

UBC discovery may eliminate diabetics' need for insulin shot

BY CONNIE FILLETTI

UBC scientists have discovered an insulin-like substance which may replace insulin and revolutionize the way diabetics are treated.

Vanadium, a simple, inorganic trace element found throughout the environment, can mimic the effects of insulin or enhance the effect of the small amounts of insulin present in diabetics.

There are approximately one million diabetics in Canada, at least half of them depend on insulin treatment.

John McNeill, Dean of Pharmaceutical Sciences at UBC, and post-doctoral fellow Dr. Sasanka Ramanadham, along with Dr. Roger Brownsey and Dr. Ray Pedersen of UBC's Faculty of Medicine and scientists at the University of Montpellier, France, have just released their most recent studies on vanadyl in the American Journal of Physiology. A form of vanadium, vanadyl returned diabetic rats to a normal state.

"This could mean that a diabetic would never have to take insulin ever again. At the very least, it would reduce the amount they would have to take," said McNeill.

"Vanadium, in one form or another, can be a substitute for insulin and could greatly improve treatment for diabetics," he stated.

The importance of vanadium in determining the amount of insulin a diabetic receives should not be downplayed.

McNeill explained that too much insulin causes low blood sugar and possibly death. Too little insulin leads to high blood sugar which may produce a variety of serious secondary effects including kidney disease, heart problems and cataracts. Vanadyl proved effective in eliminating these secondary effects present in the rats tested.

McNeill projects that human testing of vanadium is "probably a few years away."

The research team is continuing its exploration of how vanadium produces insulin-like effects and is searching for other forms of the substance which may prove even more effective than vanadyl.

Their work is being sponsored by the Canadian Diabetic Association and by a private contribution from the Agnes and Alfred Woods Research Fund.

McNeill will present the latest study on vanadium to an international conference on the cardiac complications of diabetes in Tokyo next month.

Groups oppose housing plan

By PAULA MARTIN

A plan by the UBC Real Estate Corporation to develop market housing on university-owned land has come under criticism from resident and student groups.

The plan calls for Hampton Place, UBCREC's first project, to be built on 28

acres of campus land at Wesbrook Mall and West 16th Avenue. It is estimated that the 790 units of rental and owned low-rises, townhomes and apartments will eventually add about 1,600 residents to the area.

Hampton Place will generate about \$3 million in annual income for the university, said UBCREC President Mark Betteridge. He added that the income will ensure stable long-term funding for UBC's capital and endowment programs.

But a spokesman for the West Point Grey Residents Association says members of her group feel that residents in the area weren't consulted about the project.

"There were a lot of people taken back by the fact that UBC was going ahead and doing this without public input," said Cynthia Foreman.

Foreman said although the community -- and its parking, traffic, schools and recreational facilities -- will be affected by the new housing development, quality of life is not the main issue.

"I think people are more up in arms because there was no input," she said, adding her group would like public hearings on the development.

"The university has followed all of the legal requirements and more as the owner of the land," Betteridge said, noting there is no requirement for public hearings.

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INSIDE

HONORARY DEGREE: Hungary has given an honorary degree to Forestry Professor Antal Kozak. Page 3.

ACCIDENT PRONE: Left handers are more accident-prone than right handers UBC Psychology Professor Stanley Coren has found. Page 6.

GALIANO STUDIED: A battle over land use on Galiano Island is being studied by Commerce Professor Kenneth MacCrimmon. Page 7.

QUOTED: "Governmental wish lists do not result in discoveries." Nobel Laureate John Polanyi.

Reports

The University of British Columbia
Vancouver, British Columbia

Volume 35, Number 16
September 21, 1989



Friendship Celebration

Photo by Media Services

Japanese Prime Minister Toshiki Kaifu strikes the bell at the Pacific Bell Tower near the Asian Centre to celebrate friendship between Canada and Japan. Kaifu was on a two-day visit to Vancouver.

More students from China enrolled despite Tiananmen

By GAVIN WILSON

Students from the People's Republic of China are continuing to arrive at UBC despite predictions their numbers would dwindle after the massacre at Tiananmen Square.

According to figures released by International House, about 250 Chinese students are currently enrolled at UBC, up from 197 students in October of last year and from 138 in Oct., 1987.

As well, an unknown number of visiting scholars have also arrived. There were about 100 at UBC last year.

Both students and scholars are receiving permission to leave China despite increased security checks and widespread defections by Chinese nationals living abroad, including, it is believed, most students and scholars at UBC at the time of the Beijing massacre.

"I'm quite surprised," said Iris Thomson, acting director of International House. "I thought we would see a reduction this year just as everyone else did."

"The assumption that everyone made was that their numbers would drop off.

But it appears that China has not taken any steps to restrict students from coming here," she said.

And the number of Chinese students could still grow, Thomson added. Students continue to arrive on campus, even though classes have already started. Nearly

all of UBC's Chinese students are in graduate studies.

The exact number of visiting scholars is more difficult to pin down. Invited by individual departments, "it's impossible

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75th Anniversary planning in high gear

Faculty, staff and students are gearing up for the launch of the 75th Anniversary year in January.

The Alma Mater Society has formed a working committee, chaired by Eric Ommundsen, to involve students on the various 75th Anniversary organizing committees. Student initiated anniversary activities ranging from kick-off festivities in January to year-long competitions featuring '75' as a central theme are planned. The Alma Mater Society committee will also facilitate effective communications of 75th Anniversary news

and information to student societies, clubs, groups and individuals.

Planning for the three major 75th Anniversary events - Open House in March, Summer Festival May through August, and 75th Anniversary/Homecoming Week September 27 to October 3, is well under way.

Jim Richards, Dean of Agricultural Sciences and Chairman of Open House, 1990, said that all twelve faculties have appointed Open House Chairs and that faculty representatives were briefed on

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Planning for 75th in high gear

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Sept. 11. The deadline for Open House project proposals is September 29, 1989.

Norm Watt, Director of Extra-Sessional Studies and chairman of the special events committee, has recruited a talented group of volunteers who will be producing an array of unique summer events including a UBC RECYCLING FAIR, The President's annual croquet tournament, Children's Theatre, specialized campus tours and much more.

Ron Longstaffe, Vice-President of the Alumni Association and Chairman of the 75th Anniversary/Homecoming Week, has worked with Deborah Apps of the

Alumni Association to recruit fourteen working committees for the planning and implementation of the birthday week. Currently, plans include a commemorative edition of the UBC Chronicle, an expanded Homecoming Parade, a Great Trek/Arts 20 Relay, Alumni reunions, and a black tie Gala Great Trekker Dinner.

Bill Webber, Dean of Medicine and Chairman of the 75th Anniversary Campus Projects Committee, has invited faculty members to submit 75th Anniversary project proposals by Sept. 22, 1989.

Dean Webber's Committee will consult with faculty and the campus commu-

nity in identifying and initiating 75th Anniversary projects.

The campus community is encouraged to make use of the UBC 75th Anniversary logo on all printed materials. Photo mechanical transfers of the logo are available through Media Services, and UBC business stationery may be ordered with the 75th Anniversary logo in place of the crest.

The 75th Anniversary Souvenir Merchandise Committee, chaired by the Don Donovan, Merchandise Manager of the Bookstore, has developed approximately 15 souvenir items.

Chinese are 'duty-bound' to return

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to keep track of them," Thomson said.

Samuel Chanson, an associate professor in Computer Science, said that recent events in China had no effect on the arrivals of 10 new graduate students and three visiting scholars in his department.

"Yes, I was a bit surprised," he said. "I expected no more than half of them to make it."

Both Thomson and Chanson said they have heard reports that Chinese officials responsible for granting exit visas are sympathetic to the student-led democracy movement.

A statement released Aug. 28 by the Chinese Embassy in Ottawa has reaffirmed Beijing's policy of sending students and scholars abroad. It also said government-sponsored students and scholars are "duty-bound" to return home to work for their country when they complete their studies.

There were 1,214 Chinese students in B.C. on June 4, and the cases of those who have applied to stay are now being assessed by Canadian immigration authorities. It is thought that the majority of these students have applied for permanent residence status in Canada.

On July 1, 15 Chinese students at UBC resigned from the Communist Party of China. In a letter to the Chinese consulate dated to coincide with the anniversary of the party's founding, they said they could no longer remain party members after the June massacre and the subsequent purges, arrests and propaganda campaign.

Meanwhile, Raymond Chan, an engi-

neering project team manager at TRIUMF, has been invited to take part in an international organization dedicated to bringing democracy to China. Chan is the leader of the Vancouver Society in Support of the Democratic Movement, which was established shortly after the June 4 massacre.

The meeting has been called to set up a global body known as the Democratic Chinese Front, which Chan said will operate as a political party in exile.

Attending the meeting in Paris on Sept. 22 are Chinese dissidents, including

several prominent former members of the Chinese Communist Party, who support the democracy movement and who fled the country in the wake of the clampdown.

One of only three people from Canada invited to attend, Hong Kong-born Chan will sit as an observer.

When he returns his local organization will hold a demonstration and 24-hour fast to coincide with China's National Day starting at 3 p.m., Sept. 30, at the corner of Main and Terminal.

Teaching in China creates dilemma

Last June, as the bloody events in Tiananmen Square unfolded before a horrified world, Samuel Chanson vowed he would not return to China as long as it was ruled by tyrants.

But now, the UBC computer scientist is not so sure. Would his return be seen as a tacit approval of the government, or would his presence aid the intellectuals who led the democracy movement?

It is a dilemma that is faced by dozens of faculty members at UBC and thousands of experts and academics around the world in the confusing aftermath of the June 4 massacre.

Chanson spent three weeks in May at universities in Beijing on a United Nations Development Program project, teaching a course on computer communications and advising on research projects.

After the massacre he said: "I feel like I've been used by the Chinese government. They don't respect or value their own education system or their own intellectuals. I don't want to go back there until that has changed."

But now, Chinese academics and students seem to enjoy an unexpected freedom to travel abroad and continue their studies, and this has given Chanson pause for thought. In the meantime, the UNDP has resumed the computer project.

"Not going back is a way of offering symbolic support for the students and intellectuals. But on the other hand, if I were invited by an individual university, I'm sure they would have considered this."

"It would be a dilemma. I think I'd have to take every case individually."



Photo by Media Services

Michael Pentry of Parking and Security Services checks one of UBC's new digital parking meters with LED readout that can be hooked up to the new handheld ticket writing system. All meters on campus will be replaced with the digital meters.

Education network to meet in Paris

An international information network on higher education - the Trans Regional Academic Mobility and Credential Evaluation (TRACE) - will hold its constitutive assembly in Paris on Oct. 26 and 27.

TRACE has been developed by a group of experts representing several national and international organizations concerned with studies abroad and the evaluation of foreign academic and pro-

fessional credentials.

The information network will provide access to standardized data on systems and institutions of higher education, on study programs, credentials, diplomas and degrees worldwide.

The Association of Universities and Colleges of Canada is a founding member of TRACE.

Groups consulted, Gellatly says

Continued from Page 1

Bruce Gellatly, UBC's Vice-President of Administration and Finance, added that appropriate groups were consulted throughout the planning stages, including the University Endowment Lands Ratepayers' Association.

The issue was also considered at an open meeting of UBC's Board of Governors in the spring of 1988 and impact studies were made available to the Greater Vancouver Regional District, he said.

"This has not been developed overnight," Gellatly said. "This development has been going on since 1982."

Vanessa Geary, External Affairs Coordinator for the Alma Mater Society, said students have their own concerns about Hampton Place.

"The biggest problem with it as far as students are concerned is that it does nothing to address housing problems."

Gellatly said that Hampton Place will help UBC address those needs.

