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The University of British Columbia Vancouver. British Columbia

Volume 37. Number 4 February 21. 1991

Board of governors name new V.P.

Strangway, Birch reappointed

he UBC Board of Governors has extended President David Strangway's appointment until June 30, 1997, board chairman Ken Bagshaw announced earlier this month.

The board also approved the reappointment of Daniel Birch as Vice-President, Academic, and Provost. In a new appointment, Peter Ufford has been named Vice-President, External Affairs.

Strangway's reappointment was the result of a broadly based consultation and performance review. A committee of faculty and student board members conducted the review, meeting with representatives of many UBC constituencies.

This process confirmed overwhelming support on the campus for the extension of Strangway's appointment, Bagshaw said.

"In particular, David Strangway's leading role in the enhancement of UBC's relationship with both the public and private sectors, his tireless and effective commitment to the success of the World of Opportunity Campaign, and his efforts to focus the university's goals through the development of the Mission Statement and President's Reports were widely recognized and applauded," Bagshaw said.

An internationally recognized space scientist, Strangway is a former chief of NASA's Geophysics Branch and supervised the analysis of the moon rocks that returned with the Apollo mission

As well as heading the University of Toronto's Geology Dept. in the 1970s, Strangway was U of T's vicepresident and provost from 1980-83 and served as president during 1983-84

Strangway was appointed president and vice-chancellor of UBC in 1985.

After earning degrees in classics and history at UBC, Birch began his academic career in 1966 at Simon Fraser University where he taught in the Faculty of Education. Later, earning a doctorate at Berkeley, he was appointed dean of the faculty at SFU in 1972, and three years later became associate vice-president, academic. Before leaving SFU, Birch served as acting vice-president and acting president.

In 1981, he returned to UBC as professor and dean of the Faculty of Education. He joined the president's office in 1985.

Birch spent his early years in China with missionary parents and has devoted much of his work to intercultural understanding. As part of his commitment to enabling North American students to understand Asian cultures, he has written and published many textbooks and manuals. His service outside the university includes international development projects in Latin America and Asia, a multicultural services organization in Vancouver and eight years on the boards of two teaching hospitals.

Ufford has served as consultant to the president on external affairs since April, 1987, when he was retained to initiate and organize a major capital campaign for the university. He has participated in all aspects of the carnpaign, now known as A World of Opportunity, including the market survey and setting up the matching program with the provincial government.

Ufford is currently developing an external affairs division for the university, which formally incorporates Development, Community Relations, Ceremonies, the Alumni Association and some functions of government liaison and international relations.

He has served as the campaign clirector of the United Way campaign of the Lower Mainland and Windsor, Ontario and has worked extensively in the non-profit sector.



Adel Safty, seen here in an interview on UTV, is one several UBC professors who have recently been called upon to provide background for coverage of the Gulf War on local news media. See story, Expertise, on page 2.

Appointments to board of governors announced

By GAVIN WILSON

Three new members have joined the board of governors. They are provincial government appointee Michael Partridge and student representatives Wendy King and Derek Miller.

Partridge has a long association with the university since graduating with a degree in Commerce and Business Administration in 1959. Active in fraternity and faculty alumni organizations, he has held several positions with the Alumni Association, including a term as president.

Partridge is a former winner of the Blythe Eagles Volunteer Service Award and last year, during UBC's anniversary celebrations, was one of 75 alumnus recognized for

their outstanding service to the university.

Partridge is the regional vice-president, group sales, of the London Life Insurance Company in Vancouver. His appointment to the board is for three years.

King and Miller, elected to the board by the student body, will serve oneyear terms.

King, a fourth-year Arts student who enters UBC law school in September, is also a member of Senate until April. During her two years as a senator, King chaired the student caucus and was a member of the Appeals on Academic Standing Committee, the Dean of Arts Search Committee and the Task Force on Teaching Evaluation. She is currently a member of the President's Advisory Committee on Race Relations.

King has been a member of the AMS student council as a senate representative and will again be on council as a board representative.

Miller earned a degree in marine biology last year, and is now enroled in the first year of the applied creative non-fiction diploma program in the Creative Writing Department.

Miller previously served as the representative for science on the AMS student council and as the editor of the Student Handbook published by the AMS. He was editor of the 432 newspaper and director of publications for the science undergraduate society.

Tuition fee, financial aid guidelines adopted



SPEEDING LOCOMOTIVE: **Planner Andrew Brown says** creating a cohesive master plan for UBC is akin to "laying tracks ahead of a speeding locomotive." Page 2

GREAT DANE: Director Gordon McCall "dusts off" Hamlet.. Page 6

STILL SAFE: UBC geologist George Dix says research can still be safe in environmentally sensitive areas. Page 8

By GAVIN WILSON

UBC's Board of Governors has approved new tuition fee and financial aid guidelines as proposed by President David Strangway.

The board voted to adopt the guidelines after hearing presentations from student leaders who urged members to limit tuition fee hikes to the rate of inflation.

The new guidelines set annual fee increases at 4.5 per cent plus the increase in the Vancouver cost-of-living index for each of the next three years. The new fee structure goes into effect in the 1991-92 academic year.

The guidelines also designate a portion of the fee increase for enhanced

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

"We listened to the students' points of view and were impressed with their presentations," said Ken Bagshaw, chairman of the board of governors. "But we would not have approved these guidelines if we did not believe that it was in the best interests of everyone at the university. I think there is general agreement that a three-year planning horizon is of benefit to the university and students alike."

Strangway said the increases are also needed to meet the cost of operating the university, which is rising faster than the rate of inflation.

"We are committed to maintaining a superior quality of education at UBC. We see these new guidelines as an important step towards maintaining and strengthening the academic integrity of the university while ensuring that no otherwise admissible student is denied the opportunity to enrol solely for financial reasons," he said.

Student leaders argued that students are shouldering more of the cost of operating the university each year while the provincial government's share is shrinking.

Jason Brett, president-elect of the Alma Mater Society, said that the fee hikes will force students to cut back on already frugal lifestyles,

place a greater strain on the financial aid system and put more students into debt.

"This will set a dangerous precedent that may endanger my little brother's, or my own children's, chance for an education," he said.

John Burges, external affairs director of the Graduate Student Society, said that the issue is the quality of life of students. While fees will increase at rates above inflation, the income of graduate students is unlikely to do the same, he said.

Currently, the annual tuition fee for Arts and Science undergraduate students, taking a regular course load at UBC, is \$1,680.

New campus seeks to create sense of place

By GAVIN WILSON

University Planner Andrew Brown compares his task of creating a cohesive master plan for the university to "laying tracks ahead of a speeding locomotive."

UBC is in the midst of what is probably its greatest expansion ever. Spurred on by donations from the A World of Opportunity fundraising campaign and from the provincial government, new buildings and facilities worth hundreds of millions of dollars will go up in the next 10 vears

Already, construction cranes are sprouting up across campus. Buildings currently underway include the University Services Centre on West Mall, biotechnology labs in an expansion of the bookstore building and the David Lam Management Research centre at Main Mall and Agricultural Road.

While these projects go ahead, and others are being designed, Brown is faced with the task of unifying a master plan for a sprawling campus that

has grown piecemeal for the past 70 vears

prospect. The campus covers 900 acres and includes everything from academic buildings and sports facilities to residences and forest.

The campus is eight times larger than the University of Toronto and McGill combined, making it easily the largest in Canada, and one of the two

said Brown. "The plan will be a powerful tool that can help to shape the future of this institution.'

Two of the plan's major aims will be to limit sprawl and create a sense of place on a campus that has few land-

It's a daunting

or three largest in North America.

"This is a major piece of work,"

Parte V

groups representing all constituencies of the university, seeking input and advice on how the campus should be shaped.

"We're listening to every point of view. It's like creating a 15,000-piece jigsaw puzzle and then putting it together in some way that makes sense,' said Brown. "It's an ongoing process, we're still open to new pieces.'

One of the most frequent complaints Brown has heard is that the campus is simply too big to walk across, that

people feel isolated. "Typically, the largest public space that works is about 200 acres in area,"

"That's the size of most medieval villages and modern neighborhoods such as Greenwich Village in New York, Soho in London and the quartiers in Paris."

One of the proposals planners are looking at is bringing more commercial and retail development to campus. This could be done by creating a "town centre" - an extension of the village along University Boulevard, perhaps as far as the bookstore. The area, al-3 ready home to many public facilities,* could one day boast shops and even a hotel.

Based on five- and 10-year capital improvement plans and planning strategies conceived to date, the campus plan will undergo re-drafts and revisions until the final version is presented to the board of governors for approval later this year. But Brown stresses that the plan will always be fluid, subject to change and alteration.

An exhibition of the campus plan will be on display in the Faculty Club for three weeks beginning Feb. 21.

A presentation of the principles underlying the draft plan will be made Feb. 28 at 1 p.m. in Woodward IRC for faculty members and the university community generally.

Expertise called on for media war coverage

By CHARLES KER

Adel Safty is being watched. During the first two weeks of the gulf war, the UBC language education professor, turned war analyst, made two dozen television appearances on local and national news programs.

Viewers actually began calling one Vancouver station to find out when Safty would be on next.

"He's become a bit of a celebrity," said George Froehlich, executive producer at UTV.

Froehlich has even used Safty to promote his station's war coverage after the professor predicted that Iraq would attempt to hide its airforce in Iran.

The 15-second promotional clip shows Safty in the studio making his prediction on Jan. 22. The screen then switches to a major U.S. network reporting the same story five days later.

"Other stations called to see if I had inside information or just good analysis," said Safty. Froehlich thinks the latter

"Journalists are very good at bombarding people with information." said Froehlich. "But you need somebody who can put it all in perspective. Safty does that in a very down-to-earth way."

Between Jan. 14 and Feb. 4, Safty appeared 10 times on CBC television and radio, made 15 appearances on UTV, was interviewed by Global TV, The Financial Post and twice by The Vancouver Sun and The Globe and Mail

Munton, who specializes in Canadian foreign policy, added that while some interviews were less thoughtful than others, his experience with the media has so far been a good one.

Mike Wallace, also with the political science department, estimated that the day after war broke out, he received a phone call every 18 minutes between 8 a.m. and 11 p.m.

Wallace, an expert on Canadian defence policy, said he had to turn down a lot of requests because the interview time was just too short.

"Some of these people expected me to explain the gulf situation in 30 seconds." said Wallace. "I stop being a scholar at that point."

How does political scientist Brian Job describe the media response to war?

"The words feeding frenzy come to mind," he said.

Job's media encounters have included appearances on Cathay TV and interviews with The Financial Post, Seattle Post Intelligencer and the Minneapolis Star Tribune.

Other UBC experts called upon for

U of A cut-backs may result in department closures

Police, university investigation underway Students involved in vandalism

By GAVIN WILSON

Police and university officials are investigating an attempted prank by students that resulted in damage to campus telephone cables

UBC Security Coordinator Joan Dickson said a plastic sheath covering was removed from a telephone trunk line on the night of Jan. 31, exposing 2,400 cable pairs.

Between 50 and 75 pairs were cut and the others were exposed to potentially damaging moisture. Telephone service was disrupted in at least two campus buildings, but was quickly restored by B.C. Tel crews.

"The potential for damage was astounding," Dickson said. "It could have eliminated telephone connections to half the campus and would have taken two months to restore."

Dickson said two students turned themselves in to police later that night. They admitted to exposing the

analysis on the war include Gail Bellward, Faculty of Pharmaceutical Science, Hanna Kassis, Religious Studies Department, Maurice Levi, Faculty of Commerce and Business Administration, Paul Bradley with the Department of Economics and Colin Gordon of the History Department.

Yes we can!

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wires, but said they were not responsible for cutting them. They claimed to have fled the site after being surprised by another, unidentified person. When they returned to retrieve their tools, the wires had been cut, they

The cost of repairing the damage is believed to be at least \$6,000. Police are considering laying charges.

This was the latest in a series of incidents linked to students that Dickson said "we are no longer considering pranks.'

In December, access gates at every parkade and parking lot on campus were removed. Most of the gates were found nearby, but the connecting hardware was never recovered. Two students were questioned in connection with the incident. Police are still investigating.

Also in December, a pair of tents belonging to the university were stolen. They were later retrieved from students. No charges were laid.

said.



