next fall. Construction of the \$7.2-million development is to start in January, at the corner of Acadia Road and Fairview Crescent.

"Apart from the high cost of off-campus housing, there is a compelling need for young faculty to be close to laboratory and research space at all times," said UBC Treasurer Bryon Braley.

Braley added that UBC expects to make an estimated 100 new appointments each year for the next 10 years.

Once developed, the two-acre site will include 114 one-, two- and three-bedroom apartments, a day-care service and small outdoor play area. Rents will range from between \$650 to \$1,050 per month.

The apartments will be housed in

two separate buildings, two- and four-storeys high, with each apartment having one outdoor parking space. The length of tenancy agreements has yet to be determined.

Subsidized under the B.C. Rental Supply Program, the new project is part of UBC's Faculty Assistance Housing Program. The UBC initiative also provides mortgage down-payment assistance consisting of a \$10,000 grant or a \$25,000 interest-free loan for new faculty members who want to buy a house. Starting Feb. 1, the program will help new faculty secure a graduated-payment mortgage. University officials are looking into the possibility of having pension contributions diverted into a mortgage plan.

New faculty currently renting on campus are housed in 21 townhouses in Acadia Park.

ada who graduated with 90 per cent or better. These students received offers in March, which included \$1,500, unconditional acceptance, guaranteed housing and letters of welcome from the president and a dean.

Back on the homefront, the liaison office provided orientation programs on campus last summer for some 1,400 new students and 500 parents from across the country. Throughout the year, the office arranged and conducted campus visit programs for more than 40 secondary school groups, introduced a Friday campus tour program for individual students and hosted more than 125 people at its second annual coun-

sellors information day.

To further heighten UBC's profile, Stott introduced a colorful UBC poster in 1988 as well as six editions of TUUM EST, a newsletter for B.C. schools and colleges. A second newsletter, Blue and Gold, was launched last year and was circulated to all UBC applicants.

All these new initiatives augment UBC's flourishing school-visit program. The program keeps four liaison officers on the road during the winter, seven days a week, meeting with prospective students and counsellors in over 215 B.C. high schools and 15 public colleges.