"We are looking to this project to make student housing possible, because it will provide us with capital funds which we otherwise couldn't get and which will keep the cost of student housing at affordable rates," he said.

"Clearly it's a legacy for the university which over the next 100 years will generate an annual cash flow which will provide UBC with funds for both capital and endowment purposes."

UBCREC was incorporated by the university in 1988 as a private company to carry out real estate developments.

The corporation's Hampton Place public information trailer at Westbrook Mall and West 16th Avenue was damaged by fire on Sept. 12. The blaze is under investigation by the Fire Commissioner's arson investigator.



Photo by Media Services

Pat Downey, University Endowment Lands Assistant Firechief, holds debris inside the UBC Real Estate Corp. information trailer which was damaged by fire earlier this month.

Hungary honors Forestry professor

By JOMOSS

Hungary has bestowed an honorary degree on UBC Forestry Professor Antal Kozak and in doing so extended an official olive branch to more than 200 exiled faculty and students who fled after the short-lived Hungarian revolution 33 years ago.

Kozak received his honorary doctorate from the state-controlled Sopron University of Forestry and Wood Science, a 180-year old university which in its time was considered one of the leading forestry schools in Europe.

The degree was awarded in association with a national science congress in Budapest, Aug. 21-26.

He was part of a group which represented almost an entire university that defected from Hungary and came to Canada to join the Forestry Faculty at UBC.

To Kozak, his honorary degree is the government's way of saying all is forgiven.

"They had to reach out to the Sopron group in some way and this was how they chose to do it," Kozak explained.

In 1956, Kozak was 20 and a third-year forestry student at the university when Hungarians rose up against the Communist government that had been in power since World War II. He and other students organized truck convoys to ship supplies of medicine, food, clothes and blood from Austria to resistance fighters in Budapest, 200 kilometres away.

Kozak escorted one of the last shipments into the beleaguered capital, where the truck was fired upon several times as it reached the city.

Two days later, on Nov. 4, after 12 days of fighting, the uprising was quelled by Soviet troops and an exodus of Sopron students and faculty slipped over the border to Austria.

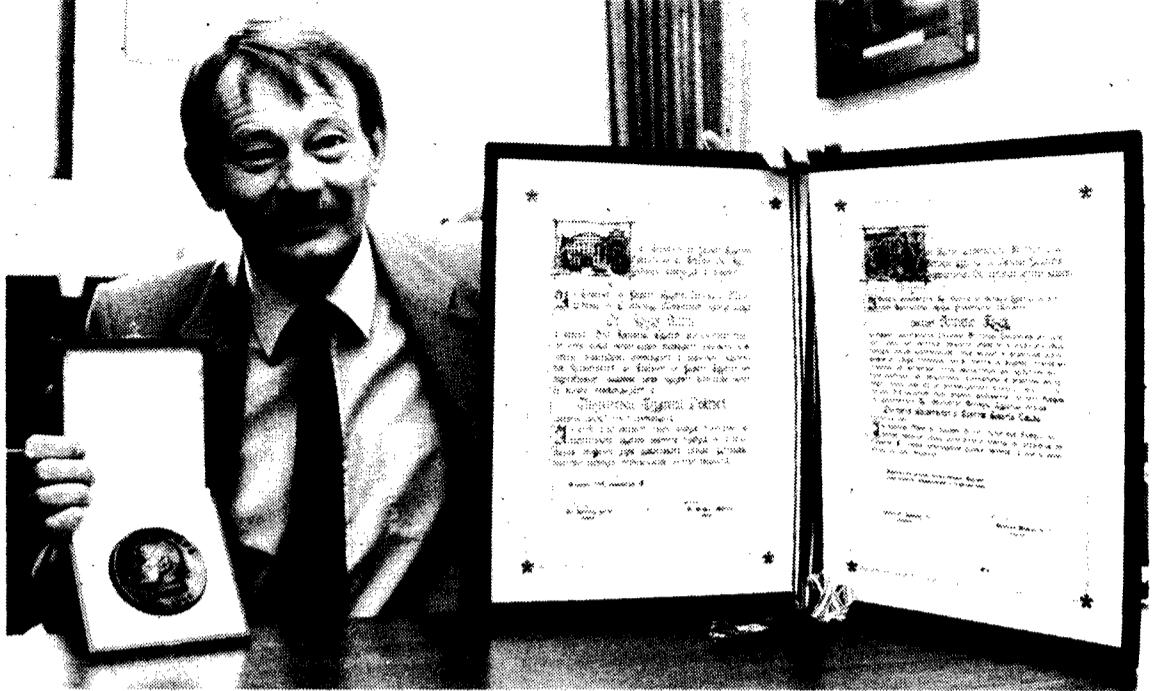
"We were scared," said Kozak, adding that most Hungarians knew from the outset the revolution had little chance of success. "It was like a mosquito fighting an elephant."

Hungarians had hoped the western world would side with their cause, but the Suez Canal crisis diverted global attention from the small Soviet satellite country to matters of more pressing economic concern.

Once it was realized almost the entire Sopron school had escaped to Austria, the group contacted twenty countries around the world asking for asylum. Canada's offer seemed the most suitable and in 1957, Kozak was one of 200 students and 14 faculty who arrived at UBC to establish the Sopron Division of Forestry.

They fully expected to return to their homeland within a year or two, but it was almost ten years before the Hungarian government declared an amnesty for exiled nationals. Even then, Kozak says, many people believed they would be jailed if they returned.

He graduated with his BSF from UBC in 1959, and went on to complete a masters and PhD before joining the faculty as a part-time lecturer in 1963. Colleagues



Forestry Professor Antal Kozak shows off honorary degree awarded by Sopron University in Hungary. He received the silver medal from the Hungarian national research institute for his contributions to forestry research.

Laszlo Adamovich, Oscar Sziklai and Laszlo Paszner are also members of the Sopron group. Kozak is now Associate Dean of Forestry and Professor of Forest Resources Management.

One of Kozak's research topics over the last 25 years has been to investigate better ways of predicting the quantity and quality of commercial lumber available in standing trees. He has developed mathematical modelling techniques which can calculate precise diameters and volumes of the logs to be processed from 33 B.C. tree species.

Kozak has just finished refining the technique for use by the provincial government and developed supporting software programs.

"It's a brand-new technique that's simpler and faster than others and will have a wide application," he said.

One of the first countries to benefit from his research, outside of Canada, may be Hungary.

Kozak has visited frequently over the last two decades to see his parents. But his first official invitation to return home was when Sopron university asked him to

lecture and undertake research last year.

The move towards reconciliation by awarding an honorary degree to a Sopron group member was a moment of triumph for the Sopron community in Canada, still a closely-knit group with a strong national identity and patriotic ties.

In addition to the degree, Kozak was awarded a medal from the national forestry research institute in recognition of his contributions to forest research in Hungary.

United Way goal set at \$195,000, up 20 per cent

By CONNIE FILLETTI

The goal set for this year's UBC United Way employee campaign is \$195,000, up 20 per cent over last year.

John McNeill, Dean of Pharmaceutical Sciences and chairman of the campus campaign (which kicks off Oct. 1) is optimistic about meeting that goal.

"We feel that with the kind of campaign we're mounting, people at UBC will support it. We're trying to personalize the fund raising drive by getting away from a mail campaign and recruiting more people to canvass," McNeill said.

Last year, the number of UBC full-time faculty and staff who contributed to the campaign jumped to 19 per cent from 13 per cent in 1987. McNeill hopes participation will increase to 25 per cent in 1989.

McNeill is also encouraging each faculty, department and non-academic unit on campus to have a representative canvassing their colleagues.

"It's so easy for people to participate, both as volunteers and donors, in the United Way. The option of payroll deduction allows you to give straight from your paycheque, and you can designate which organization sponsored by the United Way you would like your contribution to go to or not to go to. It has to be one of the most flexible and painless ways of giving," McNeill said.

Increased student participation is also anticipated this year for the first time in the 59 year history of UBC's United Way employee campaign. Students will raise

funds through several special events including sales, contests and by exploiting interfaculty rivalries.

McNeill, who steps down as chairman after this year's campaign, has received much personal satisfaction from his involvement with UBC's campaign.

"As a university, we already contribute to the community by training individuals who will enrich the quality of life



for us all. Our campus wide participation in the United Way employee campaign furthers our contribution to the community," said McNeill.

Training sessions for canvassers are available. For more details and information on how to volunteer for this year's campus campaign, contact Deb Shunamon at 228-3034.

Women's Studies conference set for September at UBC

UBC's first major Women's Studies conference should raise the profile of feminist research on campus and help with the push for a degree program in this area, says conference organizer Valerie Raoul, chair of the Faculty of Arts Women's Studies Committee.

The conference, Gender and the Construction of Culture and Knowledge, is being held at the Woodward IRC building Sept. 22-24.

Raoul, a professor in the French Department, says UBC is a notable exception when it comes to Women's Studies because it is the only major Canadian university that doesn't offer a degree option in this field.

"We would like to see a degree program at UBC," Raoul said. "We'd also like to see a centre to coordinate research

on women which is taking place on campus."

The conference will bring together feminist scholars and researchers from across Canada and the United States, including 35 scholars from UBC.

The keynote speaker will be feminist psychologist Alexandra Kaplan from Boston's Wellesley College, who will speak on new perspectives on women's psychological development.

The program will address feminist issues in art, literature, social policy, anthropology, theology, education and science.

"The particular interest of this conference is that it is asking the basic question -- what is the influence of gender in both the type of research which is undertaken and the type of results that are produced?" Raoul said.

Letters to the Editor

Thanks for weekend

Editor,

As recent winners of the "It's Yours" contest, we wish to thank you for a most enjoyable weekend.

We especially enjoyed the quality of food and friendly staff in the Subway Cafeteria.

It was an opportune time for our son,

Richard, to gain some exposure to UBC as he plans to attend university in two years time.

Please extend our thanks to the many departments involved in planning our special weekend.

With thanks,
The Tones Family
David, Cathy and Richard

The Studio Package



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Calendar

September 24 -
October 7

MONDAY, SEPT. 25

Centre for Cont. Ed. Lecture/Recital

The Spanish Guitar - Michael Strutt, Lecturer, UBC. \$13.00. For information call 222-5254. Conference Room, Carr Hall. 8:00 p.m.

Applied Mathematics Seminar

Examples of New Non-Classical Similarity Reduction. Dr. Peter Clarkson, Dept. of Mathematics, U. of Exeter, England. Math 229. 3:45 p.m.

Multicultural Liaison Office - Free Public Forum

Multiculturalism in Canada: Meeting the Challenge. Dr. John Samuel, Acting Director, Race Relations, Dept. of Secretary of State; Dr. Elliot Tepper, Carleton University; Dr. Jean Laponce, UBC. For information call 228-5339/222-5238. Robson Square Media Centre Theatre. 7-9 p.m.

Biochemistry and Pharmaceutical Sciences Seminar

Characterization of the defect in renal phosphate transport in X-linked hypophosphatemic Ricketts. Dr. H.S. Tenenhouse, Department of Pediatrics and Biology, McGill University. For information call 228-5925. Copp Building 2010. 3:45 p.m.

Mechanical Engineering Seminar

Computational Fluid Dynamics. Dr. Martha Sakudean, Head, Mech. Eng. For further information call 228-4350. CEME 1204. 3:30 p.m.

TUESDAY, SEPT. 26

Statistics Seminar

The Problem of Bandwidth Selection in Kernel Density Estimation. Dr. Jean Meloche, UBC. For information call 228-3167. Ponderosa Annex C, Room 102. 4:00 p.m.