When he isn't on television or teaching, Safty, a former political science professor, is busy researching a book on the Camp David negotiations between Egypt, Israel and the United States and their effect on the Middle East.

But Safty is just one of a number of UBC professors who have themselves been bombarded by media requests for analysis on the war.

"For a while here you couldn't walk down the hall without tripping over camera crews," said Political Science Professor Don Munton. "Our department has definitely done its public service for the month."

The University of Alberta must close some academic departments to make a \$4.5-million cut in annual operating expenditures, says university president Paul Davenport.

"The university is experiencing serious financial difficulties," Davenport said. "Our institution cannot continue to do everything it currently does and maintain excellence at the same time."

A report prepared by Davenport and his vice-presidents recommends the university close three academic departments - Agricultural Engineering, Applied Sciences in Medicine and Recreation and Leisure Studies --- as well as the program of Mining Engineering.

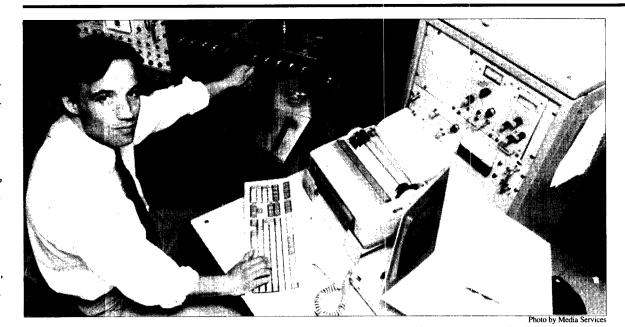
It also recommends "significant reductions" in the budgets of the Department of Oral Biology, the Faculty of Extension and University Computing Systems and a reduced quota for doctoral students in Dentistry.

The report also calls for major reorganizations of the Vocational Education and Industrial Arts Education program, Student Counselling Services, the Faculty of Library and Information Studies and, potentially, the Department of Printing Services.

The recommendations will now be discussed by senior university committees and the board of governors.

Peter Meekison, vice-president, academic, said the selective cuts recommended in the report are preferable to the across-the-board reductions the university has experienced in recent years.

UBC Media Services, Third Floor LPC 2206 East Mall, UBC Campus, 228-5931



Peter Jones operates a mass spectrometer, used to measure the amount of heavy water in the body.

UBC/RE to market new technology

By CHARLES KER

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A new university company has been formed to develop and market technology resulting from UBC research. UBC Research Enterprises (UBC/ RE), a spin-off company of UBC's Industry Liaison Office, was incorporated last month to oversee prototype development, market assessment and the formation of companies based on university research.

Ed Auld, UBC/RE vice-president, said the company will attract financing and support from private industry, investors and government agencies for a more coordinated approach to commercializing technology.

"The company will provide onestop-shopping for all aspects of technology transfer," said Auld. "Our goal now is to work in close partnership with faculties and take the technology from demonstrations in a lab to more marketable devices."

Research disclosures to UBC's Industry Liaison Office have increased from a handful each year, in the early 1980s, to almost 100 this year. About

10 per cent of these disclosures involve some form of significant prototype development. Estimates indicate that for every dollar of research and development that goes into an invention, another \$10 must be spent before it can be commercialized.

Auld said venture capital financing not presently available to the university for scaling up inventions will now be open to inventors through UBC/ RE. Auld added that the federal government's willingness to consider matching private investment may also result in the annual prototype development budget being increased by about \$500.000.

The Industry Liaison Office, which spends \$300,000 each year in patenting research ideas, will continue to oversee the majority of technology transfers. With the help of an advisory board of academic and industry experts, UBC/RE will provide market assessments, industrial contacts, financing and preparation of business plans for prototype development.

An annual survey of companies

shows 87 firms have evolved from university research and personnel in the last two decades. These companies employ more than 4,600 people and generated sales in excess of \$824 million in 1989.

Royalties have grown from \$5,000 a year in 1983 to close to \$750,000 in 1990. For every dollar of royalties UBC receives from licensed companies, half goes to the inventor, one-sixth to the inventor's faculty or department and the remainder to the university. In the 1989-1990 academic year, UBC generated more than 60 per cent of B.C.'s total public and private research.

'Heavy water milkshakes' used

New procedure advances cholesterol investigation

By ABE HEFTER

A procedure developed by a UBC professor is revolutionizing the way cholesterol production in the human body is measured.

Peter Jones, of the School of Family and Nutritional Sciences, has determined that non-radioactive stable isotopes can be used safely to measure cholesterol synthesis.

"The use of stable isotopes will open doors in the investigation of cholesterol metabolism," said Jones. "Until recently, cholesterol synthesis was determined by fecal examination. The procedure was time consuming, not very accurate and rather odoriferous," he said. "Stable isotopes, which can be used to trace the formation of a variety of compounds in the body, including cholesterol, are enabling us to get more accurate readings quickly and safely."

Using "heavy water milkshakes," Jones was able to determine the rate of cholesterol formation in the body. The heavy water contains deuterium, a nonradioactive stable isotope produced by nuclear generating stations. Jones compiled data by analyzing blood samples from people who had consumed measured amounts of the heavy water milkshakes.

"Half of a person's cholesterol is produced by the body while the other half is consumed in the diet," explained

Food outlets close for break

Campus Food Services outlets will be closed or operating on restricted hours today and tomorrow, Feb. 21 and 22, due to spring break.

Open for business are: Subway Cafeteria, from 7:30 a.m. to 3:30 p.m. (but closed Saturday and Sunday); the Ponderosa, from 7:30 a.m. to 3:30 p.m; IRC Snack Bar, from 8 a.m. to 3:45 p.m.; and the Barn Coffee Shop, from 7:45 a.m. to 3:45 p.m. The Underground in Sedgewick Library will be open on Sunday, Feb. 24, from 10 a.m. to 9:30 p.m.

Jones. "Determining a person's circulating cholesterol level was never a problem. That can be done with a simple blood test. Now we can see how dietary factors influence how much synthesis contributes to cholesterol levels in the blood."

A study published in 1989 by the University of Toronto revealed that circulating cholesterol levels could be lowered by eating many small meals each day, as opposed to three large meals. But it wasn't until Jones applied his isotope methodology that scientists were able to determine why "nibbling" lowered the amount of cholesterol produced by the body.

"In a study we conducted last April, six UBC students were fed every four hours over a three-day period," said Jones. "The students consumed the same number of calories they normally would during the course of three meals a day. Using heavy water, we were able to discover that the nibbling diet resulted in a radical decrease in cholesterol synthesis --- the likely cause of the reduced cholesterol levels seen in the Toronto study."

Jones said that normally, every time we eat, insulin is released into the body. This creates a set of circumstances which stimulates the production of cholesterol.

"The bigger the meal, the higher the level of insulin that's released," said Jones, "and the more cholesterol is produced. By eating smaller meals, you're not giving your body enough calories at one time to stimulate the production of insulin."

The result: a lower cholesterol formation rate - 75 percent lower in Jones' study of UBC students.Jones said further application of this technique in humans will improve our current understanding of the interaction of clinical nutrition and disease.

Hirshen ready to re-energize **UBC** School of Architecture

Bv CHARLES KER

Sanford (Sandy) Hirshen rises quickly from behind his desk and moves towards the window.

'That's a gorgeous wingspan," he says as a bald eagle soars past his fourth-floor office. "I've been wanting to see one of those."

Welcome to B.C., Sandy. After a distinguished 25-year teaching and professional career in alifornia, Hirshen has moved up

& Associates and a fellow of the American Institute of Architects.

Apart from his academic and administrative qualifications, it has been Hirshen's commitment to public service architecture which is notable.

"I was brought up in the poverty of the Bronx so I've always felt some responsibility to the community environment I grew up in," he said.



The whole nature of Hirshen's work sprang from that first project, which contained housing and shelter as well as child and health care facilities. As a result of this first commission. Hirshen became consulting architect to the State of California and its poverty program.

In the 10 years that followed, his firm would construct 33 such communities and draw a good deal of national and international attention in the proc-



also the founding member in the architectural firm Hirshen Trumbo

the coast to take on the directorship of UBC's School of Architecture.

"Its a point in time when internally, everyone in the school feels the need to have it re-energized," said Hirshen. "That is really my job - to re-energize this school." A not-so-quick read through Hirshen's 21-page resume shows

he is more than up to the task. A former professor in the Department of Architecture at The University of California, Berkeley, Hirshen was also chair of the College of Environmental Design and director of the Centre for Planning and Development Research. He is

Profile

Hirshen's social conscience was nurtured during early academic life by radical sociologist C. Wright Mills. Soon after graduating with an architecture degree from Columbia University, Hirshen left his job at a wellknown San Francisco firm to help a group of public health physicians build shelters for migrant farmworkers.

The decision to improve the miserable living conditions of these workers coincided with the Johnson-era's War on Poverty. With a \$3-million grant, Hirshen and his colleagues built an innovative portable shelter for 100 families, made of paper and plastic.

"With my first project, I was forced to grapple with all these fundamental human needs," said Hirshen. "Satisfying the user needs and my own artistic needs at the same time is the ideal I strive for."

Internationally, Hirshen's work has included United States Embassy programming and design for facilities in Cyprus and Turkey as well as consulting in Latin America and Asia. In 1985, he won a Guggenheim Fellowship to do a comparative study of public housing in Italy, France and Holland.

However, Hirshen said opportunities for interesting work in the field of social housing evaporated during the Reagan years and he wasn't interested in pursuing a more conventional pracPhoto by Media Services

Sanford Hirshen, the director of UBC's School of Architecture.

tice. So, it was time for change.

"As I reached middle age, I was interested in a more focused career," said Hirshen, who turned 56 earlier this month. "There were many academic directorships available but I wanted a place that had both the potential to do interesting work and was a beautiful place. UBC was it."

The move from Berkeley's 100member faculty to UBC's architectural contingent of 10 also meant much

closer interaction among colleagues. Hirshen said a priority will be to "re-invigorate" the academic postprofessional masters degree and start attracting students from around the world to study at UBC after they've had their professional training.

When he's not administering to business on campus, Hirshen said he and his wife keep busy discovering Vancouver and walking on the beach.

UBC REPORTS Feb. 21, 1991

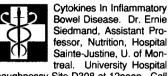
February 24 – March 9

MONDAY, FEB. 25

Pharmacology Seminar

Biochemical Pharmacology Of Epipodophyllotoxin (TP-16) Analogues. Dr. Y.C. Cheng, Pharmacology, Yale U. School of Medicine. BC Cancer Res. Centre Lecture Theatre from 12-1pm. Call 877-6010.

Paediatrics Research Seminar



Sainte-Justine, U. of Montreal. University Hospital Shaughnessy Site D308 at 12noon. Call Dr. Josef Skala at 875-2492.

In The Spotlight



Outstanding Students In Concert. Music Recital Hall at 12:30pm. Free admission. Call 228-3113.

Mechanical Engineering Seminar

Influence Of Buoyancy On The Flow In Recovery Boilers. Fariba Aghdasi, Ph.D. Student. Mechanical Engineering, UBC.; Dynamics Of The Space Station Based Mobile Remote Manipulator System, Harry Mah, Ph.D. Student, Mechanical Engineering, UBC. CEME 1202 from 3:30-4:30pm. Call 228-6200.

Biochemistry Seminar

Catalytic Antibodies: Perspective And Prospect For The Future, Dr. Don Helvert, SCRIPPS Clinic, San Diego. IRC #4 at 3:45pm. Call 228-3402.

Astronomy Seminar

The Helium Strong Stars. Dr. Dave Bohlender, Geophysics/ Astronomy, UBC. Geophysics/Astronomy 260 at 4pm. Coffee from 3:30pm. Call H. Richer at 228-4134/2267.

Laundrette. Graduate Stu-

dent Centre Fireside Lounge

At 6:30pm. Call 228-3202.

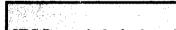
Grad Centre Video Nights



TUESDAY, FEB. 26

Financial Planning Noon-Hour Series

Are There Any Safe Investments Left? A Look At Today's Stock Market...And Bevond. Don Proteau, Hodgins, Leard, Proteau/Assoc. A joint presentation of the UBC Faculty Association and the Centre for Continuing Education. Henry Angus 104 from 12:30-1:20pm. Call 222-5270.



CALENDAR DEADLINES

For events in the period Mar. 10 to Mar. 23, notices must be submitted by UBC faculty or staff on proper Calendar forms no later than noon on Tuesday, Feb. 26 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 wil be published Mar. 7. Notices exceeding 35 words may be edited.

Medical Genetics Seminar

Cloning And Characterization Of Candidate sequences For The Gene For Multiple Endocrine Neoplasia Type 2A. Dr. Paul Goodfellow, Medical Genetics, UBC. IRC #1 at 8:30am. Call 228-5311.

Botany Seminar



Lectures In Modern Chemistry 1990/91 Pacific Coast Lecturer In Organic Chemistry: Molecular Evolution And Understanding Enzymes: Ribonuclease Organic Chemistry And Alcohol Dehydrogenase. Dr. Steven A. Benner, Chemisty, E.T.H.-Zentrum, Zurich, Switzerland. Chemistry B250 at 1pm. Call 228-3266.

Neuroscience Discussion Group



WEDNESDAY, FEB. 27

Computer Services Hands-On

Microlunch. How To Select A DataBase Program. Darren Craze. Computer Sciences 460 from 12:30-1:30pm. Call 228-3941.

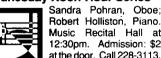
Microbiology Seminar Series

Function Of CD4 And CD8 Co-receptor Molecules In T Cell Development. Dr. Hung-Sia Teh, Microbiology, UBC. Wes-brook 201 from 12:30-1:30pm. Call 228-6648.

Geography Seminar

Women's Health Issues In El Salvador And Nicaragua. Cathy King, Oxfam Global Health Project. Geography 201 from 12:30-1:30pm. Call 228-5875.

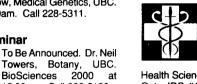
Wednesday Noon-Hour Series



at the door. Call 228-3113. Applied Mathematics Seminar Discontinuous Solution Of P.D.E's: Flows With Shocks. Dr. N. Geffen, Mathemati-

THURSDAY, FEB. 28

Pharmacology Seminar



Nitric Oxide As A Mediator Of Non-adrenergic, Noncholinergic Inhibition In The Enteric Nervous System. Dr. Edwin E. Daniel, Physiology/Pharmacology, Health Sciences, McMaster U., Hamilton, Ont. IRC #1 from 11:30-12:30pm. Call 228-2575.

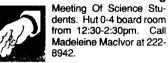
Forestry Seminar

Cost Benefit Analysis Of Ectomycorrhizae. Dr. Jones, Biology, Okanagan College. MacMillan 160 from 12:30-1:30pm. Admission free. Call 228-2507.

Speaker Series

Land Management Strategies For Retaining Wildlife Trees. Dan Luosier, Consulting Forest Biologist. MacMillan 166 at 12:30pm. Call 228-5724.

First Nations House Of Learning



UBC Jazz Ensembles

Free Admission. Music Recital Hall at 12:30pm. Call 228-3113.

Obstetrics/Gynaecology Research Seminar

Physiology And Clinical Significance Of Androgen Conjugates. Dr. Roger Rittmaster, Obsterics/Gynaecology, Dalhousie U. Grace Hospital 2H30 from 1:30-2:30pm. Call 875-2334.

Koerner Memorial Lecture

Poetry And Music In The Middle Ages. Prof. Leo Treitler, Graduate Centre, City U. of New York. Music Library 6795 at 3:30pm. Call 6795.

Physics Colloquium



Nador L. Bacazs, Physics, SUNY at Stony Brook, New York. Hennings 201 at 4pm. Call 228-3853.

Psychology Colloquium

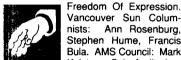
Emotional Expression And Well-Being. Dr. James Pennebaker, Southern Methodist U. Dallas, Texas. Kenny 2510 at 4pm. Call 228-3005.

Astronomy Seminar

Illustrated Lecture

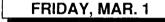
City Of The Grim Reaper: The Rediscovery Of Mashkan-shapir In Southern Iraq. Dr. Paul Zimansky, Associate Professor, Archaeology, Boston U. Museum Of Anthropology Theatre at 8pm. Call 228-2889

Rights/Freedom Forum - Session 3



Stephen Hume, Francis Bula. AMS Council: Mark Keister. Sub Auditorium

from 12:30-2:30pm. Call Peter Cocciolo at 224-5328.



Pediatrics Grand Rounds

Paediatric Aids. Dr. Jack Forbes, Consultant, M.B., Ch.B., F.R.C.P.(C). G.F. Strong Rehab. Centre Auditorium at 9am. Call 875-2118.

School Nursing Noon-Hour Lecture

The Influence Of Nursing Research On Health Care Policy. Dr. Margaret Dimond, Professor And Assistant Dean For Research, U. of Washington College of Nursing. School Of Nursing, Acute Care Hospital #180 (3rd fl.) at 12noon. Call 228-7463.

Koerner Memorial Lecture



The Politics Of Reception: Tailoring The Present As Fulfillment Of A Desired Past. Professor Leo Treitler, Graduate Center, City U. of New York. Music

113 at 12:30pm. Call 228-6795.

Chemical Engineering Weekly Seminar

Topics In Adaptive Process Control. Dr. Dumont, Electrical Engineering. ChemEngineering 206 at 3:30pm. Call 228-3238.

Fisheries/Aquatic Sciences Seminar

Future Trends In Fisheries Research. Peter Larkin, UBC. Biosciences 2361. Call 228-4329.

Economics Departmental Seminar

Estimating Panel Data Sets With Serial Correlation When Instruments Are Not Strictly Exogenous. David Runkle, Re-

MONDAY, MAR. 4

Cecil/Ida Green Visiting Professor Lecture

Psychology. Phantom Limb Pain. Prof. Ronald Melzack, Psychology, McGill U. IRC #6 at 12:30pm. Call 228-5675.

Paedicatrics Research Seminar

Series 1990/91. The Molecular Pathology Of Cholesterol Esterification. Havdn Pritchard, assoc. prof., Pathology, UBC Research Centre. University Hospital, Shaughnessy Site D308 at 12noon, Call Dr. Josef Skala at 875-2492.

Biochemistry Seminar

Calponin: A Calmodulin-Binding Troponin-T-Like Protein In Smooth Muscle. Dr. Michael Walsh, Medical Biochem., U. of Calgary. IRC #4 at 3:45pm. Call 228-3810.

Applied Mathematics Seminar

Evolutionary Ecology Of Inducible De-fences. Dr. Colin W. Clark, UBC. Math 229 at 3:45pm. Call 228-4584.

Mechanical Engineering Seminars

Simulation Of Fishing Fleet Economics. David Molyneaux. Dynamics And Coontrol Of Fish Processing. Franco Bussani. Both speakers, M.A.Sc. students, Mech. Eng., UBC. Civil/Mechanical Engineering 1202 from 3:30-4:30pm. Call 228-6200.

Astronomy Seminar

VST G. Peter Kaye Lectures

Jesus And God's Reign In Asia. Dr.

Choan-Seng Song, Theology/Asian Cul-

tures, Pacific School of Religion, Berkeley, CA. The Way, The Truth, The Life Of

Jesus: 12:30-2pm. The Banquet Of God's

Reign: 7:30-9:30pm. Epiphany Chapel,

Vancouver School of Theology. 228-9031.

UBC Student Composers Con-

Free admission. Music Recital Hall at

TUESDAY, MAR. 5

Psychiatry Academic Lecture

Serotonergic Contributions To Schizo-

phrenic Symptomatology. Dr. John Krystal, Psychiatry, Yale U. and Director, Clini-

cal Research, West Haven VA Medical

Center. BC Cancer Research Centre,

601 West 10th 8:30-9:30am. 228-7325.

12:30pm. Call 228-3113.

Program 1991

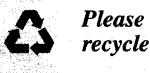


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Large Scale Instability. Dr. Craig Hogan, Physics/As-tronomy, U. of Washing-ton. Geophysics/Astronomy 260 at 4pm. Coffee at 3:30pm. Call H. Richer

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.

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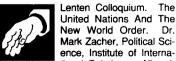
Biotechnology Laboratory Seminar

cal Sciences, Tel-Aviv U., Israel. Mathe-

matics 229 at 3:45pm. Call 228-4584.

Molecular Anatomy Of Microbial Cytadherence. Dr. Joel B. Baseman, Chairman, Microbiology, U. of Texas, Health Sciences Center, San Antonio. IRC #5 at 4pm. Call 228-2210.

Christinanity/World Conflict Discussion



ence, Institute of International Relations. All welcome. Buchanan D306 at 4:30pm. Call 224-1410/3722.

Resource Ecology Seminar

Mite Sex Ratio Strategies And Relatedness. Dolph Harmsen, Queen's U. Biosciences 2449 at 4:30pm. Call 228-4329.

Automated Survey For Variable Stars. Dr. Ed Schmidt. U. of Nebraska. Geophysics/Astronomy 260 at 4pm. Call H. Richer at 228-4134/2267.

Law Lecture

Hate, Hierarchy And Homicide, Professor Christine L.M. Boyle, LL.B., Queen's, Belfast; LL.M., Queen's, Kingston; Walter S. Wen Lecture-1991. Curtis 101/102 at 5:30pm. Call 228-3925.

Dentistry Lecture

The Changing Face Of Dentistry And Implications For Dental Education. Dr. Harald Loe, Director of National Institute of Dental Research, USA. Woodward IRC #1 at 7:30pm. Call 228-5996.

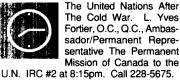
Distinguished Artists Series

An Evening Of Chamber Music Featuring Celebrated Faculty Artists. Admission: \$12/Adults. \$7/Students/Seniors Music Recital Hall; Prelude Lecture at 7:15pm, Concert at 8pm. Call 228-3113.

search, FRB, Minneapolis. Host: Professor James Nason. Brock Hall 351 from 4-5:30pm. Call 228-2876.



Vancouver Institute Lecture



UBC Faculty Women's Club Social Evening

Dancing With Ruth And Alex Jappy. Cecil Green Park at 7:30pm. Games, refreshments, husband/guests welcome. Call for reservations at 222-1983.

Neuroscience Discussion Group

Excitatory Amino-Acid Receptors Systems On Sub-Populations Of Striatial Neurons In Vitro. Dr. Sam Weiss, Pathology, Pharmacology/Therapeutics, U. of Calgary. University Hospital, UBC Site G279 at 4pm. Call 228-2330.

Medical Genetics Seminar

Clinical Genetics In Newfoundland: An



Overview. Dr. Elizabeth Ives, Community Medicine/Behavioural Sciences, Medicine, Memorial U. of Newfoundland, St.

John's. IRC #1 at 8:30am. Coffee at 8:15 am. Call 228-5311.

Biotechnology Lab Seminar

Protein Purification: Can Water Do The Trick? Dr. Daniel Forciniti, Chemical Engineering, North Carolina State U., Raleigh, NC. Wesbrook 201 at 4pm. Call Dr. M. Smith at 228-4838.

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PURPOSE OF THE DISCUSSION PAPER

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The intent of this discussion paper is to stimulate discussion about the content of a UBC Long Range Development Plan.

It is intended that the Long Range Development Plan have three major sections: the first dealing with background and issues, the second dealing with planning determinants and strategies, and the third being a demonstration plan, or image of the campus as it might be if the strategies were carried out.

This discussion paper is a "first cut" at each of the sections. At this time, Section 2 deals more substantially with the Main Campus than with the Middle and South Campuses. These latter areas will receive greater attention in succeeding drafts.

SECTION ONE: BACKGROUND

THE ROLE OF THE PLAN

The physical planning process is the vehicle to get buildings and landscapes constructed, maintained, and preserved in order to provide and manage the necessary community of facilities which enables institutional goals and decisions to be realized.

A comprehensive Institutional Plan for UBC has four primary inter-related components: academic planning, financial planning, community planning and physical planning. The Mission Statement is a summary of all four; but it focuses on the Academic plan (including education, research and service), touching on the others as they are needed to support the Academic Mission. The Long Range Development Plan will focus on the Physical Environment necessary to nurture and support the Mission. should make a contribution and work together so that the whole is greater than the parts. The alternative is that each is designed to meet only the needs of it's own special constituency without reference to the others, or, worse, works at cross purposes to the needs of others and the common good.