Geography Colloquium

The Beaver Wars Revisited - a reinterpretation of trade and warfare in Eastern Canada before 1653. Prof. Conrad Heidenreich, Geography, York University Room 200, Geography Bldg. 3:30 p.m.

Botany Seminar

Application of biotechnology to reforestation. Dr. Ben Sutton, B.C. Research. For information call 228-2133. Bio Science Bldg. Room 2000. 12:30 p.m.

Lectures in Modern Chemistry Seminars

Looking at Orbitals in the Laboratory - Chemical Applications of Electron Momentum Spectroscopy. Dr. Chris Brion, Chemistry, UBC. For more information call 228-3266. Chemistry Bldg Rm. B250. Refreshments at 12:40. Lecture at 1:00 p.m.

WEDNESDAY, SEPT. 27

Grad Scholarships Day

National/Provincial/UBC Graduate and Post-

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 Editor-in-Chief: Don Whiteley Editor: Howard Fluxgold Contributors: Connie Filletti, Paula Martin, Jo Moss, and Gavin Wilson.



Photo by Media Services

Children play at the new daycare centre on campus, which opened its doors this month. Some parents were surprised to find that programs are already fully booked.

CALENDAR DEADLINES

For events in the period Oct. 8 to Oct. 21 notices must be submitted on proper Calendar forms no later than noon on Wednesday, Oct. 27 to the Community Relations Office, 6328 Memorial Rd., Room 207, Old Administration Building. For more information call 228-3131. Notices exceeding 35 words may be edited.

doctoral Awards. Speakers from the National and Provincial Granting Agencies and the Faculty of Grad. Studies. Contact GSS or call 228-0745. Grad Stds. Centre Ballroom. 9:00 a.m. - 4:30 p.m.

Forestry Seminar Series

How to use research services, liase with industry and transfer technology. Dr. Richard Spratley, Dir. Research Services and Dr. James Murray, Dir. Industrial Liaison. For information call 228-3544. MacMillan 166. 12:30 - 1:25 p.m.

Faculty Club 30th Anniversary

Reception for Past and Present Boards of Directors. Main Dining Room, 6-7 p.m. Semi Formal Gala Dinner (reservations required), Main Ballroom, 7 p.m. For information / reservations call 228-3291.

Music Noon-Hour Series

Charles Foreman, piano. Tickets \$2.00 at the door. For information call 228-3113. Music's Recital Hall. 12:30 p.m.

Grad Student Society

Female Grad Student Support Network. Discussion of Sexual Harassment Issues with Margaretha Hoek, Asst. to Dir. Women Students. Graduate Centre Garden Room. 12:30 p.m.

Arts Faculty Panel Discussion

A joint presentation by the Theatre and English depts. Hogarth, Stravinsky, Auden and Hockney, about the forthcoming Vancouver Opera production of The Rake's Progress, with Richard Bevis (Engl.), Robert Gardner (Thtr) and Alison Green (Van Opera).

Committee On Lectures - French

Litterature et anthropologie au XVIIe siecle with Professor Louis Van Delft, U. of Paris, Nanterre. For information phone 228-4004. Buchanan D244. 12:30 p.m.

THURSDAY, SEPT. 28

Faculty Club Annual General Meeting

For information call 228-2708. Salons A, B and C. 8:00 p.m.

Office for Women Students

Time Management Seminar. Ray Edney, Wmn Students' Off. Free Admission. For information call 228-2415. Room 223 (Women Students' Lounge) Brock Hall. 12:30-2:20 p.m.

Psychiatry Academic Lecture

Corticotropin Releasing Hormone and the Etiology of Depression. Dr. Jane Garland, Resident V, Psych UBC. University Hospital, UBC Site. 8:00 - 9:00 a.m.

FRIDAY, SEPT. 29

Concert

Classical Wind Ensemble of the Essen Folkwang College of Music. Admission free. For information call 228-3113. Music Bldg. Recital Hall. 8:00 p.m.

Chemical Engineering Seminar

Two-Phase Anaerobic Fermentation of Two Industrial Wastewaters. Robert Stephenson, Grad student, Chem Eng. For information call 228-3238. Rm. 206 - Chem. Eng. Bldg. 3:30 p.m.

Faculty Club Seafood Festival

Reservations - 228-3803. Main Dining Room. 5:30 - 8:00 p.m.

Medical Genetics Seminar

Towards a complete genetic and physical map of *C. elegans*. Dr. Shiv Prasad, Med. Gen., UBC. For information call 228-5311. Room D308, University Hospital, Shaugnessy Site. 2:15 p.m.

Pediatrics Case Management Rounds

Hemolytic Uremic Syndrome - Pathogenesis

and the Role of Specific Therapy. Drs. B. Fahkry, M. Bond and D. Lirenman, Peds. UBC/BCCH. For further information call 875-2117. G.F. Strong Rehab. Centre Auditorium. 9:00 a.m.

Grad Student Society Events

In the Fireside Lounge of the Grad Centre: 2nd Annual Darts Tournament. 7:30 p.m. Jazz Duo with Peter Huron. 8:30 p.m. - 12:30 a.m. Everyone welcome. For information call 228-3203.

MONDAY, OCT. 2

Applied Mathematics Seminar

A Singularity Dynamics Picture of Solitary Wave Interactions. Dr. P.P. Goldstein, Nuclear Theory, Dept. Inst. Nuclear Studies, Warsaw, Poland. Room 229, Math Bldg. 3:45 p.m.

Germanic Studies Lecture

To Be A Woman Writer in Finland with Finnish author Marta Tikkanen. Bu B-319 12:30 p.m.

Astronomy Seminar

Profile Fitting Techniques for Astronomical Photometry: Theory and Applications. Dr. Peter Stetson, Dom. Astrophysical Observatory, Victoria. For further information call H. Richer, 228-4314 or 228-2267. Geophysics and Astronomy, Room 260. Coffee from 3:30 p.m. Lecture at 4:00.

Mechanical Engineering Seminar

Integrating C.A.D. with Machining Process Control and Control of Bandsaw Snaking. Grad students Allan Spence and Bruce Lehmann, respectively. CEME 1202 3:30 p.m.

TUESDAY, OCT. 3

Oceanography Seminar

Nitrogen Cycling in Shallow Environments. Dr. Yves Collos, Centre de Recherche en Ecologie Marine et Aquaculture de l'Hourmeau, France. For further information call Dr. John Fyfe, 228-3278. BioScience 1465. 3:30 p.m.

Classics Club Lecture

What is Epigraphy? Prof. C.P. Jones, Dept. of Classics, U. of Toronto. Buchanan Penthouse. 7:30 p.m.

Faculty Women's Club

First General Meeting for 1989/90 Academic year. History of Cecil Green Park House and Signup for Interest Groups. Mrs. Sherwood Left and Mrs. Jo Robinson. All women faculty and faculty wives welcome. (Additional sign-up Oct. 2 from 7-8 p.m.) Cecil Green Park House. 9:30 a.m.

Geography Colloquium

Regional Impacts of Global Climate Change. Prof. G. Thomas, Geog. UBC. Room 200, Geog Bldg. 3:30 p.m.

Faculty Club Seminar

Wines Session No.3. Wines of France-Burgundy/Chablis. Darren Berezowski. Newcomers welcome. For pre-seminar supper reservations call 228-3803. Seminar information call 228-4693. Faculty Club Music Room. 7:00 - 9:00 p.m.

Statistics Seminar

Testing for Overdispersion with respect to Exponential Family Models. Dr. Charmaine Dean, Dept. of Math and Stats. SFU. For information call 228-2234. Ponderosa Annex C, Room 102. 4:00 p.m.

Botany Seminar

Phenylpropanoid conjugates in plant cell cultures. Dr. Brian Ellis, Head, Plant Science, UBC. For information call 228-2133. BioSciences 2000. 12:30 p.m.

Civil Engineering and

Geophysics Seminar

Dec. 7, 1988 Armenia Earthquake Briefing - 60 min. videotape produced by Earthquake Engineering Research Institute with footage of the disaster and a briefing by the U.S. investigation team. Discussion follows. For more information call 228-5406. IRC #5 3:30 p.m.

WEDNESDAY, OCT. 4

Music Noon-Hour Series

Clément Marquis, guitar. Tickets \$2.00 at the door. For information call 228-3113. Music Bldg. Recital Hall. 12:30 p.m.

Geophysics Seminar

Role of Atmospheric Feedbacks in Amplifying Greenhouse Gas Forcing of Climate Change. Dr. G.A. McBean, Atmospheric Science Programme, Geography, UBC. For further information call Doug Oldenburg, 228-5406/2267. Coffee from 3:45 p.m. Geophysics and Astronomy Bldg., Room 260. 4:00 p.m.

Creative Writing Lecture

Canadian author W.P. Kinsella reads from his new collection, The Miss Hobbema Pageant. For information call 228-3058/2712. Freddie Wood Theatre, 12:30 p.m.

Classics/President's Lecture

Greek Drama and The Exposure of Children. Prof. C.P. Jones, Classics Dept. U. of Toronto. For information call 228-2889. Buchanan Bldg. A-102, 12:30 p.m.

Regent College - Special Lecture

What Do You Do When? Contemporary Mennonite Christians in the Soviet Union. Dr. John B. Toews, Prof. Church History, Regent College. For information call 224-3245. Main floor Auditorium, Regent College. 11:00-12:00 noon

THURSDAY, OCT. 5

Biotechnology Lab and Gairdner Foundation Seminar

T cell receptor diversity and selection in vivo. Dr. Mark Davis, Assoc. Investigator, Howard Hughes Medical Institute. For information call 228-5433. IRC Lecture Hall #5. 4:00 p.m.

See CALENDAR on Page 5

Annual Report of the Multicultural Liaison Office, 1988-89

The Multicultural Liaison Office was established in July 1988. Its Director reports to the Vice-President Academic. In initiating the office, a prime objective was to seek out ways in which the University could reach out to those sectors of the community who have traditionally experienced the institution as inaccessible and insensitive to their needs. If we were to be truly committed to the achievement of excellence in teaching, research and service, it seemed important that we draw on as wide a range of community resources as possible.

Such contact would also sensitize us to the newer needs of a multicultural society and stimulate appropriate responses toward an improved societal integration of all population segments. A new institutional attitude may lead us to take proactive stances on crucial issues facing a multi-ethnic university. To aspire in this direction, this office focused on the following areas:

1. Establishing contact with different sectors of the community.
2. Identifying faculty research and teaching interests pertinent to ethnic relations. New community-faculty liaison could emanate from these efforts.
3. Contacting major funding agencies to identify priorities and areas of mutual interest.

1. Contact with Community

As one approach toward community outreach and achieving our goal to stimulate public discussion on issues related to ethnic relations in our society, the Multicultural Liaison Office plans a series of public education fora to be held in the Fall of 1989. Themes for the first three sessions are:

- Sept. 25, 1989 Intergroup Relations in a Multi-Ethnic State
- Oct. 24, 1989 Effective Teaching and Parenting in a Multicultural Society

Nov. 14, 1989 The Role of the Media in Race Relations

The aim of these sessions is to seek out authoritative sources to address the concerns of a multicultural society. To ensure collaborative planning of these sessions, the Multicultural Liaison Office established an Ad-Hoc Consultative Committee of some 30 individuals reflecting a range of involvement with ethnic relations. Members were drawn from both the wider community as well as the faculty.

The meetings also served to inform the community representatives of the directions currently being pursued at UBC and to call for recommendations in areas where we might more appropriately address community needs.

Throughout the year, contacts were developed through:

- i) our initiative;
- ii) responding to invitations to address meetings;
- iii) membership in community-related bodies, such as the Race Relations Advisory Committee to the Vancouver School Board;
- iv) through requests for media presentations.