THE LONGEVITY OF THE PLAN

Campus plans express the university's expectations at the time they are drafted, but they continue to evolve. The plan must be able to evolve along with the University's needs and resources or it will soon become redundant.

In order to ensure that the plan is useful as a firm basis on which to direct campus development, and remains so, the following requirements must be met:

i) The plan strategies must be endorsed by the Administration and the Board of Governors.

ii) When a project is first contemplated, a determination should be made as to whether the basic intent of that project is in conformance with the plan.

iii) If it is, the project design, at each stage, should be tested for conformance with the plan strategies.

iv) If it is not in conformance, the project should be modified so that it is, or the plan should be modified to permit the project.

iv) The plan should be formally reviewed and updated every five years.

This discipline will ensure that the plan is sufficiently flexible to accommodate genuine evolution, but remain sufficiently current and relevant to protect the University community from arbitrary or single-constituent decisions. the composite environment to make it an efficient place to work, learn and live, as well as a place which uplifts the spirit and is a joy to inhabit.

A central proposition of the Mission Statement is that the University is "an environment to support the adventure of the mind and spirit". That environment is intellectual, social, and physical. To be a great university, UBC must have a great environment in all three ways; and each should support and be supported by the others.

A great physical environment will assist in nurturing great education and research. It will help attract outstanding teachers, students and researchers, and make their work more productive and enjoyable. It will encourage benefactors to identify with the place. But it will not materialize simply through the provision of new buildings. The design of buildings and the infrastructure tying them together requires no less direction and creative thinking than the other pursuits of the University. The Mission Statement defines appropriate pursuits for UBC: "If an area of activity is not based on a conceptual framework and may be carried on with a minimum of thought, it has no place in the university". This measure should be applied no less to the design and maintenance of the campus itself than to the other activities at UBC.

The design and realization of a great environment - to which this plan seeks to give meaning - must be a stated goal. If "UBC is to continue to be one of the best universities in Canada, if not the best, and among the best in North America"; if it is to "enhance its status as a research intensive university"; if it is to "serve the Province as well as it should as a mainspring for economic, social and cultural development", it must have the physical environment to do so, for both practical and symbolic reasons.

The Mission Statement emphasizes "the inter-relationship between disciplines, the need to re-establish links between the humanities and the sciences, and the need to build bridges" within disciplinary groupings. This objective can be helped or hindered by the design of the physical environment. The campus design can help by fostering an identification with and an understanding of the whole campus, links between buildings, and links within departments in the buildings. of the spaces between the buildings, and the repair of existing ones. The strategies are intended to give some guidance as to the University's collective idea of "exemplary".

PLACE IN THE COMMUNITY

The University, with its neighbour the UEL community, is at the land's end of Point Grey, perceptually separated from the rest of the city by the forest of Pacific Spirit Park. This location gives it a sense of being special, set in a garden bounded by forest.

But in spite of its relative isolation and natural setting, it is not self-contained, and it is not monastically collegiate. It is a large bustling commuter campus. The distance that its occupants must travel makes it a time-consuming place to get to and from. This situation promotes a tendency for many commuters to stay as short a time as possible on campus, to spend their leisure, social and shopping time elsewhere. The lack of facilities for these activities reinforces the tendencies in a positive feedback loop. The potential campus lifestyle suggested by its location and landscape is to a degree at odds with the reality.

However, the Mission Statement now lays claim to a renaissance in the university, which might resolve this discrepancy - the current building programme, after a long lapse in capital investment, is evidence that the renaissance is a realistic possibility. The University's mission is an unambiguous drive for academic and research excellence. How can the physical development of the university, given its location, assist in promoting excellence?

One of the strengths of the location is the way in which it fits in with the traditional view of the North American collegiate ideal traceable to the origins of English higher education in Oxford and Cambridge, of a relatively complete, self-contained academic community, a city in microcosm dedicated to the pursuit of knowledge, thought and the academic life.

Physical planning deals both with individual projects and public infrastructure: circulation systems, utilities, and linking landscapes. Much of the content of each project is established by identifying and meeting user needs, as constrained by the financial resources available. But an aspect of each project also deals with the contribution it makes to the campus as a whole.

A campus is a family of buildings and landscapes. Each has individual needs and a separate identity. However, as in a family, each can and

PHYSICAL IMPLEMENTATION OF THE UBC MISSION

The campus plan is the means by which the physical aspirations of the Mission Statement can be implemented. This means dealing with the facts and figures of Section II (The People) and Section III (The Community); and it should do so using the philosophical underpinnings set out in the Introduction and Section I (The Mission). This will be done when the design of the buildings and landscapes on campus not only meet the needs of their particular users, but contribute to

The UBC campus is described as "unfinished". In one sense, a campus is never "finished", but it should have a sense of finish, or at least of compose, of being complete at all times while allowing for further growth. The sense of finish necessary to give occupants and visitors the feeling that they are in the tangible presence of a great university requires the exemplary design and construction of new buildings and But the campus is sorely lacking in everyday urban services. To be a fully operating part of the larger community it must become more continuously active, and to do this it needs a greater variety of recreational, social, and retail facilities, and a larger and more integrated resident population.

DISTRICT STRUCTURE

The University has a primary structure of four major components: the

DRAFT STATEMENT OF PLANNING PRINCIPLES



Theological Colleges, the Main Campus, the Middle Campus, and the South Campus, which share the Point Grey land's end with the UEL neighbourhood.

1991 CAMPUS PLAN

In it's secondary structure, the Main Campus breaks down into a series of smaller components. The large "academic core" is surrounded by service functions: parking, residential, cultural, student service and health care uses.

The Middle Campus has a less organized grouping of residential areas, athletic fields, parking lots, botanical gardens, and federal research facilities.

The South Campus, essentially separated from the rest of the University by 16th Avenue, has a perimeter of dense forest and an interior clearing containing industrial research facilities and agricultural fields and buildings.

CAMPUS SIZE

The UBC campus land area is one of the largest in North America. Stanford in California compares in size, but comparison with other western universities, such as Washington, Simon Fraser and Alberta show complete land holdings that are only the size of UBC's Main Campus, excluding the Middle and South Campuses. Comparison with the other two top Canadian universities (McGill and Toronto), show whole campuses, of roughly similar student enrolment and faculty/staff populations, containing all the academic, Health Science, parking, athletic, recreational, social and support facilities within perhaps half the area consumed by similar facilities at UBC.

While McGill and UofT do not need the same housing and parking acreage as UBC, this condition does not reduce the discrepancy in size by much. And the University of Alberta, which has a similar car orientation also takes up a far smaller acreage than UBC.

When the UBC land area is compared with that of downtown Vancouver, one gets a sense of how large the whole campus is. If one were to walk from north to south, it would be like walking from Main Street to the Lost Lagoon in Stanley Park.

A comparison with the length of the Mall to that of Granville Street downtown is also instructive. The south section is as long as the distance between Drake Street and Nelson, and the Rose Garden would be north of Georgia St. The East and West Malls would lie on Hornby and Richards Streets. retention of all habitable structures on campus, even those of questionable quality efficiency: built space is always valuable to someone and it saves unnecessary inconvenience or conflict to leave existing buildings where they are and build elsewhere. Campuses such as UoTT and McGill have not had that luxury and have consequently built more densely.

A low density campus, especially one in a garden environment, has charm and some advantages, but as the campus spreads so it will become increasingly difficult to support the Mission Statement's objective of encouraging interdisciplinary linkage, broad as well as specialized education, and cross-disciplinary fertilization in research.

Urban settlements tend to break down into distinguishable districts of about 200 acres each. This is roughly the size of the quartiers in Paris, districts such as Soho and "The City" in London, downtown and midtown in Toronto, and downtown and the West End in Vancouver. This is also approximately the size of many self-contained medieval villages. The reason for this tendency to cellular organization probably lies in walking distances: 200 acres is encompassed within a 15-minute walking diameter.

The spread of the UBC Main Campus means that the University is struggling against this natural tendency. Many of the complaints about lack of cohesion, getting lost, isolation and long walking distances spring from this struggle.

Section TWO: Planning Strategies

The Strategies described below are some of the principles which should guide development on the Main Campus. Further strategies will be developed during the planning process.

LIMITS TO SPRAWL: CAMPUS COHESION

The so-called "Academic Core" at UBC is larger than most whole universities: core, body and periphery combined. There are significant costs to sprawl. Longer roads and paths, increased paving and landscaping, extended underground services, all cost more to build and maintain. Salaries paid to maintenance workers, academics and staff are continuously lost to unproductive travel time. The land cost is significant. circulation, and by infilling with a greater intensity of buildings and activities, sheer distance is difficult to overcome, no matter how good the circulation systems or how active the scene.

The University would benefit financially, socially, aesthetically and academically - that is, it will support its Mission Statement more adequately if all future education, academic, research, housing and support services were contained within the boundaries of the presently built up Main Campus.

The area is already greater than a naturally cohesive 200 acre district, but it is not practical to think of shrinking back. In addition, commitments have already been made to locate new facilities south of Agronomy Road. If these commitments are too firm to rescind, expansion should extend no further than the centre of the parking block. At this point a firm line should be drawn, beyond which no further mainstream academic or research facilities should be built. Similarly, limits should be drawn to the north, west and east, in these cases to natural boundaries. The practicality of this strategy lies in the considerable capacity of the built-up campus to absorb new buildings.

The result would be a 20-minute rather than a 15-minute walking campus. This may not be ideal, but will be considerably better than a 25- or 30minute walking campus. The impediments to cohesion inherent in a 20minute walking campus should be reduced as much as possible through an efficient and frequent internal transit system.

DEVELOPMENT CAPACITY: FUTURE BUILDING SITES

The UBC campus contains an unusual number of temporary structures. They originated through lack of funds for permanent facilities at the time, but they remain because, rather than tearing them down and building permanently in their place when funds become available, the University usually chose to pioneer new sites. It had the land, and the temporary facilities were still of use. But if a sprawl-limiting strategy takes the place of that tradition, the question arises as to how much development capacity is available within the 20-minute Main Camfirmly developed sites from consideration, there still remain many opportunities for intensifying land use in the Main Campus through future construction.

A SENSE OF PLACE: CHARACTER AREAS

The genius loci - spirit of the place of UBC can and should be enhanced through the siting and design of further development to reinforce the distinctive character and identity of the campus and its parts. The genius loci of the campus is inherent in the patterns of buildings and landscapes, and is largely, but not solely, a product of the site's original topography and vegetation. It is the variations of topography, vegetation, and built form which produce distinctive areas within the campus. The planning and design of new buildings and landscapes should seek to clarify and support these distinctions.

Topography

A central north/south ridge - the "Hog's Back" - was very rightly selected by the early planners for the location of the Main Mall. Elevated above the rest of the site, the prominence of the ridge lent itself to the development of an effective campus focus.

<u>The Main Mall</u>

The Mall is an allée of regularly spaced pin oaks, which establishes a formal order in the centre of an otherwise profuse and relaxed landscape.

While the strongest design element on campus, it has some of the air of an abandoned carriageway. To reach the potential it deserves, it should become more formal and simple.

The Main Mall is the primary landscape asset of the Campus, the sole organizing feature and primary means of orientation in what would otherwise be a very fractured group of buildings. As arguably the most memorable aspect of the campus to first time visitors and long term faculty alike, it should be preserved and enhanced.

The Western Slopes: A "Hill Town"

Each of the original campus blocks are twice the size of downtown blocks, and nearly three times the size of West End blocks.

There is no doubt that the UBC campus could have been built in a more compact manner, and would have been if it had had land constraints like most other campuses. The presence of large land holdings has encouraged sprawl. It has also encouraged the If the Main Campus is to become more cohesive, it requires better linkages between what are currently relatively isolated components. The campus north of Marine Drive, the Student Union area, the Health Science area, and the residential precincts should be better linked to the centre of the campus. While this can be partly accomplished through pedestrian and transit pus.

In answering this question, the first thing to determine is which buildings and landscapes should remain in the long term because of their functional, material or aesthetic value.

The accompanying illustrations show those buildings which are expected to remain for the long term, and those landscapes with the similar expected longevity.

Several sites are already committed to future construction in the current five year plan, and are therefore no longer available. These are also illustrated.

Having removed committed and

The relatively steep slopes between the West and Main Malls currently have a small "grain" pattern of buildings. This intricacy can be reinforced and the sense of a "hill town" promoted in the buildings, lanes, courts, and stairs throughout this zone.

The Top of the Escarpment

The top of the escarpment around the Museum of Anthropology and Cecil Green House should be developed to enhance the sense of being perched

1991 CAMPUS PLAN

DRAFT STATEMENT OF PLANNING PRINCIPLES



on the top edge of the cliff, overlooking the ocean.

The Forest

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A dense, primarily coniferous forest clothes the steep escarpment, the plateau rim and the western and theological sections of the campus.

This zone should retain the sense of dense coniferous forest, with buildings occupying "clearings in the forest". The Asian Centre and the parkade are both big buildings, but they are successfully hidden in the surrounding forest. Surprisingly little site area need be given over to landscape around buildings to retain the sense of forest. For example, the thin strip of coniferous trees behind the West Mall Office, separating it from the parking structure behind, gives the effect of the forest coming right to the back of the buildings. This treatment should be extended down the west zone to Totem Residences.

The Academic Plateau

In contrast, academic courts of a larger grain, set in a composed "garden" of large shrubs, profuse ground cover, and primarily deciduous trees, should continue the existing tradition east of the Main Mall.

Commercial Main Street

University Boulevard is the busy main entrance to the campus and should be developed in the character of a main street flanked with commercial and semi-retail activities.

ORIENTATION AND SPATIAL STRUCTURE

The UBC campus is a particularly difficult place to find one's way around. Many parts of the campus are unfamiliar to many people, even those who have worked and studied there for years.

This condition results partly from the . low density spread of the campus, and partly through the homogeneous look of the place, caused by buildings and landso capes of similar type. The first problem will be helped by the strategy to limit sprawl; the second by creating a greater sense of place. However, the major factor is the lack of a clear framework of streets and public spaces, a recognizable system of public thoroughfares along which building addresses can be organized. This is a condition which should be recti-L, fied.

provide points of orientation; but they are far apart and, with the exception of the flag pole and clock tower, are not visible from each other. Additional markers to create a continuous series visible one from the other would assist orientation.

The siting and design of future projects in the centre of the campus should encourage the creation of positive spaces, that is space which is firmly contained by building forms. The town squares of Europe are examples of such spaces. The Main Mall is successfully contained by some building facades, for example the Chemistry and Henry Angus Buildings. Elsewhere it is given partial containment by means of the regularly spaced pin oaks.

The Main and Cross Malls should terminate in major meeting or symbolic spaces contained positively by the surrounding buildings and landscape, and positively contained greens or squares should occur along its length.

Each of these spaces, together with the intersection of the Main and Cross Malls, should be associated with a special marker. Three exist already: the flag pole for the North Oval, the clock tower for the Library Garden, and the Barn. Perhaps the earthen mound serves as such as an identifying feature for the east Town Square. The others should be given markers as new development occurs around them.

THE MALLS, SQUARES AND GREENS

The Main and Cross Malls should have an appropriate punctuation where they emerge from the academic centre of the campus.

To the north, the Flag Plaza can be reinforced, terracing down to the Rose Garden and into a large lawn. This lawn, which will have the feel of being carved out of the fcrest, engages Marine Drive and encompasses the Rose Garden, giving passersby an introduction to the campus. It will act as a front lawn or forecourt to the University, and will visually link the lower northern campus with the upper central area.

The existing bus terminal at the east side of the Cross Mall has some of the aspects of a bustling town square, which should be reinforced. The square would be supported by the "student world" to the north. The University Boulevard entry can be given a strong sense of identity and perform a valuable role as the University's commercial "Main Street", extending the existing shopping nucleus into the campus.

As the Main Mall emerges from the built-up area and enters the parking lots, the design of a termination space is a special case. A unique and memorable characteristic of the Mall is its extreme length, the unimpeded slice it makes through the landscape and out into the ocean to the north. To retain this character southward, the axis should not end as it emerges from the academic core, but continue. Yet some punctation at the point of its emergence should mark this important place. An opening around the barn in that location, well placed as a visitors centre, could serve this purpose, and the barn could act as the identifying marker for the space.

VEHICULAR ACCESS AND PARKING

The original site plan for UBC had an urban character: defined street blocks in a regular grid pattern. Subsequent development has, however, produced a campus of a distinctly suburban character: dual carriageway arteries, roads designed not as a flexible network but for origins and destinations at the time of design, deadend roadways, complicated intersections in which each turning movement is given a separate lane, and pedestrian paths separated from roadways.

This pattern combines low density with cells of single purpose land uses to create an environment which has limited flexibility and diversity.

A more continuous and flexible road/ block network should be reinstated in the areas surrounding the heart of the campus. Where the road/block system presently exists, such as in the parking lots south of Agronomy Road and to some extent west of West Mall, it is retained. The North Campus is linked into the road network through a loop road connecting the East and West Malls via an extension of Cecil Green Park Road. Within the Health Sciences Area and its extension zone, existing streets are extended and linked. Similarly, the deadend driveway network between the Student Union Building and Gage Residences is rationalized into an urban street which links through to the East Mall.

The tradition of gates to the campus is retained at each of the major entry

Campus and the analysis of walking distances clearly indicate that a frequent and convenient internal transit system is essential if the Mission Statement's objectives of inter-faculty communication is to be met, and class changes within 10 minutes are to be accommodated. There could be two locations for major bus stations, one existing and the second proposed on University Boulevard west. An internal transit system is also proposed, linking the bus stations and the parking lots and parkades with most of the academic and research buildings of the Main Campus; all within 2 minutes of transit stops.

If the system is to be effective, buses should be very frequent at class change, and at other times have maximum headways of 5-7 minutes.

Consideration should also be given, either as an alternative or as an addition, to a linear transit system running back and forth along the Main Mall. This system could be intermittent, operating prior to the first morning class and at subsequent class changes.

PEDESTRIAN CIRCULATION

The proposed pedestrian circulation system is an extension and rationalization of that which now exists. In the outer areas of the Main Campus, regular sidewalks should be provided on both sides of the road. In the inner area, the two major malls and crosspaths between academic blocks form the primary network. A finer network of paths fits within academic blocks. That pattern follows the "building grain" discussed under "A Sense of Place".

For years people have suggested that the campus needs a system of sheltered pedestrian ways. There are a few routes through buildings, and a few covered walkways, but they are not on prime circulation routes, and do not link together to form continuous routes.

Some campuses, particularly in cold climates, have developed underground networks associated with service tunnels (such as at Carleton), or have designed and constructed their buildings so that the interior circulation route of each links with the next. Campuses in warmer climates have sometimes util-

There are also a limited number of landmarks and memorable public spaces. The Main Mall is memorable, although some of it's value as an identifying structure is lost because it is ineffectively contained by flanking buildings, and by the relative lack of identifying features along its length. Markers like the Flag Pole, Clock Tower, the Barn, and the Bus Terminal do A second town square can be located at the west end of the Cross Mall, supported by a second bus terminal, student services, classrooms and housing in the long term.

The Main Mall is punctuated by major open spaces both north and south of University Boulevard: the existing Library Garden and a new "Science Quad" encompassing Fairview Grove. points.

The proposed road system would not only facilitate automobile, transit and bicycle circulation around the campus, but it would also feed directly into parking lots and parkades.

Short term parking for visitors who require direct access to buildings throughout the campus is accommodated in small lots between buildings and in metered street parking zones.

TRANSIT

The need for cohesion of the Main

ized a system of arcades to achieve the same result, perhaps the most notable being Stanford.

If implemented from the beginning, a system of arcades along the two main malls and between academic blocks might have served UBC well as a method of rain protection. However, the opportunity for the incremental development of a complete covered or interior pedestrian system integral to building design has now largely passed.

This leaves three options for rain protection along the Main Mall: extend the frontage of the flanking buildings; build free-standing covered walkways; and incorporate covered walks within new buildings in the few development sites still available.

1991 CAMPUS PLAN

DRAFT STATEMENT OF PLANNING PRINCIPLES



VIEWS TO OCEAN, **MOUNTAIN AND FOREST**

British Columbia is naturally beautiful, and views of mountain, ocean, and forest are particularly important to its people and its visitors.

Situated on a ridge on a plateau on a peninsula, the site provides the opportunity to exploit spectacular views of the sea and distant mountains. However, the proliferation of the landscape and forest, beautiful as it is, has obscured many of these views by its very presence and rampant growth.

Existing views should be retained and new ones released. From ground level, the major opportunities for views occur at the north, east and south terminations of the Mall Axis, and along the escarpment lookout area of the lower north campus. Forest trees should be trimmed or thinned to permit the views from these key points.

PROVISION OF BUILT SPACE

Space required by the University for academic units can be provided in three major ways:

i) by increasing the efficiency of space utilization;

ii) by renovating existing space;

iii) by constructing new space.

One of the ways in which the existing space inventory can be made more efficient is to create better linkages between them, so that the "pool of space' available within a reasonable access time to each academic unit is expanded.

CONTRIBUTION TO THE CAMPUS

BUILDING/OUTDOOR SPACE RELATIONSHIP

Many of the older buildings and some of the newer ones serve to reinforce the sense of place of the open spaces on campus. This happens when the building and outdoor space have a reciprocal relationship in which each supports and enhances the other. One of the reasons the Library Garden is memorable is because the front facade of the Main Library establishes a contained edge, animated by entrances. Similarly, the Chemistry and Angus Buildings work well as flanking buildings to the Mall, and present entrances and overspilling activities on to it.

In contrast, the Sedgewick Library draws on the value of the open space for views and daylight - but the relationship is one way. The building does not positively reinforce the outdoor space. Similarly, Biological Sciences is separated from the Mall by a moat, preventing building activities from animating the Mall, and vice versa.

Space containment is desirable in the central and urban portion of the campus. Future buildings in these areas should be designed so that entrances and activity areas are directly accessible from grade, and so that building facades positively contain adjacent outdoor space. Spaces contained will vary in size and character. For example, on the "Western Slopes" outdoor spaces would be small and intimate, with a large wall-to-floor ratio. In the Academic Plateau, outdoor spaces would be larger, with a wall-tofloor ratio of about 1:1.

In the "Forest" and the "Escarpment Overlook", the relationship between building and space is different because buildings are self-contained pavilions interspersed within the forest and gardens. Outdoor spaces should be treated as glades and clearings cut out of the forest.

LONG LIFE, LOOSE FIT: **DESIGN FOR FLEXIBILITY**

mental needs change, expand or contract, space which is thus released can be re-occupied by other units.

ARCHITECTURAL CHARACTER

The architectural character expressed in the 1912-14 Plan was in the grand Beaux Arts style, but very little of this pattern has been implemented. The substantial exceptions are the Main Library and the Chemistry Building; and in simplified form, the "temporary" buildings in the block west of the Library Garden. These buildings incorporate a simplified mix of the Gothic architectural style stemming from the European ecclesiastical roots of higher education and the classical forms associated with the Jeffersonian model, both in vogue for universities at the time.

UBC began with but has since departed from these models. Like many institutions developed in the post-war period, it has promoted (or accepted) a more egalitarian image with "modernist" or "international" style buildings. These styles were intentionally designed to avoid symbolic associations with previous eras or with particular social institutions.

While this architectural approach may successfully represent the democratic and universally accessible academe of the 1950's and 60's, the resulting campus, were it not for UBC's rich landscape, would be barely distinguishable from industrial parks and low rise office developments of the same period and style.

In order to strengthen its distinctive image, new buildings on the campus should be designed to be more expressive of "university". This expression relates to the "style" of the architecture. It also relates, more importantly, to making the activities of the University apparent and accessible from the outside world and avoiding overtly opaque, internalized and "protective" structures.

In order to retain the sense of a "Garden Campus in the Forest", buildings on campus should not rise much higher than the trees: they should be an average of about four storeys which is also the limit of an efficient walk-up condition - and be limited to a maximum of six storeys.

used in limited amounts such as in decorative banding, but large expanses are particularly dull in the Vancouver light and subject to unsightly wet patching and streaking in the drizzle. Metal and architectural glass might also be used to good decorative effect in limited amounts, but are too severe to be used in large quantities.

The modelling of building forms and the treatment of their facades should be handled so that they "read" at different scales: from afar in their silhouette, from the middle distance in their massing, and close-up in their detailing and decoration.