Among these were:

Association of Multicultural Societies (AMSSA) "Minority Participation in the Workplace", Robson Media Centre, October 15, 1988.

CKVU, an hour-long call-in radio program on Immigration, January 6, 1989.

Knowledge Network, televised interview on "The Ethnic Community: Persistence and Change", April 3, 1989.

Canadian Association of Physicians with an interest in South Asia. Address on "South Asians in the Canadian Mosaic", Vancouver, May 13, 1989.

National Ecumenical Chaplains Conference, "Fragmentation and Pluralism: Developing Strategies for the Campus Ministry in the 90's", University of Victoria. Address on "Issues for Campus ministries in a mul-

ticultural-multifaith university community", University of Victoria, May 27, 1989.

Attendance at community-sponsored cultural events, often in conjunction with locally-based Consulates has provided a valuable source of contact with people from different backgrounds in the city.

Adaptation to the changing character of a campus and a society requires the willing participation of many key players. Existing structures and practices need to be analysed and plans developed for improving future direction.

The type of changes preferred are those which would be carefully considered and integrated into existing units and practices wherever possible.

Much of the first year's development of the office was spent contacting individual faculty members with a profile in the ethno-cultural areas, some department heads, Deans and Program Directors, the Registrar, and the Director of the Museum of Anthropology. Most persons consulted were supportive.

Given the fact that the MLO is a one-person operation with a divergent range of expectations and demands, not all faculty who have something to contribute have been contacted. This process will be ongoing.

Collaborative beginnings were established especially with the Centre for Continuing Education, the Women Students' Centre, Research Administration, and some faculty members in the Asian Studies Department as well as in the Anthropology and Sociology Department.

2. Faculty-Student Liaison

Discussions with the President of the Alma Mater Society, the Ombudsperson, and a range of students who have shown leadership in one form or another have been

valuable in identifying both the positive as well as the tension producing areas of student life on campus.

Together with the support of the Vice-President, Student Services, we plan an informal seminar to pursue these issues further and identify areas requiring action.

3. Contact with Funding

Agencies. We established good contacts with both the regional office of the Secretary of State as well as the Ottawa office. In conjunction with the Office of Research Administration and the Faculty of Arts' Ethnic Studies Committee, we invited the Senior Research Officer of the regional Secretary of State's Office to address interested faculty on available research funding. Some 30 individuals attended a lunch time meeting.

4. Faculty-Community Linkages.

There have been several requests from the community for academic support in programming for their needs. Among these:

- i. Vancouver School Board member on the Race Relations Advisory Committee sought cooperation of the Faculty of Education in discussions regarding the updating of credentials for new Canadians with teaching qualifications acquired in other countries.

- ii. A member of the Vancouver City Council's multicultural health promotion sector initiated contact through our office with the Faculty of Medicine.

- iii. Several community centres have sought assistance for improvement of their program planning to meet the recreational needs of inner city and multicultural populations.

- iv. Immigrant Services Society sought host families for refugees and new immigrants.

- v. The Ismaili Community, Education Committee, sought direction from our office for ways to assist their community members in learning about the structure of educational institutions in B.C. so that their members can make informed choices for their children.

From the national office of the Secretary of State, the Assistant Under Secretary of State, Education Support, Stewart Goodings, has contacted our office to discuss a proposal to host an invitational meeting of universities involved in multicultural and race relations initiatives.

The Under-Secretary of State (Multiculturalism) invited our participation in a session of the World Congress of Comparative Education, on Race Relations. (June 1989).

Teaching and Research-related Activities

I have taught a graduate course "Educational Policy in Culturally Plural Societies: Comparative Perspectives" in the Department of Social and Educational Studies and supervised individual reading courses and graduate student programs at the M.A. and Ph.D. levels.

An international conference on intercultural education is being planned for 1989/90. Application for funding has been submitted.

Research and Participation in academic conferences has been on-going. Among these:

- a. International Sociological Association: Amsterdam, December 1988.

- b. Canadian Association for the Foundations of Education: Quebec City, June 1988.

- c. World Congress of Comparative Education: Montreal, June 1988.

Kogila Adam-Moodley

Dr. Kogila Adam-Moodley
Director, Multicultural Liaison.
June, 1989

1915 - 1990



ANNIVERSARY

Report of the Vice-President Administration and Finance 1988-89

The audited financial statements are a public document. Copies of the University's audited financial statements have been provided to each University Department and the University Library. For those interested in more information than provided in these highlights, please refer to the copy in your department.

Table 1 describes the activities in each of five of the seven separate funds involved in the financial reporting of UBC during the 1988-89 fiscal year. Excluded are the Student Loan Fund and Endowment Principal Fund. The concept of fund accounting organizes transactions so that revenues and their related expenses are accounted for in separate funds in accordance with objectives specified by donors, limitations and restrictions imposed by sources outside the University, and determinations made by the Board of Governors.

GENERAL PURPOSE OPERATING FUND

The revenue and expenses used in the general operations of the University are accounted for in this fund. The University ended the 1988-89 fiscal year with a surplus of \$3 million after provision for an inter-fund transfer of \$1.7 million and appropriations for the year of \$2.8 million. There was an increase in operating income over 1987-88 of \$16 million resulting primarily from increases in Provincial grants of \$11 million, student fee credit course revenue of \$2.9 million and non credit course revenue of \$1.9 million. Total expenses at \$249.1 million were up \$18.7 million with \$14 million of the increase attributable to salaries and benefits.

SPECIFIC PURPOSES FUND

The revenues and expenditures for projects stipulated by donors and income earned on the Endowment Principal Fund are included in this fund. Trust fund revenue was \$21.9 million and Endowment Fund investment income was \$10 million for a total of \$31.9 million. With expenses of \$36 million and a \$2.6 million interfund transfer, the year-end balance was \$20 million, \$6.7 million lower than last year. Total expenses increased by \$9.1 million, with \$4.5 million of the increase attributable to salaries and benefits, \$1.5 million attributable to furniture and equipment and \$2.2 million attributable to renovations and alterations. Of the \$3.7 million increase in furniture and equipment and renovations and alterations, \$2.8 million is attributable to the Biotechnology Centre which was funded from the Centres for Excellence. The 1988-89 endowment fund income of \$10 million represents a return on investments of approximately 8.7%.

SPONSORED RESEARCH FUND

This fund includes amounts specifically identified for research grants and contracts or related activities as provided by government granting agencies, research institutes and other public and private agencies. Revenue increased from \$71.5 million in 1987-88 to \$80.1 million this year. The \$8.6 million increase is accounted for by increases in Social Sciences and Humanities Research Council grants of \$1.1 million, other departments of the Government of Canada grants of \$1.2 million, Province of British Columbia Health Care Research Foundation grants of \$2.2 million and other less significant variations. Schedule 5 to the Financial Statements provides additional details.

ANCILLARY ENTERPRISES FUND

Ancillary enterprises provide goods and services to the University community and are expected to operate on a break-even basis. Total income for the ancillary enterprises was \$55.4 million, an increase of 9.5% over 1987/88. Included are the Bookstore, Food Services, Student Housing and Conferences, Oyster River Farm, Parking Services, Health Sciences Parkade, Tennis Centre, Athletics and Sport Services, UBC Press, Media Services and the Educational Measurement Research Group. In 1988-89 the administrative charge of 1% of sales and services generated \$544,000 of revenue to the General Purpose Operating Fund. This charge will increase to 1.5% in 1989-90. The charge partially covers the cost of university services not specifically billed to the ancillary enterprises such as Purchasing, Personnel Services, Financial Services, Occupational Health and Safety and Security.

CAPITAL FUND

The capital fund consists of gifts, grants, interest and authorized capital borrowing received for the purpose of acquiring capital assets including those pertaining to ancillary enterprises. Capital fund revenue increased by \$19.7 million. This increase is due to an additional \$10 million received from the Province of British Columbia for construction of the Chemistry/Physics building and a matching grant of \$6 million from the Provincial government for the major fund-raising campaign. Building contract expense increased by \$19.9 million as a result of an increase in the number of ongoing capital projects. \$21.3 million of the revenues and expenses are offsetting amounts which relate to servicing the debt on long-term debenture funding for completed buildings and other past capital projects financed by the Provincial government.

COMBINED FUNDS

Table 1 shows the total revenue and expenses of all five funds by object of revenue and expenses. Total revenue for all funds was \$473.9 million, up \$49.5 million from last year. Total salaries and benefits were \$282.9 million, an increase of \$23.4 million.

Table 2 shows the source and distribution of General Purpose Operating funds over the past five years.

Table 3 shows a comparison of the Total General Purpose Operating Expenses by object of expense for the five years 1984-85 to 1988-89.

Table 4 shows the change in total Sponsored Research funding since 1984-85.

Table 5 shows the source and distribution of Sponsored Research funds.

GENERAL

The University of British Columbia will be celebrating its 75th anniversary in 1990. In order to properly mark this occasion events will be scheduled for the entire year. The 3 main events will be Open House in early March, Summer Festival in May through August and Homecoming in late September. Planning and organizing for the Anniversary began in early 1989. The University launched its major campaign "A World of Opportunity" in March 1989. The campaign goal is to raise \$132 million including \$66 million of B.C. Government matching funds. This is the largest university fund raising campaign in Canadian history. The campaign has been very successful and submissions for government matching funds are ahead of schedule; the total submission for 1989-90 of \$12 million has already been submitted. The campaign funds will provide the facilities, scholarships, endowed chairs and equipment required for academic distinction.

The planning phase for the new Student Information System was completed during the 1988-89 fiscal year. The current project is to re-develop the existing batch student records and financial accounting systems. The first phase is scheduled to be completed by June 1990. The planning phase of the Human Resources System was completed in 1988-89. Package selection will be completed in the fall of 1989. Purchasing is researching various Material Management Systems which will satisfy the university's requirements for a new purchasing system, a fixed assets component and an acceptable interface with the Financial Records System. Plant Operations is working on a new Maintenance Management System to replace the old Work-In-Process system.

During the past year the office of Campus Planning & Development was created to give formal recognition to the importance of planning and project development for many new facilities which will be built in the next five to ten years. Construction has started

on the following projects: the David Lam Asian Garden Centre, the Children's Day Care Centre, the Child Study Centre, an addition to the Museum of Anthropology and the Cecil Green Park House Upgrade. Design work is proceeding on four projects associated with the five year capital plan and the UBC Campaign. These are the David Lam Management Research Centre (\$6.9 million), first phase of the Student Services Centre (\$3.5 million), Main Library addition and renovation project (\$24 million) and a University Services Building (\$10.5 million). Planning for numerous other projects is also underway, specifically the Advanced Materials Building (\$17.1 million), Centre for Integrated Computer Systems Research (15.1 million), Forestry Sciences Centre (\$40 million), Visual and Performing Arts Facilities Centre (\$32 million) and the Student Recreation Facilities project (\$9.5 million). The new Parkade situated at the north end of campus beside Gage Towers was completed in December 1988. The Acadia Park Phase 3 development of 77 units for family housing was completed in June 1989. The Chemistry/Physics building will be completed in September 1989.

The two university fund raising foundations have continued to serve as a mechanism for the transfer of substantial gifts to the university. During fiscal year 1988/89 the UBC Foundation received \$3.8 million and the American Foundation \$2 million (US) in donations. The UBC Real Estate Corporation, a wholly owned subsidiary of the university, appointed a President in August 1988 and began active consideration of various projects during the fall including provision for market housing on campus. Hampton Place, the UBC Real Estate Corporation's first development project will be a low density mixture of rental and owned townhomes and apartments situated on campus at the corner of Wesbrook Mall and 16th Avenue. Construction is scheduled to begin in September, 1989. The principal objective of the Corporation is to take responsible and pragmatic steps to make good use of the University's vacant land to improve UBC's long-term capital and endowment programs which, in turn, help contribute to a stronger financial base for education in British Columbia.