Entrances to the buildings and public places should be legible both from a distance and nearby. Building entrances should address public spaces and thoroughfares, rather than parking lots.

Each building design should relate to and work together with its neighbours and with adjacent open space and activities, so that the composition of groups of buildings is as well considered as the composition of the building itself.

BARRIER-FREE ACCESS

The campus, like most others, presents impediments to free and easy access for disabled people. Particularly difficult access problems occur when building entrances are set at the halflevel between the two primary building floors. The University should, as an open, public institution, provide exemplary standards of barrier-free access throughout the campus, and where necessary, upgrade existing facilities.

THE LANDSCAPE AS AN ARBORETUM

There have been many efforts over the years to establish an extensive arboretum on campus - the present arboretum near Thunderbird Stadium on both sides of Marine Drive, the Nitobe Gardens, the Old Arboretum on West Mall, the native grass berms near the Museum of Anthropology and the Rose Garden all bear witness to these efforts and act as important educational resources as well as visitor attractions.

New buildings should be designed to serve the University community at large as well as the needs of its constituent user groups. The project team users, managers, and designers - will therefore have three areas of responsibility: the first towards particular project needs, the second towards interior common and campus circulation needs, and the third towards outdoor space.

The elements to be considered are the interior pedestrian circulation system, university-wide instructional space, the containment by the building of positive outdoor space, and a "window to the campus" or external expression of the work and interest of the building's occupants.

Buildings last much longer than the precise functions for which they are first designed. Too tight a "fit" between present functional requirements and the building can reduce the building's potential for adaptation to new uses in the future.

The specialized needs defined by the user committee must be met, but this should be done in a way which is described as "loose fit", so that the organization of building circulation and rooms is sufficiently generic to permit occupation for a number of different types of use over the life of the building.

This approach will also assist efficiency in the use of the University's total inventory of space. As depart-

(During the course of the planning study, the impact or advantages, if any, of limited clusters of tall buildings should be examined. It may be that the advantages gained by vertical punctation in the urban form of the campus are achievable without real compromise to the garden character of the campus. A determination of this question can only be made once it has been thoroughly examined.)

The dominant building material on campus should be masonry in keeping with the long standing academic tradition in Europe and North America. Heavy timber construction may be appropriate in some locations within the forested zone. Concrete could be

This aspect - the landscape as an educational resource - should be nurtured and extended to the extent possible throughout the campus.

UTILITY SYSTEMS

The existing layout of underground utility lines and service tunnels throughout the campus is a complicated network of new and old, adequate and redundant distribution lines for heating and chilling, gas, electricity, water and telephone. It requires considerable rationalization.

The need for electronic communication for computer access throughout campus will add to both the complexity and urgency of this task.



Lectures in Modern Chemistry Spin Control In Organic Molecules/Materials: Toward An Organic



California Institute of Technology, Pasadena CA. Chemistry B250 at 1pm. Refreshments at 12:40pm. Call 228-3266.

Ferromagnet? Dr. Dennis

Dougherty, Chemistry,

Botany Seminar

Gene Duplication In Plants: The Chlorophyll a/b-Binding Protein Gene Family And Other Distinguished Lineages. Dr. Eran

Pichersky, Biology, U. of Michigan, Ann Arbor. BioSciences 2000 at 12:30pm. Call 228-2133.

Botanical Garden Slide Lecture

Landscape Design For Plant Enthusiasts. Dr. Howard W. Pfeifer, Botanist, Landscape Designer, Lecturer (USA, UK, Canada). Botanical Garden Reception Centre at 8pm. Call 228-3928.

Financial Planning Noon-Hour Series

 UBC's Pension Plan: Information To Assist You In Your Retirement Planning.
Marcelle Sprecher, Manager, Compensation/Benefits, UBC. Free admission. A joint presentation of the Faculty Assocition and the Centre for Continuing Education. Henry Angus 104 from 12:30-1:30pm. Call 222-5270.

Interfaith Symposium

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The Right to Self-Definition And Its Implications For The Jewish-Christian Dialogue. Rabbi Martin Cohen. St. Mark's College from 7:30-9pm. Call 224-3311.

VST G. Peter Kay Lectures

Jesus And God's Reign In Asia. Dr. Choan-Seng Song, Theology/Asian Cul-

tures, Pacific School of Religion, Berkely, CA. 12:30-2pm: Not A Homogeneous God. 7:30-9pm: Epiphanies Of God In The Oekumene. Epiphany Chapel, Vancouver School of Theology. Call 228-9031.

WEDNESDAY, MAR. 6

Hewitt Bostock Memorial Lecture

Linguistics Seminar: Aspects Of Prosadic Minimality. Professor Alan Prince, Psychology, Brandeis U. Scarfe 203 from 9:30-11:30am. Call 228-4256.

Microbiology Seminar Series

Topic: To Be Announced. Heather Leitch, Microbiol., UBC. Wesbrook 201 from 12:30-1:30pm. Call 228-6648.

Forestry Seminar

The Synthesis Of Forestry, Processing And Marketing: A Key Requirement For A Reproducton In Fish. Dr. Ed Donaldson, Federal Fisheries, West Vancouver. IRC #3 at 3:30pm. Call 228-4224.

Biochemistry Seminar

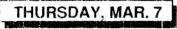
Procaryotic Transciptional Enhancers. Dr. Sidney Kustu, Cell Biology, U. of California, Berkeley. IRC #4 at 3:45pm. Call 228-2376.

Christianity/World Conflict Discussion

Just War Theory. Rev. Bud Raymond. St. Anselm's Anglican Church. A Leriten Colloquy presented by the UBC Anglican Community. Buchanan D306 at 4:30pm. Call 224-1410/3722.

Wednesday Noon-Hour Series

Erik Oland, baritone; Terrence Dawson, piano. Admission, \$2 at-the-door. Music Recital Hall at 12:30pm. Call 228-3113.



Cecil/Ida Green Visiting Professor Seminars

Psychiatry. Current Concepts Of Pain. Professor Ronald Melzack, Psychology, McGill U. Detwiller Pavilion Lecture Theatre, University Hosptal, UBC Site at 9am.

Psychology. Memory Mechanisms In Pain. Professor Ronald Melzack, Fsychology, McGill U. Kenny 2150 at 4pm. Both lectures, call 228-5675.

Hewitt Bostock Memorial Lecture

Linguistics. Connectionism And The Study Of Language: What They Can Learn From Each Other. Professor Alan Prince, Psychology, Brandeis U. Buchanan A203 from 12:30-2:30pm. Call 228-4256.

Pharmacology Seminar

Excitatory Amino Acid Nomenclature-A Rose By Any Other Name? Dr. Kenneth Curry, Pharmaceutical Sciences/Physiology, Medicine, UBC. IRC #1 from 11:30am-12:30pm. Call 228-2575.

Physics Colloquium

The Universe You Don't See. Virginia Trimble, Physics/Astronomy, U. of Maryland; U. of California, Irvine. Hennings 201 at 4pm. Call 228-3853.

CICSR Distinguished Lecture Series

The Opening Up of Communications-Towards Wideband Telecommunications. Dr. Roberty Lucky, Executive Director, AT&T Communication Sciences Research. Scarfe 100 from 1-2pm. Coffiee/ cookies at 12:30pm. Cal 228-6894.

UBC Stage Band

Fred Stride, director. Free admission. Music Recital Hall at 12:30pm. Call 2:28-3113.

Fisheries/Aquatic Science Seminar

The Introduction Of Bait-Fish In The Laurentian Shield Lakes: Impact On Structure and Function Of Biological Commmunities. P erre Magnan, Universite du Quebec a Trois-Rivieres. BioSciences 2361 at 3:30pm. Call 228-4329.

Biochemistry Seminar

Evolution Of Fusion Negative Mutants Of Murine Coronavirus. Dr. Michael Buchmeier, Immunology, Scripps Clinic/Research Foundation, La Jolla, CA. IRC #4 at 3:45pm. Call 875-4347.

Chemical Engineering Weekly Seminar

Melting And Pyrolysis Of Lignin. Dr. K. C. Teo, Chem. Engineering, UBC. ChemEngineering 206 at 3:30pm. Call 228-3238.

Paediatrics Grand Rounds

Neurology Meeting. G. F. Strong Rehab. Center Auditorium at 9am. Call 875-2118.

Economics Departmental Seminar

Topic: To Be Announced. Lars Hansen, Chicago. Host: Professor Harry J. Paarsch. Brock 351 from 4=5:30pm. Call 228-2876.

University Chamber Singers

Cortland Hultberg, director. Free admission. Music Recital Hall at 12:30pm and in the evening, at 8pm. Call 228-3113.



Vancouver Institute Lecture



Cecil/Ida Green Visiting Professor. The Tragedy of Needless Pain. Ronald Melzack, Psychology, McGill U. IRC #2 at 8:15pm. Call 228-5675.

NOTICES

Fulbright Scholarships Available Fulbright Awards' application packages for Canadian scholars seeking visiting appointments to the U.S. for the 1991/92 academic year, are now available from The UBC Research Services/Industrial Liaison Office. Submissions must be received by the Foundation for Educational Exchange in Ottawa by Feb. 28. Call 228-8595.

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.

Executive Programmes

Business seminars include: Feb. 27/28, Speaking for Results, \$375. March 6-8, Project Management Process, \$875. Call 224-8400.

English Language Institute

Professional Development Series For Language Teachers.

February workshops: Generating Student Talk in the Language Class, Computer-Assisted Language Learning, and Teaching English in Japan. Tuesday evenings from 7-9pm. Call 222-5208.

Reading Writing/Study Skills Centre

More courses starting early march: Writing Business Letters/Memos for Results; Media Interview Techniques; Robert's Rules of Order—Demystified; The Artful Business of Freelance Writing; ECT Mini-Workshops. Call 228-5345.

Psychology Step-Families Study

Married couples who have at least one child from a previous union living with them, are invited to participate in a study of stress and coping in step-families. Call Jennifer Campbell at 228-3805.

Adult Child Separation/Divorce Study

Volunteers needed. The study will explore how mothers cope with their adult child's separation/divore. Participants will be required to anonymously complete a mailed questionnaire. Call Allison Krause, Counselling Psychology, at 946-7803.

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 Question- Volunteering

Counselling Psychology Retirement Preparation

February 24 –

March 9

Volunteers interested in planning their retirement needed for research project. Discussion on related issues included. Call Sara Comish at 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.

Exercise In Asthma Study

Volunteers with exercise-induced asthma needed for 2-part study (30 min. each). No medications or injections. Call Dr. Phil Robinson at Pulmonary Research laboratory, St. Paul's Hospital at 682-2344, extension 2259.

Asthma Research Study

Volunteers 12-70 years with mild to moderate asthma needed to participate in 16 week research project involving "pulmicort" a commonly used inhaled steroid taken once daily. Call Brian Anderson at 228-7719 between 9-1pm.

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 210. Ponderosa Annex C-210. Call 228-4037.

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

Hamlet by William Shakespeare

Theatre Performance from March 6-16,

holdover March 21-23. Directed by Gor-

don McCall. Tickets: \$7/Students/Sen-

iors, \$10/Adults. Reservations call 228-

Theatre Performance from Feb. 27-Mar.2;

Mar. 6-9. Directed by Des Price. Tickets:

\$6. general admission. Reservations call

Top Girls By Caryl Churchill

Sexual Harassment Office

228-6353.

2678.

228-2678

 Vigorous Industry In The Twenty-First
Century. Dr. David Cohen, Harvesting/ Wood Science, Forestry UBC. Free admission. MacMillan 166 from 12:30-1:30pm. Call 228-2507.

Geography Colloquium

Academic Research And The Legal System: Reflections On The Gitksan-Wet'sowet' Land Claims Trial. Dr. Bob Gallois, Geog., UBC. Geography 201 at 3:30pm. Call 228-3268.

Geophysics Seminar

Seismic Tomography And Gravity Inversion For Seamount Structure. Philip Hammer, Scripps Institution of Oceanography, U. of Califoria, San Diego. Geophysics / Astronomy 260 at 4pm. Coffee at 3:45 pm. Call 228-3100.