In the late spring of 1988 the university acquired the Department of Fisheries and Oceans laboratory on the west side of campus. The building is now occupied by the Food Sciences Department and the International North Pacific Fisheries Commission. The university and TRIUMF entered an agreement to provide a long term lease to Nordion International Inc. on the TRIUMF site. Nordion intends to construct a 3 storey addition to the existing facility to house equipment and laboratories to produce marketable medical diagnostic products based on nuclear technology. The university has also leased an 8 acre site to Forintek Canada Corporation to construct a new facility for forestry research. The lease is fully prepaid and yields the university \$4 million which is intended for selected capital projects.

**TABLE 1
THE UNIVERSITY OF BRITISH COLUMBIA
STATEMENT OF CHANGES IN UNAPPROPRIATED FUND BALANCES
FOR THE YEAR ENDED MARCH 31, 1989**

(thousands of dollars)

	General Purpose Operating	Specific Purposes	Sponsored Research	Ancillary Enterprises	Capital	1989	Totals 1988
Revenue and other additions:							
Government grants & contracts							
Government of Canada	\$ -	\$ 3,628	\$ 51,327	\$ -	\$ -	\$ 54,955	\$ 50,599
Province of British Columbia							
Base operating	194,106	-	-	-	-	194,106	183,301
Designated	2768	5,515	434	-	-	8,717	9,800
Other	-	6,742	8,391	-	47,576	62,709	42,278
Municipalities	-	1	15	-	-	16	36
Other governments	-	116	111	-	-	227	355
Foreign governments	-	770	1,878	-	-	2,648	1,988
Student fees	49,018	294	-	1,098	-	50,410	45,402
Bequests, donations and non government grants	-	4,810	17,760	-	2,834	25,404	21,017
Sales and services	944	-	231	53,771	-	54,946	50,398
Income from investments	3,362	10,067	-	511	1,030	14,970	14,522
Loans	-	-	-	-	4,818	4,818	4,780
	<u>250,198</u>	<u>31,943</u>	<u>80,147</u>	<u>55,380</u>	<u>56,258</u>	<u>473,926</u>	<u>424,476</u>
Expenses & other deductions:							
Salaries - Academic	105,398	8,136	13,793	-	-	127,327	116,083
- Student services	5,994	3,530	8,284	-	-	17,808	15,918
- Staff	70,756	6,510	17,629	13,758	955	109,608	102,031
	<u>182,148</u>	<u>18,176</u>	<u>39,706</u>	<u>13,758</u>	<u>955</u>	<u>254,743</u>	<u>234,032</u>
Benefits	23,104	1,083	2,634	1,296	5	28,122	25,424
Travel, field trips, moving	4,252	2,130	5,027	-	115	11,524	10,089
Library acquisitions	5,693	481	363	-	-	6,537	5,995
Operational supplies and expenses	19,810	928	16,322	6,210	5,417	48,687	42,560
Furniture and equipment	5,016	3,773	7,066	1,102	1,241	18,198	19,709
Utilities	8,163	184	831	1,410	214	10,802	10,593
Renovations and alterations	659	2,260	138	1,642	2,209	6,908	8,250
Scholarships, fellowships & bursaries	3,973	4,099	609	-	-	8,681	7,942
Professional fees	2,645	2,669	1,690	-	3,016	10,020	6,853
Cost of goods sold	-	-	-	21,219	-	21,219	17,451
Debt servicing	-	-	-	6,455	21,267	27,722	26,207
Building contracts	-	-	-	-	22,969	22,969	3,110
Internal cost recoveries	1,943	214	1,185	544	-	-	-
External cost recoveries	(4,447)	-	-	-	-	(4,447)	(3,695)
	<u>249,073</u>	<u>35,997</u>	<u>75,571</u>	<u>53,636</u>	<u>57,408</u>	<u>471,685</u>	<u>414,520</u>
Transfers & appropriations:							
Expended from prior years' appropriations	3,381	-	-	1,272	8,976	13,629	10,882
	<u>(1,708)</u>	<u>(2,626)</u>	<u>650</u>	<u>(545)</u>	<u>1,389</u>	<u>(2,840)</u>	<u>(5,871)</u>
Interfund transfers	(1,708)	(2,626)	650	(545)	1,389	(2,840)	(5,871)
Appropriations for the year	(2,752)	-	-	(2,680)	(9,586)	(15,018)	(13,629)
	<u>(1,079)</u>	<u>(2,626)</u>	<u>650</u>	<u>(1,953)</u>	<u>779</u>	<u>(4,229)</u>	<u>(8,618)</u>
Net Increase (decrease) during the year	46	(6,680)	5,226	(209)	(371)	(1,988)	1,338
Unappropriated Fund balance, beginning of year	223	26,630	17,365	239	2,462	46,919	45,581
Unappropriated Fund Balance, end of year	<u>\$ 269</u>	<u>\$ 19,950</u>	<u>\$ 22,591</u>	<u>\$ 30</u>	<u>\$ 2,091</u>	<u>\$ 44,931</u>	<u>\$ 46,919</u>

**TABLE 3
SUMMARY COMPARISONS OF TOTAL GENERAL PURPOSE OPERATING EXPENSES
1984-85 TO 1988-89**

	SALARY AND BENEFITS						Travel & Field Trips	Library Acquisitions	Supplies & Expenses	Utilities	Furniture Equipment & Alterations	Total
	Academic	Student Service	Staff	Total	Benefits	Sub Total						
1988 - 89	42.3	2.4	28.4	73.1	9.3	82.4	1.7	2.3	8.0	3.3	2.3	100.0
1987 - 88	42.2	2.4	29.2	73.8	9.2	83.0	1.6	2.3	7.9	3.5	1.7	100.0
1986 - 87	42.8	2.5	28.5	73.8	9.0	82.8	1.4	2.4	7.9	3.7	1.8	100.0
1985 - 86	43.7	2.5	28.4	74.6	9.1	83.7	1.1	2.3	5.2	4.3	3.4	100.0
1984 - 85	44.0	2.3	29.1	75.4	9.1	84.5	1.1	1.9	5.7	4.1	2.7	100.0

**TABLE 4
TOTAL SPONSORED
RESEARCH FUNDING
(thousands of dollars)**

	Amount
1988 - 89	\$ 80,147
1987 - 88	71,511
1986 - 87	65,280
1985 - 86	59,619
1984 - 85	63,096

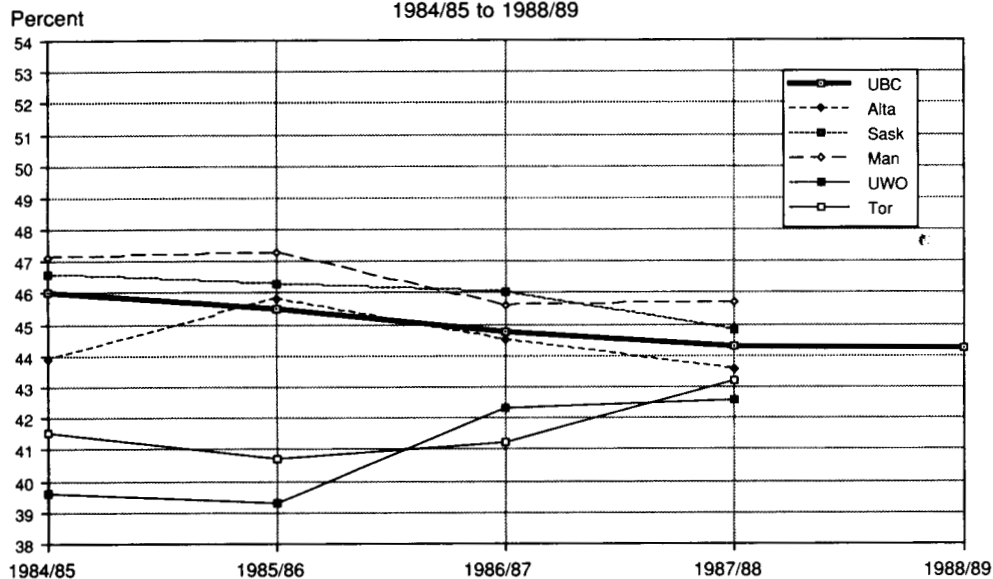
**TABLE 2
SOURCE AND DISTRIBUTION OF THE GENERAL PURPOSE OPERATING FUND
FOR THE YEARS ENDED MARCH 31, 1985 TO 1989**

Source	1989	1988	1987	1986	1985
	%	%	%	%	%
Province of B.C. - Grants	78.7	79.4	80.0	79.7	81.2
Student Fees - Credit	15.2	14.9	15.4	15.3	14.1
Student Fees - Non-Credit	4.2	3.7	3.0	3.2	2.9
Other	1.9	2.0	1.6	1.8	1.8
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Distribution By Function					
Academic and Associated Academic Services	72.6	72.5	72.1	73.2	72.9
Library	7.2	7.3	7.5	7.3	7.5
Student Awards and Services	2.6	2.7	2.6	2.6	3.0
Administration	5.8	5.6	5.3	4.3	4.2
General	1.1	1.0	1.2	0.7	0.7
Plant	11.2	11.4	11.8	12.3	12.2
Overhead Recovered on Research	(0.5)	(0.5)	(0.5)	(0.4)	(0.5)
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

**TABLE 5
SOURCE AND DISTRIBUTION OF SPONSORED RESEARCH FUND
FOR THE YEARS ENDED MARCH 31, 1985 TO 1989**

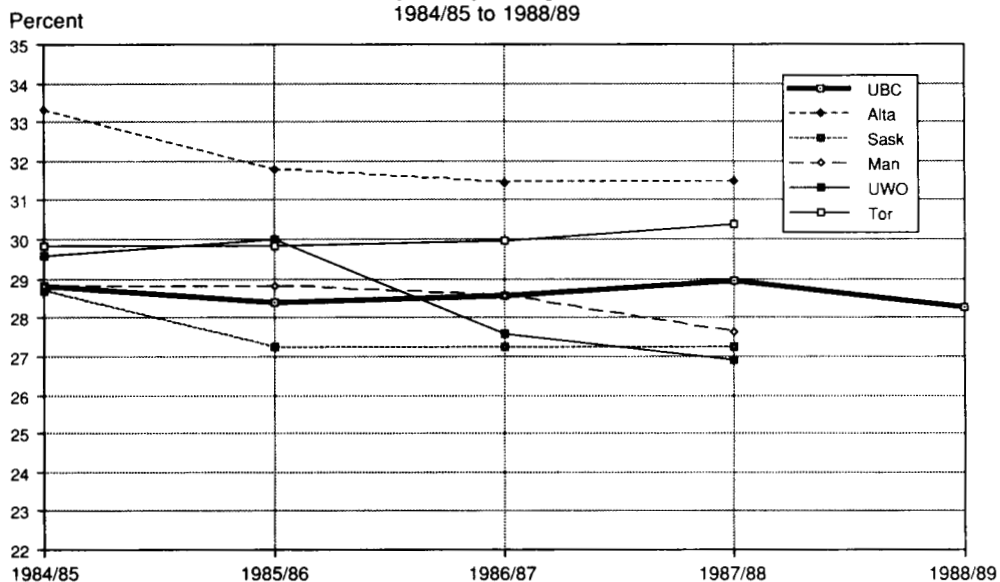
Source	1989	1988	1987	1986	1985
	%	%	%	%	%
Government of Canada	64.1	67.7	68.9	62.6	69.6
Province of British Columbia	11.0	8.5	7.9	9.2	7.7
Other governments and agencies	2.5	1.7	2.5	2.8	2.2
Total governments	<u>77.6</u>	<u>77.9</u>	<u>79.3</u>	<u>74.6</u>	<u>79.5</u>
Individuals, business, foundations	22.2	21.8	20.5	24.9	20.1
Other	0.2	0.3	0.2	0.5	0.4
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Distribution					
Salaries and benefits	56.0	55.6	58.2	56.7	56.6
Travel and field trips	6.7	6.5	6.3	6.1	5.9
Operational supplies and expenses	21.6	21.6	20.4	18.1	17.7
Furniture and equipment	9.4	11.3	10.1	13.1	13.7
Other	6.3	5.0	5.0	6.0	6.1
	<u>100.00</u>	<u>100.00</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Graph A
Total Academic Salaries* as a Percent of Total
General Purpose Operating Expenditures
1984/85 to 1988/89



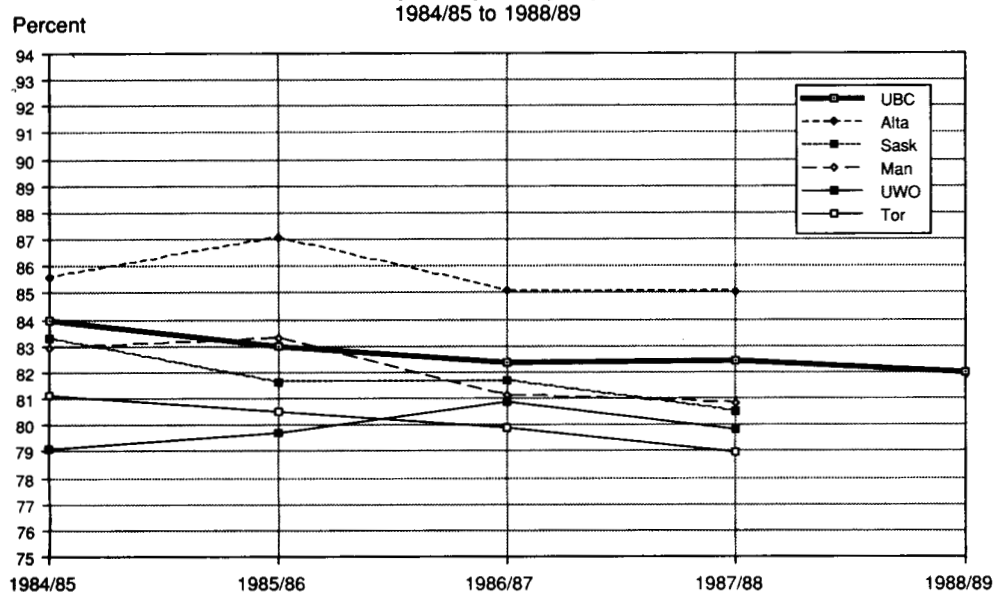
Source: Canadian Association of University Business Officers.
*Academic Salaries comprises Academic ranks and other instructional staff and student service appointments.
Excludes early termination agreements.

Graph B
Non-Academic Salaries as a Percent of Total
General Purpose Operating Expenditures
1984/85 to 1988/89



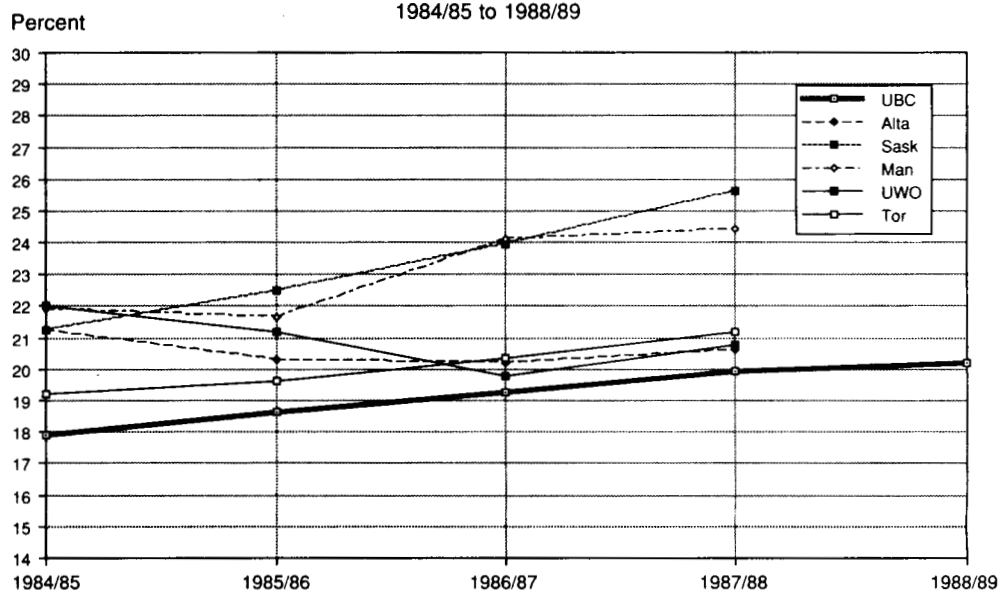
Source: Canadian Association of University Business Officers.
Excludes early termination agreements.

Graph C
Total Salaries and Benefits as a Percent of Total
General Purpose Operating Expenditures
1984/85 to 1988/89



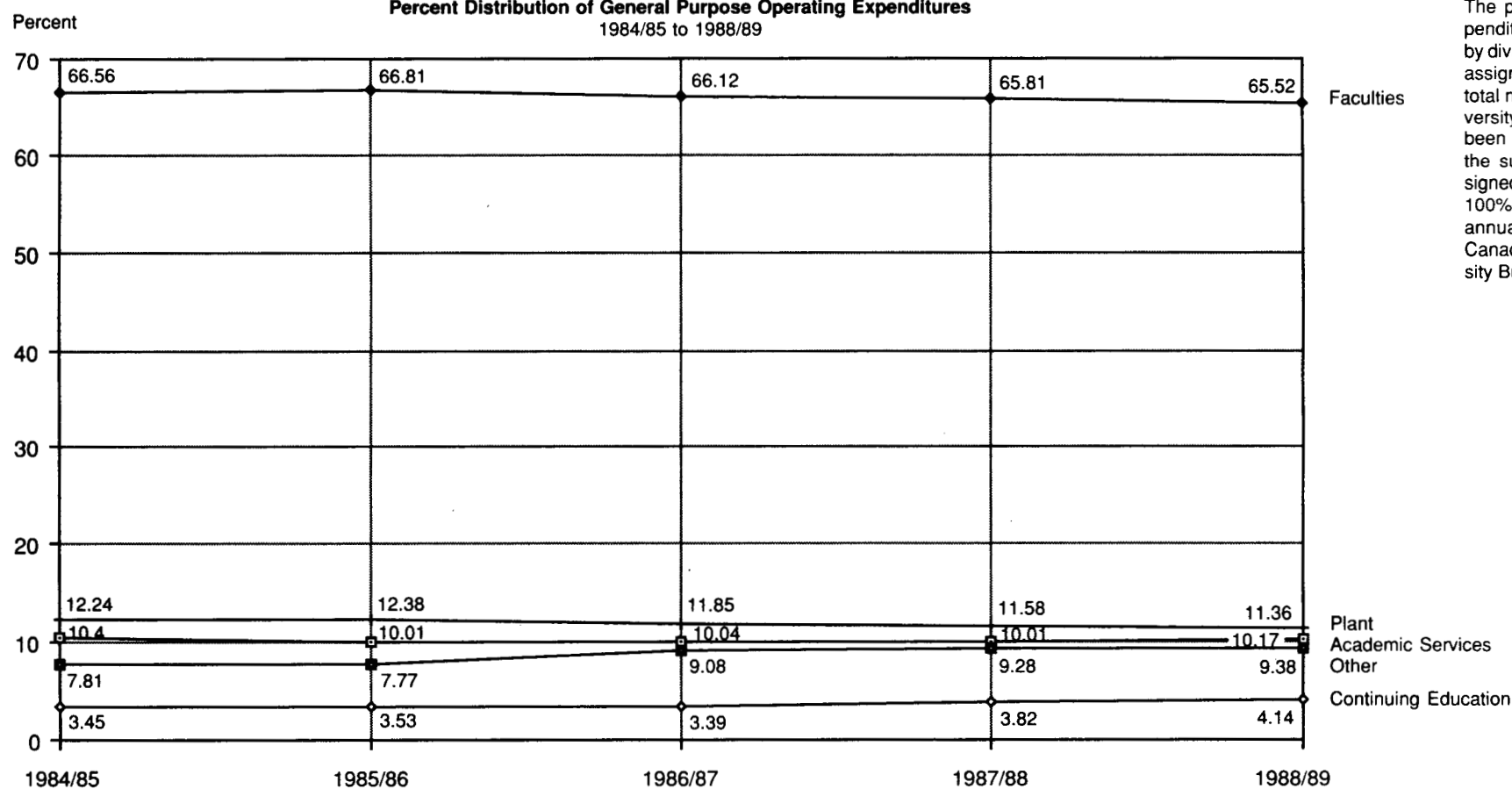
Source: Canadian Association of University Business Officers.
Excludes early termination agreements.

Graph D
Non-Salary Expenditures as a Percent of Total
General Purpose Operating Expenditures
1984/85 to 1988/89



Source: Canadian Association of University Business Officers.

Graph E
Percent Distribution of General Purpose Operating Expenditures
1984/85 to 1988/89



NOTE ON GRAPHS
The percent shown for each expenditure category is calculated by dividing the gross expenditures assigned to that category by the total net expenditures for the University after cost recoveries have been removed. The result is that the sum of the percentages assigned to the category will exceed 100%. This is consistent with the annual reports provided to the Canadian Association of University Business Officers (CAUBO).

- Academic Service includes Computing Centre, Academic Services, Library.
 - Faculties includes ETA and retroactive salary increases.
 - Other includes student aid, student services, administration, general and other.
 - Continuing Education comprises CCE and non-credit programs.
 - Plant
- Note:** Expenditures are net of carry-forward.

Graphs A and B depict the relative position of UBC as compared to other universities for academic and non academic salaries as a percentage of General Purpose Operating Expenditures.

Graphs C and D depict the relative position of UBC as compared to other universities for total salaries and benefits and non-salary expenditures as a percentage of General Purpose Operating expenditures.

Graph E depicts the percentage distribution of General Purpose Operating expenditures for faculties and administrative units.