Physiology / Zoology Seminar Series 1991

Potential For Regulation Of Growth And

Students For Forestry Awareness Speaker Series

New Directions In Silviculture. Dirk Brinkman, Brinkman & Associates Reforestation Ltd. MacMillan 166 at 12:30pm. Call Peter Opie at 222-1882.

FRIDAY, MAR. 8

Social/Educational Studies Lec-

ture

Gentlemen's Agreement: Race, Poverty, And Public Policy In Metropolitan America. Professor Kenneth T. Jackson, Jacques Barzun Prof. History/Social Sciences, Columbia U.; Francis Parkman/ Bancroft Prize winner (American History), 1985; founder of the Urban History Association. Graduate Student Centre Banquet Room from 1-2:30pm. Call 228-5374.

UBC Speakers Bureau



Would your group like to know more about topics ranging from Preventing Dental Diseases to The Future of Hong Kong? More than 500 topics to

choose from; most speakers are available free of charge. Call 228-6167, Mon., Tue., Fri., 8:30am-12noon.

Library Orientation Tour

Meet in Main Library entrance. Tour covers Main and Sedgewick Libraries. Call 228-2076.

Museum of Anthropology



Exhibition extended: Portraits of BC Native leaders, chiefs, chief counsellors and elders by Kwaguitl photographer David Neel. Now open in the new West

Wing: The Koerner Ceramics Gallery. Closed Monday. Call 228-5087.

naire Study

Volunteers needed to complete two 90minute sessions. Stipend, \$20. Call Janice at 228-7895/7057. To find an interesting and challenging volunteer job, get in touch with Volunteer Connections, Student Counselling and Resources Centre, Brock 200. Call 228-3811.

Advertise in UBC Reports

Deadline for paid advertisements for the Mar. 7 issue is 4 p.m. Feb. 26.

For information, phone 228-3131

To place an ad, phone 228-4775

Marchak says quality must be Arts faculty guide

Patricia Marchak became UBC's Dean of Arts on July 1, 1990, exactly 18 years after her first teaching appointment at the university.

As a UBC undergraduate, Marchak studied English and Sociology and was editor of the Ubyssey. In 1980, she became a full professor in the Anthropology and Sociology Department and was appointed head of the department in 1987. A Fellow of the Royal Society of Canada, Marchak has had seven books published during her teaching career at UBC.

How does it feel to be dean, given your history at UBC and in particular with the Faculty of Arts?

That's like asking what's it like to be alive. Obviously, I wouldn't have applied for the job if I didn't believe in the arts faculty. I've been here such a long time that I consider this my home. When I was young, somebody else took care of the infrastructure and let me get on with the task of becoming a scholar. Now I'm a senior person and it seemed to fall to me to do this job so I'm doing it.

How has your perception of the faculty changed since becoming dean?

The faculty is enormous and extremely diverse. All its component parts are exciting and interesting, and fantastic things are being done. However, its frustrating to advance the interests of the faculty in a university and a province where a great many of the decisions are made on criteria that have nothing to do with scholarship, as such. The criteria may be quite apt and appropriate for many other reasons, but its very hard to persuade the public-at-large if the university itself is not persuaded that a book on the history of Dutch merchants, or Herodotus, or Dante, or whatever, is what the university's all about.

Many students see science and technology

and the arts as two solitudes. How do you view their relationship?

I think the relationship has been quite distant in the past. When I was an undergraduate, it was



Patricia Marchak

the arts and science faculty, so it was close enough then. But after they became separate faculties, a distance grew, not just at UBC, but throughout the world. I think what's happened now is that we have a group of new deans arriving from different routes at the same point. We simply have to find ways of merging some of our programs and coming together a great deal more. We're presently developing programs for environmental studies that combine arts and sciences. I'm looking for- Psychology, in fact, has the absolute highest ward to much more cooperation between these groups.

In what condition do faculties of arts emerge from the 1980s?

The faculties of arts here and elsewhere remain the largest faculties for the reason that they attract more students than any other faculty. We have 40 per cent of students at UBC, so, although students may very well be going after an income, apparently they think they can get it with an arts degree. Business leaders are going out of their way to find people with an arts and general science training because they find such people have been taught how to think, how to handle large bodies of information and synthesize and analyze this information under pressure. But even though business leaders are telling us all this, we are still getting squeezed in terms of the amount of resources in education going to basic arts and science. I think young people are as idealistic as they've ever been. I think they look for a better life and they urge people who are older than them to care about things that sometimes we simply become too cynical to care about.

What long-term priorities have you set for the faculty?

The long-term priority is to continue to renew faculty so that we can increase the amount and quality of scholarly work being done, and continue to improve the teaching. In accordance with the president's mission statement, we have steadily increased our graduate enrolment. We now have very high graduate enrolment in the social sciences, music, theatre, fine arts and English and growing enrolment in humanities. Our psychology, economics, geography, political science, anthropology and sociology departments have among the highest graduate enrolment at UBC; number. In music, theatre, creative writing, fine arts and the Museum of Anthropology, the costs are enormous. But you can't do these things on a half-way basis. Every position is interdependent. So we're trying to figure out how best to maintain high quality in the professional programs in these areas. The library school has 100 graduates with just 12 faculty members. We will be reducing our faculty allocations of time and finances to the undergraduate programs because we can't stretch through everything. In languages and social sciences, we are in great need of computer equipment. We're doing laboratory and experimental work in social sciences, and languages are now taught with sophisticated equipment. We know what we want, but again, we don't have the funds. A lot of what's going on right now is trying to figure out what the priorities are under conditions of inadequate funding.

Given the financial constraints on education and the shift to a more global market, what are some of the key challenges facing the arts in the 90s?

I think there is a tremendous challenge facing the humanities in the area of language and literature. We're living in a world now where people simply have to have more than one language. They always have had to have more than one language if they did business elsewhere, but North Americans have been so insular for so long that we are not a multilingual continent. So, we are having to enter a global marketplace where we are competing with Asians and Europeans who speak many languages. Our language and literature programs have been highly specialized for a population that was reading the literatures. We are trying to figure out how to combine this growing demand for straight language instruction with a humanist program for language and literature. We have always been very heavy on European languages and literature and we are now among the strongest universities in North America on Asian language and literature. There are still other areas such as Islamic, Latin American, Indian, and African literatures where we probably ought to be providing instruction. But we simply can't afford any new programs.

Could be available within 12-24 months

Female condom may be contraceptive for the '90s

By CONNIE FILLETTI

A female condom may be on drugstore shelves throughout Canada within the next 12 to 24 months.

While other prototypes are being developed, the Reality female condom, currently undergoing clinical trials supervised by Dr. Dorothy Shaw, UBC clinical associate professor of obstetrics and gynecology, is the closest to

perforating the condom.

The efficacy of the female condom as a contraceptive has condom less disruptive since it is been evaluated at other multicentre, international trials.

"Unpublished data from ongoing trials suggests that the pregnancy rates from this method are of contraception. very low and have been mostly user failures rather than method failures," Dr. Shaw said.

"Furthermore, data from trials to 1989 involving women in 4,000 uses of the Reality female condom show that there were no safety or toxicity issues."

the male condom.

Users also found the female inserted prior to intercourse. Another benefit is that it provides an added choice if women wanted to use a barrier method

While no significant side effects related to the female condom have been reported, a few women noted mild irritation of the labia or vagina.

McCall planning to dust off Hamlet's classical cobwebs

By CHARLES KER

Hamlet is coming to Frederick Wood Theatre next month and it's guaranteed he won't be the standard melancholy Dane.

"I want to dust some of the classical cobwebs off this play and make it relevant for today,' said director Gordon McCall.

If McCall's history with staging William Shakespeare is any indication, Hamlet will re-



McCall. But the most celebrated of McCall's directing efforts has been a bilingual version of Romeo and Juliet which he titled, Romeo and Juliette.

Co-directed with Robert LePage, McCall toured with the production last summer to national acclaim. Set on a strip of highway in the prairies, the play opens with a head-on collision between two cars, each contain-

being marketed.

"It's a soft polyurethane sheath with two flexible rings, similar to those of a diaphragm, but thinner," Dr. Shaw explained.

"The ring at the closed end acts as an insertion mechanism and provides support to keep the device in place. The ring at the open end lies outside the vagina and protects the labia and the base of the penis."

The ABC trial is the only one evaluating whether an inserting device (inserter) facilitates the use of the female condom.

The study has been designed to determine the effectiveness and acceptability of the inserter, as well as any risk it may pose of

Dr. Shaw added that test results also determined that the HIV (AIDS) virus did not penetrate the polyurethane barrier and the probability of risk to the women of exposure to semen in combined leakage and exposure studies was three per cent versus male condom will be competialmost 12 per cent with the male condom.

She indicated that the major appeal of the female condom was the significantly greater protection it provided from sexually transmitted diseases (STDs) than

Results of acceptability trials found that 82 per cent of those women who used the female condom would recommend it for use against STDs.

Another 51 per cent would recommend it or use it as a contraceptive. Those who would not use it generally preferred oral contraceptives.

Once it is available, the fetive in price with the male condom and will not require a doctor's prescription.

Women interested in participating in the study should contact Planned Parenthood of B.C. at 731-4252.

ceive more of a sandblast than a dusting.

McCall, 42, has returned to his alma mater after a 12 year absence. A Master of Fine Arts graduate of UBC's directing program, McCall is founding artistic director of the Shakespeare on the Saskatchewan Festival. In the last seven years, he has presented eight of the bard's plays under a special outdoor tent on the bank of the Saskatchewan River.

Examples of his innovative direction include: a guerrilla-warfare production of Macbeth, set in a Central American jungle; A Midsummer Night's Dream, set on a golf course; and the Tempest stage, placed on another planet.

"There's no such thing as a lost island in today's world, so the only undiscovered frontier that I could think of was outer space," said

ing the rival families. McCall

made the Capulets bilingual francophones and the Montagues unilingual anglophones. He also placed the star-crossed lovers in the back of a pick-up truck during their balcony scene.

For Hamlet, McCall intends to make extensive use of television and the central image of a corridor of power. But he quickly points out that his Hamlet won't be dark or moody.

"People have a misconception that because its tragedy, it's dark, but we're going to use a high level of contrast in terms of lighting," said McCall. "We aren't afraid of doing the right interpretation of Hamlet. We are doing 'a' Hamlet."

And McCall is emphatic that his Hamlet is an ambitious, political animal locked in a struggle to try to trap and kill the person he's pursuing. The action runs Mar. 6 to 16.

<u>People</u>

Davis recognized by Institute for distinguished service

Roger M. Davis, of the Faculty of Commerce and Business Administration, has been elected a fellow of the Institute of Chartered Accountants of British Columbia for his distinguished service to the profession and his community.

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Davis, a senior instructor in the acounting division, was cited for his leadership in the areas of accounting education and community service.

Davis' teaching career at UBC has spanned more than 17 years. He's a five-time nominee for the Commerce Teaching Excellence Award. There are more than 6,000 members in the B.C. Institute of Chartered Accountants.

The B.C. Health Research Foundation has honored physical therapist Darlene Reid with a Research Scholar Award.

The scholar awards provide support for out-

standing candidates who wish to initiate an independent research career in a British Columbia university or other health science facility

Reid, who joined the faculty of UBC's School of Rehabilitation Medicine in 1988, is engaged in three projects directed at researching fatigue and rest of the respiratory muscles.

She hopes the information gathered from these projects will help to design experiments that will examine the most appropriate treatment to optimize respiratory muscle function.

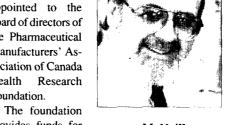
Crane Library and Resource Centre for the blind and visually impaired, headed by Librarian Paul Thiele, received a certificate of merit earlier this month during National White Cane Week.

The award was sponsored jointly by the Canadian National Institute for the Blind and the Canadian Council of the Blind.

Crane was recognized for its role in providing access to information for blind, visually impaired and many print disabled persons throughout B.C. and Canada.

Crane's unique collection of taped and braille books and materials, technical resources and reference services are primarily for UBC's population of blind and visually impaired students. But Crane has also become a provincial, national and international resource by sharing these materials with other libraries, educational institutions and service agencies.

John McNeill, dean of the Faculty of Pharmaceutical Sciences, has been appointed to the board of directors of the Pharmaceutical Manufacturers' Association of Canada Health Research Foundation.



provides funds for McNeill research and personnel support, in Canada, in the fields of pharmacology, clinical pharmacology and therapeutics.