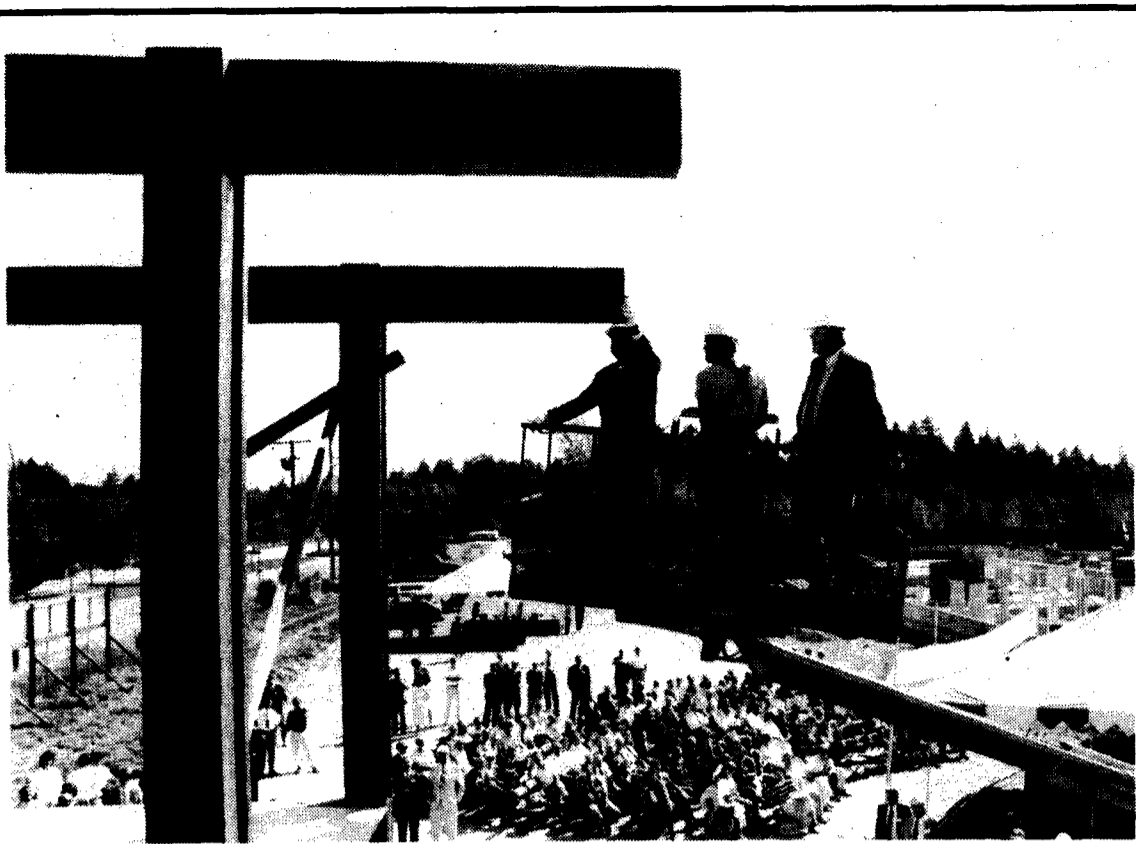


Photo by Media Services

Frank Oberle (left), Minister of State for Forestry, and Dave Parker, B.C. Minister of Forests, inspect the all-wood frame of a new \$30-million forest industry research building on the East Mall. It is one of two new buildings which will be the home of Forintek Canada Corp.'s Western Laboratory. A smaller building will house offices for the Forest Engineering Research Institute (FERIC). Both buildings will demonstrate the advantages of wood for non-residential construction.

Left handers more prone to accidents, Coren finds

By GAVIN WILSON

Left-handed people are far more accident-prone than right-handed people, a study by UBC Psychology Professor Stanley Coren has found.

In an article published in the current issue of the American Journal of Public Health, Coren says southpaws are 89 per cent more likely to suffer a serious accident than people who are right handed.

Left handers are not clumsier, he said, but they are forced to battle their natural tendencies in a world designed for right-handed people — at home, in the workplace and on the road.

The results of the study, and Coren's earlier research, have convinced him of the seriousness of the public health hazard he has identified.

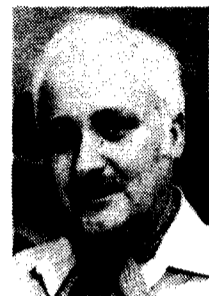
"I think there's a real safety issue involved in this," he said.

Coren's findings are based on questionnaires given to 1,896 students at UBC over four years. The students were asked whether they had suffered any serious accidents in the past two years. The answers given by right-handed students were compared to those who were left-handed.

The results showed that left handers were 85 per cent more likely to have an accident while driving, 54 per cent more accident-prone using tools, 49 per cent more likely to have a mishap at home, 25 per cent more likely to suffer a work-related accident and 20 per cent more apt to have an accident while playing sports.

At the greatest risk of all, Coren found, was a left-handed male behind the wheel of a car. Men, left or right handed, are more likely than women to be involved in accidents of any kind, he said.

The high rate of vehicle accidents is partly explained by the physiological tendency among left-handed people to raise their right hand and lower their left when startled. Right-handers do the opposite. Behind a steering wheel, this automatic reflex can send left-handed drivers swerving into oncoming traffic.



Coren

Coren hopes that one day findings such as these will be used to help prevent highway accidents, perhaps by altering traffic patterns. He also believes business and industry could learn from his research to improve safety in the workplace. For example, industrial accident forms could routinely inquire about the handedness of victims.

In earlier studies of the life spans of baseball players, Coren and fellow researchers discovered that right-handed athletes far outlived their left-handed counterparts. There was little difference in their mortality rates before the age of 33, but after that left-handed ball players were one to two per cent more likely to die in any given year than right handers.

Coren said other studies show that 13 per cent of the general population is left handed at the age of 20 years, but at age 50 this number dwindles to five per cent and at age 80, to just one per cent. Further study ruled out the possibility that people switched over to their right hand with age or that societal pressures had forced people to adopt right-handedness against their will.

New software program

GENI an aid to creativity

By JOMOSS

A GENI software package may have helped Beethoven be more creative. But it probably wouldn't have made any difference to Mozart.

GENI (for GENERating Ideas) is a new computer program which uses a variety of mind-expanding techniques to stimulate creativity. It helps the user see all the dimensions of a problem and find an innovative resolution.

The program probably would not have helped Mozart who, history tells us, was inspired to write whole pieces at a single sitting. But it may have helped Beethoven who kept elaborate notes as he sought variations on a musical theme.

Seeking new thematic variations is one characteristic of creativity, says Commerce Professor Kenneth MacCrimmon who developed GENI with former PhD student Chris Wagner. Others are: joining two or more disparate concepts, recognizing and using an analogy, and combining elements of a problem in different ways.

Given those characteristics, it's easy to see why creative problem-solving is as applicable to business as it is to music.

"The person who can see all the ramifications of a situation and come up with other possibilities has an advantage in any sphere of life," he said.

MacCrimmon, a decision theorist, has worked on creativity theories and methods for more than a dozen years. He and Wagner developed GENI three years ago in response to the boom of gadgets and techniques, each claiming to help people in business be more creative.

The problem with many of these procedures, MacCrimmon says, is that few, if any, of their claims have been tested. And each technique, by its nature, is limited in application.

"There are lots of possible ways to capture creativity, not just one concept," explained MacCrimmon, who uses GENI to teach creative problem-solving in his classes. He set out to incorporate as many of these concepts as possible in one software program.

GENI works on an ordinary desktop computer. The user enters the details of a

problem and is prompted to work through a comprehensive set of procedures that are designed to spark ideas beyond the obvious.

Some people balk when GENI asks them to connect fragments of poetry to their problem, but the program won't proceed to the next step unless it receives at least three ideas.

"In this way, computer techniques can help to discourage laziness in thinking," MacCrimmon explained.

Other procedures are more orthodox, exploring steps to the user's goal in a more logical and methodical way.

"We pop up random elements of the scenario forcing people to deal with combinations they haven't thought of," MacCrimmon said, and ideas that are entered in one part of the program are incorporated into the process and fed back to the user in another part of the program.

GENI can help a user with a problem—whether it's how to deal with steroids in sports or run a more efficient donut franchise—find literally thousands of possible solutions.

MacCrimmon maintains GENI is a useful tool in guiding normal thought processes.

"Computers can be supplemental to the way people process information and assist people whose thinking is rigid," he said.

In preliminary testing with students, GENI has proved to be very effective, MacCrimmon said. Its only dismaying feature is that it seems to give more help to people who are more creative.

An early version of GENI generated interest when it was presented at a 1986 NATO conference in Portugal, but MacCrimmon says the program needs further extensive tests before it's ready for general use or commercial application.



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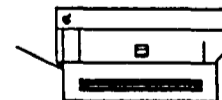
Macebearer John Dennison leads the Chancellor's Party to the annual Fall Ceremony on Sept. 7 to welcome new students to campus. Canadian Nobel Laureate John Polanyi joined President David Strangway, Chancellor Leslie Peterson and AMS President Michael Lee in greeting students. Major entrance scholarships were also presented.

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People

Alden awarded gold medal

Metals and Materials Engineering Professor **Thomas Alden** has won the 1990 Champion H. Mathewson Gold Medal, one of the most prestigious prizes in the world for metallurgical science.



Alden

The award is given by the Minerals, Metals and Materials Society (TMS), a member society of the American Institute of Mining, Metallurgical and Petroleum Engineers, the principal professional society for the North American metallurgical industry.

It is awarded to the author of a paper or papers published in *Metallurgical Transactions*, considered to be the most notable contribution to metallurgical science for that year. The journal is a joint publication of TMS and the American Society for Metals.

Alden is being recognized for his contributions to the scientific understanding of ductility, the special property of metals that allows them to be rolled into sheet or drawn into wire. His theoretical and experimental studies are conducted

primarily on iron and copper.

Alden, who joined UBC in 1967, has an AB in economics from Amherst College, in Amherst, Mass. and a MS and PhD in in physical metallurgy from the Massachusetts Institute of Technology, in Cambridge, Mass.

He will receive the prize at the 119th Annual Meeting of TMS in Anaheim, Ca., in February 1990.

Alan Artibise, director of the School of Community and Regional Planning, has been invited to serve on the board of governors of the Institute for the Study of International Cities (Canada).

The international think tank undertakes a variety of research on all aspects of international cities.

UBC Commerce student **Stephen O'Keefe**, 21, was one of 44 students across Canada named as winners of the 1989 Terry Fox Humanitarian Award. The award is given annually to students for community service and excellence in academics, athletics and extracurricular activities. They receive scholarships of \$4,000 a year until they graduate. O'Keefe, who is hearing impaired, is active in charitable ventures, is a member of the university field hockey team and also competes in track and field.

Pharmaceutical Sciences Dean **John McNeill** has been appointed to a new provincial pharmacare advisory committee by Health Minister Peter Dueck.



McNeill

The committee will advise Dueck on issues concerning pharmacare services, in addition to seeking solutions to problems identified with the program.

Nursing Professor **Sally Thorne** was awarded the 1989 Oncology Nursing Society/Adria Excellence in Writing Award in Nursing Research at the society's 14th annual congress held recently in San Francisco, Ca.

Thorne is on the board of directors of the International Council on Women's Health Issues and a member of the Advisory Board of Oxfam Global Health Project in Canada. She is the author of numerous publications on oncology--the study of tumors--and oncology nursing.

The largest professional oncology association in the world, the Oncology Nursing Society is an

American organization of more than 15,000 registered nurses dedicated to excellence in patient care, teaching, research and community education in the field of oncology.

Civil Engineering Professor **Donald Mavinic** has been re-elected to the Board of Directors of the Canadian Society for Civil Engineering.



Mavinic

He will serve as chairman of the Environmental Engineering Division for a second two-year term.

The fastest-growing division within the CSCE, the Environmental Engineering division acts as an advisory body to federal and provincial governments on environmental issues such as water quality and protection of water supply.

The CSCE is a professional body of about 6,000 members of which about 1,400 are associated with environmental engineering.

Decision-making theory

Galiano drama is studied

By JOMOSS

A real-life drama unfolding on Galiano Island is being closely monitored by a UBC Commerce professor who wants to design better ways for people to make communal decisions.

Kenneth MacCrimmon, a researcher in decision theory and creative problem solving, is testing some key bargaining and decision-making principles against actual events as island residents and a major logging company try to decide on the future of a major parcel of land.

The island's carefully preserved rural character and its long isolation from outside influences make it an ideal test case to study, MacCrimmon said.

Since January this year, he has been documenting each group's actions and the consequences, and interviewing people to find out how and why they reached their decisions. He hopes the study will allow tests of existing theories of collective decision making as well as suggest ideas for new theory development.

Finding better methods of arbitration and resolution is becoming more important as society is increasingly faced with critical issues of common global concern, he added.

A secondary result will be a list of do's and don't's which could guide other B.C. communities through an efficient process to reach the best possible solution to a communal problem.

Key players in the Galiano Island scenario are MacMillan Bloedel and about 800 permanent island residents. The company owns 3,100 hectares, a little more than half of the total land area, which it has logged since the early 1950s. But with logging becoming increasingly uneconomical it is investigating other options and has hired a Vancouver-based development company to evaluate its holdings.

Meanwhile, island residents are concerned about how future development of that land will affect their chosen lifestyle. While no formal proposal has been made,

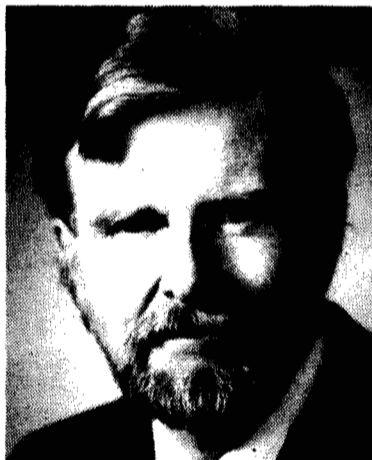
potential plans include residential and resort development--options which, if carried out, could have a big impact on the island's unique identity.

MacCrimmon says the situation on Galiano exemplifies what happens to many people who must make a decision.

"People often limit themselves to two choices, A or B. But can we take the good elements of A and B to provide a third option, C?" MacCrimmon explained. "It's surprising how people get locked in early to a particular alternative."

In addition, people generally don't take the time to investigate a problem thoroughly, he said. They try to find solutions when they often don't have a clear picture of the problem.

When two or more parties lock horns in trying to resolve a common issue, the decision-making process becomes even more complicated. "People are thinking of their own corners and not the middle area where the two corners overlap," MacCrimmon said.



Kenneth MacCrimmon

Earlier this year, a Forest and Land Use Council was formed to allow all parties involved in the Galiano land dispute to meet on a regular basis and exchange ideas. Such forums have great potential as an arena for resolving conflict between business and communities, MacCrimmon said.

New physics chair named for Warren

The announcement this month of a new chair in nuclear physics at UBC was clouded by the sudden death of its namesake, former TRIUMF Director John Warren.

At the opening of the new Chemistry-Physics building on Sept. 7, President David Strangway announced that TRIUMF had made a leadership pledge of \$425,000 over five years for the establishment of the new Warren Chair in Nuclear Physics.

"By a tragic coincidence, John Warren died this morning in England following a heart attack," Strangway said.

Warren joined UBC's Physics Department in 1947 to oversee construction of the Van De Graaff generator building.

He went on to become one of the founders of TRIUMF and its first director. In 1983, his accomplishments were recognized when the university presented him with an honorary degree. Warren was 74 at the time of his death.

"It seems painfully appropriate that one of UBC's finest physicists should be remembered today at the opening of this fine new building," Strangway said. "He was held in such esteem that his name was the obvious one for this endowed chair."

Said TRIUMF Director Eric Vogt: "The Warren Chair will perpetuate the name of an outstanding scientist who for 40 years brought some of the newest and freshest science ideas in the world to UBC."

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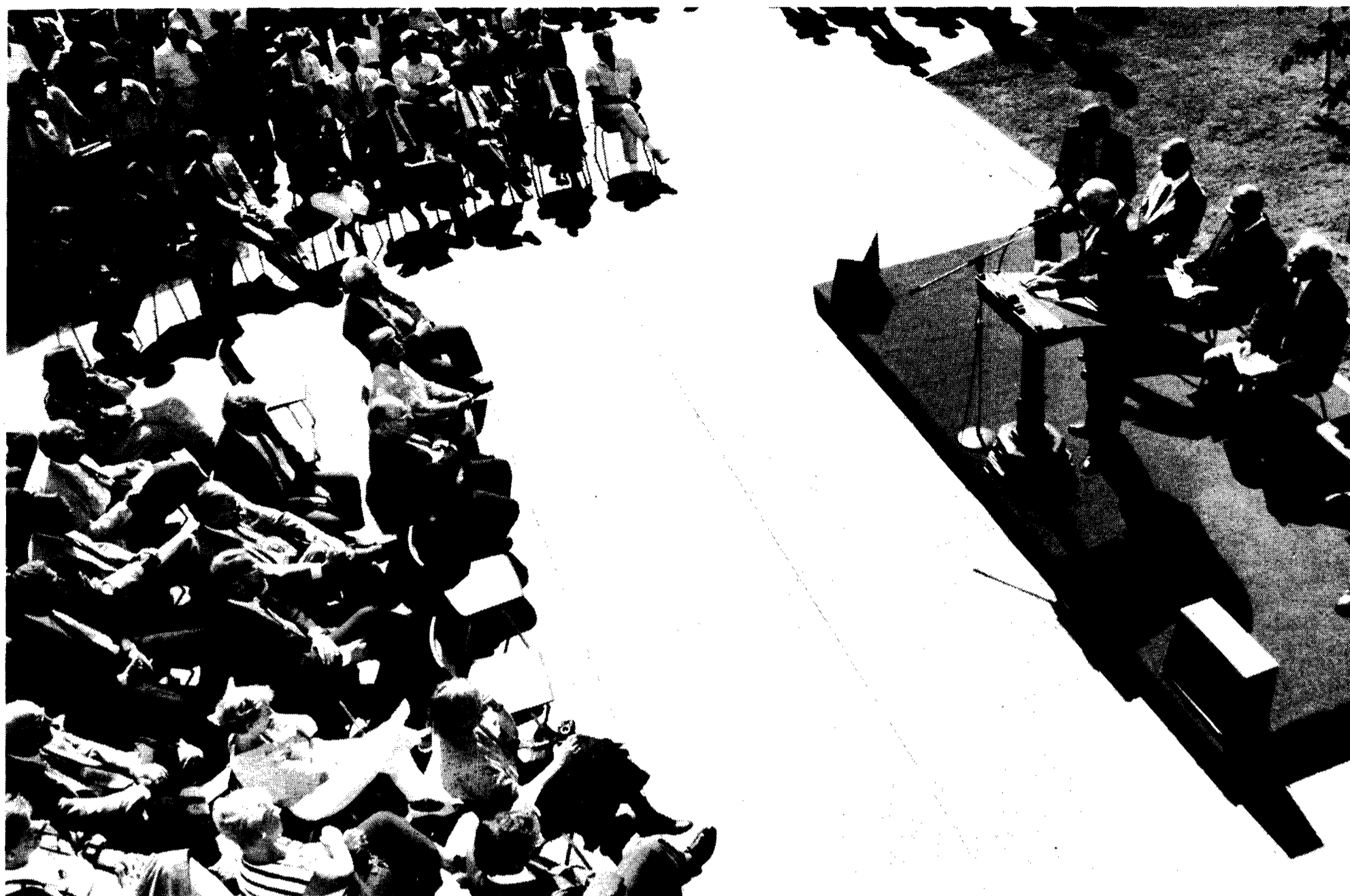
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Official Opening

Photo by Media Services

President David Strangway addresses a crowd of about 300 at the opening of the new Chemistry-Physics building earlier this month.

Polanyi decries funding constraints

By GAVIN WILSON

Nobel Prize-winning Canadian scientist John Polanyi says government funding agencies should stop placing so much emphasis on the social and economic goals of university research and give scientists the freedom they need to make important discoveries.

During a visit to UBC Polanyi said there is an increasing tendency for government funds to be tied to research aimed at reaching specific applications, but that this will not lead to good science.

"For the government to choose its science that way is like choosing a package because of its wrapping and not its contents," the University of Toronto chemistry professor said. "But that kind of thinking will result in wasted funds. Governmental wish lists do not result in discoveries."

Polanyi made the remarks in an interview with UBC Reports following a Sept. 8 symposium held to mark the opening of the new Chemistry-Physics building.

Polanyi, who was awarded the Nobel prize in 1986, was one of three Nobel laureates who lectured on their work at the symposium, the others being Herbert Brown and Arthur Schawlow. Geraldine Kenney-Wallace, chairman of the Science Council of Canada and a UBC graduate, chaired the symposium held at Hebb Theatre. Another Nobel laureate scheduled to appear, Georg Bednorz, was forced to cancel due to illness. Speaking in his place was UBC Physics Professor Jess Brewer.

Polanyi said the importance of science to the future of Canada is widely



John Polanyi

recognized, but that government policies are in danger of treating universities as extensions of industrial laboratories, with an increasing tendency to orient research toward short-term applications.

"Prime Minister Mulroney recently deplored the 'quarterly report' mentality of Canadian industry," he said. "This mentality can be even more damaging when applied to the universities."

Polanyi compared this approach to drilling for oil wells in a field next to existing wells. You can expect to find something, but there will be rapidly diminishing returns.

"Universities exist for the more difficult sort of research activity -- finding out where the logic of science allows discoveries to be made, where the possibilities lie."

Government programs are more inclined to produce research guidelines aimed at achieving specific economic or social benefits, and then trying to determine which discoveries scientists need to make.

"What's lacking in programs such as the Centres of Excellence is a sufficient commitment to pursuing fundamental research that can lead to a breakthrough in understanding," Polanyi said. "They fail to stress sufficiently the scientific criteria,

which are of overriding importance. Major advances never come about under the guidance of central authorities. They flow from the imagination of the scientists who are deeply enmeshed in the problem."

Market-oriented research can be done most effectively closer to the market, and university research should remain free to uncover nature's secrets where nature allows. The two should be in close commu-

nication.

"But industry is not responding to the challenge," he added. "There is a disinclination in industry to take risks with advanced technology. It will take time to change those attitudes."

"Unfortunately, we don't have limitless time if we are to gain a foothold in the rapidly-moving global marketplace -- a marketplace for ideas and for devices."

Chemistry-Physics building opened

Era of construction begins

By GAVIN WILSON

UBC ushered in a new era of construction on campus with the dedication of the Chemistry-Physics building Sept. 7.

The \$16.4-million building, funded entirely by the provincial government, is the first in a series of new facilities slated for construction in the next few years.

With 55,000 square feet of functional space that will house 100 researchers from the two science departments, the building was hailed at an official ceremony as a major commitment to multidisciplinary research and graduate student support.

President David Strangway, Chancellor Leslie Peterson and others speaking at the opening ceremonies thanked Minister of Advanced Education Stan Hagen, who was also present, for his support for the project.

"We expect to invite you back for ribbon-cutting ceremonies on several other buildings," Strangway said to Hagen, noting that Victoria has committed full funding to three more buildings and partial funding to four others that will be built as part of the UBC Campaign.

About 300 people looked on as the building was opened, including Nobel Prize laureates Herbert Brown, Arthur Schlawlow and John Polanyi.

Planning for the new building began nearly a decade ago, but construction did not go ahead until Hagen announced approval of funding two years ago. It is the first major academic building to go up on campus since the era of restraint.

"The building we are dedicating today is an important element in helping us to implement our strategic plan and to further the reintegration of the sciences," Strangway said.

Hagen said the new building is part of the government's commitment to building a scientific and technical base for the B.C. economy, training highly-skilled workers for the emerging technologies of the next century and providing better facilities for today's students.

"This new building can only add to UBC's growing reputation as a world class university," he said. "This is a commitment that transcends bricks and mortar."

Acting Dean of Science David Dolphin pointed out that science faculty members conduct one-third of all funded research at UBC, have won eight of the 23 Steacie Prizes awarded in Canada and are associated with half of the university's spin-off companies. Their students, which include one of every three enrolled at UBC, are ranked among the best in North America.