McNeill, whose appointment is for a one-year term, will review funding applications and participate in setting the policy of the board.

Susan Harris, of UBC's School of Rehabilitation Medicine, has been appointed chair of the Long Range Planning Committee of the American Academy for Cerebral Palsy and Developmental Medicine.

The appointment is for a two-year term, effective immediately.

Founded in 1948, the academy is an interdisciplinary society with international membership including physicians, physical therapists, occupational therapists, nurses, dentists and special educators focused on the needs of individuals with developmental disabilities.

Harris's committee is charged with developing liaisons with other international societies, identifying the research focuses of the academy and meeting the long range educational needs of academy members

Harris, a physical therapist, joined UBC in August, 1990. Her special area of research is early diagnosis of cerebral palsy in high-risk infants.

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Classified advertising can be purchased from Media Services. Phone 228-4775. Ads placed by faculty and staff cost \$6 per insertion for 35 words. Others are charged \$7. Monday, Feb. 25 at 4 p.m. is the deadline for the next issue of UBC Reports which appears on Thursday, Mar. 7. Deadline for the following edition on Mar. 21 is 4 p.m. Monday, Mar. 11 All ads must be paid in advance in cash, by cheque or internal requisition.

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EMPLOYMENT WANTED: What can I do for You? Former UBC Program Assistant available for part-time, oncall relief office duties. 228-8254.

UBC telephone exchange conversion on line for Mar. 4

By CONNIE FILLETTI

Conversion of UBC's telephones to the new exchange, 822, has started and will be completed by March 4.

"On-campus telephone users will not be inconvenienced by the introduction of 822, due to the continuation of old numbers until October, 1991," explained telecommunications supervisor Harlev Rea.

He added that either number, when dialed from off campus, will reach the correct telephone, minimizing the impact of the number change.

Currently, calls from one campus phone to another are dialed using four digits which start with any number between 0 to 8.

Starting March 4, these calls will be made by dialing five digits, with the first number being either 2 or 3. Phone numbers that can be dialed directly from off campus will begin with 2. Those numbers that cannot be dialed from off campus will begin with 3.

Rea suggested several ways of advising associates about the new phone numbers, including answering the phone stating your new number, remembering to include the new numbers in all brochures and publications and making sure business cards and stationery show the new phone numbers.

mation is given at the time of reorder.

Howland suggested that leftover stationery can be made into scratch pads, trimmed to make small note sheets or used to make internal or file copies.

Telephone features will not change. However speed call lists must be modified to five digits if four digits were used. A new faculty and administration directory will be distributed in September, 1991.

Study examines pros and cons of mortgage default

By ABE HEFTER

Holding on to your home in recessionary times is tough enough. But defaulting on a home can be an expensive proposition as well.

A study done by Lawrence Jones, a Commerce and Business Administration professor, has revealed that for some homeowners, the costs associated with defaulting exceed the benefits of "walking away" from their loans.

However, for others, defaulting may be a shrewd wealth-enhancing move.

Jones' research has concluded that a number of factors come into

is sold for less than you owe on your mortgage loan.

As part of his study, Jones analyzed loan defaults in Alberta and B.C. between 1982 and 1986. Alberta prohibits lenders from collecting deficiency judgments. But in B.C., the courts tend to give the lender a lot of leeway in going after deficiencies through asset seizures or the garnishing of wages.

Jones' study revealed that there appears to be a much higher incidence of deliberate defaulters in Alberta than in B.C. And these defaulters arise disproportionately from wealthier professional, managerial and younger households. A subsequent study done by Jones examined the extent to which homeowners, who are under age 40, use mortgage debt to finance investments other than their home. Jones found that about one-third of Canadian homeowners use mortgage debt in this fashion. "Interestingly, the majority of debt used to finance non-housing assets is held by households who are sufficiently wealthy to own their homes without any debt at all," said Jones. This finding is consistent with other studies done by Jones which conclude that for Canadians, it's their net worth, and not their income, that determines when they choose to buy their first home and what price they are prepared to pay.

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Randy Howland of Media Services advised UBC faculty and staff to modify stationery which shows the old exchange by late February, or to begin using new stationery at that time.

To make use of existing stationery with the old exchange, Howland suggested hand-changing the telephone numbers, or using a small rubber stamp or gummed labels indicating the new number.

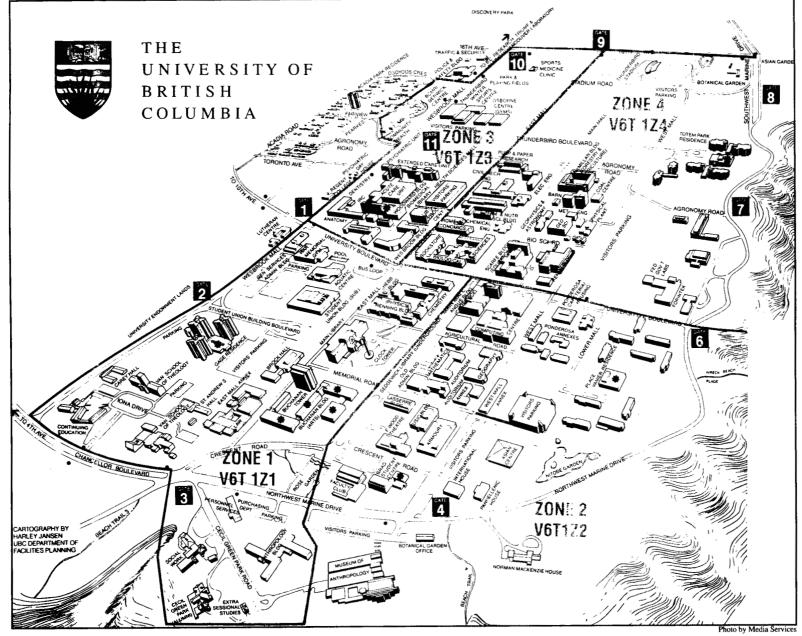
He said Media Services will not charge for typesetting changes to either the telephone exchange or the new postal codes which have recently been introduced on campus provided the materials have been previously typeset in the current graphics standards format, and provided the changed infor-

play when homeowners consider defaulting.

"First of all, there are the transaction costs associated with defaulting on a mortgage," said Jones.

"One of the consequences is that you have to move. That costs money. There may also be costs associated with taking out a new loan and some impairment of your credit rating. On the other hand, there are benefits such as living in your home for months, payment free, while your lender pursues legal action."

Jones said of particular importance is the extent to which borrowers may be vulnerable to lenders, collecting on deficiency judgments. That's the money you owe the lending institution when your house



This detailed map of the UBC campus indicates the units affected by the five new postal code zones being implemented by the university and Canada Post. While the new codes are effective immediately, all current postal codes may still be used until Dec. 31, 1991.

Lunch break for students March 4

By CONNIE FILLETTI

Student Health Outreach Nurse Margaret Johnston knows a UBC student who honestly thinks coffee is food—and he's not the only one. That's why Johnston has organized a program called Lunch On The Run.

"I've designed the program to inform students about eating for good health," said Johnston.

"I meet too many students who say they don't have time for anything more than a quick muffin and coffee."

More than a dozen food companies and health organizations will be on hand with food samples, recipes and product information.

They will also answer students' questions on nutrition and various dietary concerns such as cholesterol and heart disease.

Lunch On The Run is being organized by students of the School of Family and Nutritional Sciences, as part of Nutrition Week, in conjunction with Johnston.

The program will run March 4, 11 a.m. to 2 p.m., in the SUB concourse.

Geologist says risks must be weighed

UBC's new postal codes are:

ZONE1 VOT 1Z

Area bounded by Main Mall, University Boulevard, Wesbrook Mall, Chancellor/NW Marine Drive including Cecil Green Park Road area.

ZONE 2 V6T 1Z2

Area bounded by Main Mall, University Boulevard, NW Marine Drive including Museum of Anthropology.

ZONE 3 V6T 173

Area bounded by University Boulevard, East Mall, West 16th Avenue, Wesbrook Mall.

ZONE4 V6T 1Z4

Area bounded by University Boulevard, East Mall, West 16th Avenue, Marine Drive including Botanical Garden Centre.

ZONE 5 V6T 1W5 Areas south of West 16th Avenue

MERS SOLUTION WEST TOUT Avenue.

Affiliated and other associated units listed below will retain their existing codes.

1935 Lower Mall (Place Vanier) V6T 1X1 te Care) V6T 2B5 211 Wesbrook (University Hospital, UBC Site, Ac 2211 Wesbrook (University Hospital, UBC Site - Extended Care) V6T 1Z9 2211 Wesbrook (University Hospital, UBC Site - Psychiatric) V6T 2A1 2525 West Mall (Totem) V6T 1W9 V6T 2B7 2990 Wesbrook (RCMP) 2992 Wesbrook (Firehall) V6T 2B7 3650 Wesbrook (BC Research) V6S 2L2 V6S 2A3 3800 Wesbrook (Paprican) 4004 Wesbrook (Triumf) V6T 2A3 5920 Iona (Carey Hall) V6T 1J6 5935 Iona (St. Mark's College) V6T 1J7 5959 Student Union Mall (Gage) V6T 1K2 V6T 2C9 5961 Student Union Mall (UBC Conference Centre) V6T 1L4 6000 Ion (Vancouver School of Theology) 6040 Iona (St. Andrew's College) V6T 1J6 6050 Chancellor (Anglican College) V6T 1X3 6565 NW Marine Drive (Norman Mackenzie House) **V6T 1A7** 6640 NW Marine Drive (Fisheries) V6T 1X2 6660 NW Marine Drive (Agriculture) V6T 1X2

Safe research still possible in environmentally sensitive areas

By GAVIN WILSON

An ocean drilling project off Australia's Great Barrier Reef has shown that scientific research can be conducted safely in environmentally sensitive areas, says UBC geologist George Dix.

Dix, a Canadian, was one of a 90-member multinational crew aboard a research ship that was exploring geological

formations by drilling as deep as one kilometre beneath the ocean floor.

"The Great Barrier Reef is a World Heritage Site and environmentalists were naturally worried that we would accidently hit oil and contaminate the reef," said

Dix. Using seismic reflection data gathered prior to the cruise, as well as by the ship's sophisticated equipment, scientists were able to chart the geological structures beneath the sea floor before drilling, avoiding those that may contain oil or gas. They also analyzed the cores as they drilled, looking for any increase in pe-

The voyage, made last September and October, was part of the ongoing Ocean Drilling Program, an international partnership of scientists and governments based at Texas A and M University.

Using the specially designed drilling ship, scientists retrieved cores of sediment and rock as well as geophysical data from each hole.

> The cores, slender cylinders nearly 10 metres long, contain clues to Earth's origin, evolution and present-day structure. Scientists use the information they contain to learn more about continental drift, ocean currents, evolution of sea life, history of worldwide sea levels, cycles of glaciation and changes in global climate, and the earth's magnetic field.

> Carbonate platforms are scientifically interesting because they are sensitive indicators of changes in sea level, tectonics and oceanography, Dix said.

> A temporary assistant professor in Geological Sciences, Dix is a carbonate sedimen-



troleum content.

"We never had any problems," Dix said. "We showed that, yes, you can go into an environmentally sensitive region as long as you're careful and critical of your own methods. You also have to evaluate whether the geology is worth the risk of going in to drill."

The purpose of the expedition was to investigate development of large carbonate platforms off the coast of the Australian state of Queensland, including the Great Barrier Reef margin. tologist whose own interest in this research is how carbonate sediments are altered during their burial below the sea floor.

In 1985, his PhD dissertation was a shorebased investigation associated, in part, with the first drilling leg of the Ocean Drilling Program, working on core samples taken from deep-water carbonate slopes in the northern Bahamas.

Despite the exotic locales, shipboard research is no holiday. Researchers worked around the clock in 12-hour shifts during the 63-day voyage.

"We set records for the amount of drilling that took place. We also recovered 5.5 kilometres of core," Dix said.

The drilling ship is the JOIDES Resolution, a 143-metrelong vessel with a derrick that towers 62 metres above the waterline. Since 1985, the ship has drilled at over 200 sites in the Atlantic, Pacific and Indian Oceans, including the north and south polar regions.



scientific expeditions since 1985.