

UBC REPORTS

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Board of Governors chair steps down

by **Connie Filletti**

Staff writer

UBC's Board of Governors chair, Kenneth Bagshaw, has resigned in order to concentrate on his legal practice in Vancouver.

Bagshaw, 53, was appointed to the board by provincial order-in-council in 1987 and has been elected annually to serve as chair since April, 1990. His term on the board was to expire in December.



Bagshaw

"I can say, without hesitation, that this role has been the most rewarding and challenging endeavour I have experienced outside of my professional practice," Bagshaw said in stepping down.

A partner in the law firm Ladner Downs, Bagshaw completed three years of an

undergraduate Arts program at UBC before graduating from the university's Faculty of Law in 1964. He received the Law Society Gold Medal for first place standing in his graduating class.

Active in community affairs, Bagshaw has served as president of the Vancouver Art Gallery, chair of the B.C. Arts Board and as a trustee of the British Columbia Heritage Trust.

"Reflecting back on the various people who have served with me on UBC's Board of Governors, I can only marvel at the consistent sense of dedication to the institution and the welfare of its students, faculty and staff that has been unfailingly exhibited," Bagshaw said.

UBC President David Strangway commended Bagshaw for his service to the university.

"I am very grateful for the leadership he has provided to the board in some challenging issues it has faced over the past few years. His commitment to the university is greatly appreciated."

The chancellor of the university will provide as acting chair until a replacement for Bagshaw is announced.

UBC grad Campbell new Tory leader, PM

by **Gavin Wilson**

Staff writer

"I think it's an indication of the shape of things to come."

That's how one student reacted to Kim Campbell's election as UBC's first female frosh in 1964. The unidentified student, quoted in *The Ubyssy*, didn't know how prophetic those words were.

This week, Campbell won the federal Progressive Conservative leadership race and became the second prime minister to have graduated from UBC. The first was John Turner.

Although Campbell is just 46 years old, her association with UBC spans three decades and includes an undergraduate degree, a law degree, graduate study and teaching.

Seventeen-year-old Avril Phaedra Douglas Campbell enrolled at UBC in 1964, a recent grad of Vancouver's Prince of Wales Secondary. Interested in politics from an early age, she was the high school's first female president.

Within a month of her arrival on campus, she was urging her classmates to support her campaign for frosh president.



"If more men could be induced to stand over hot stoves, push vacuums and wash dishes it would enable women to devote themselves to the important business of running the world for which they are so well suited. In fact, women have a moral duty to save the world from the terrible mess that men have made of it."

The Ubyssy greeted her election by saying "Mr. President...isn't."

Campbell remained active in student politics, later becoming vice-president of the Alma Mater Society and a member of International House's board of directors.

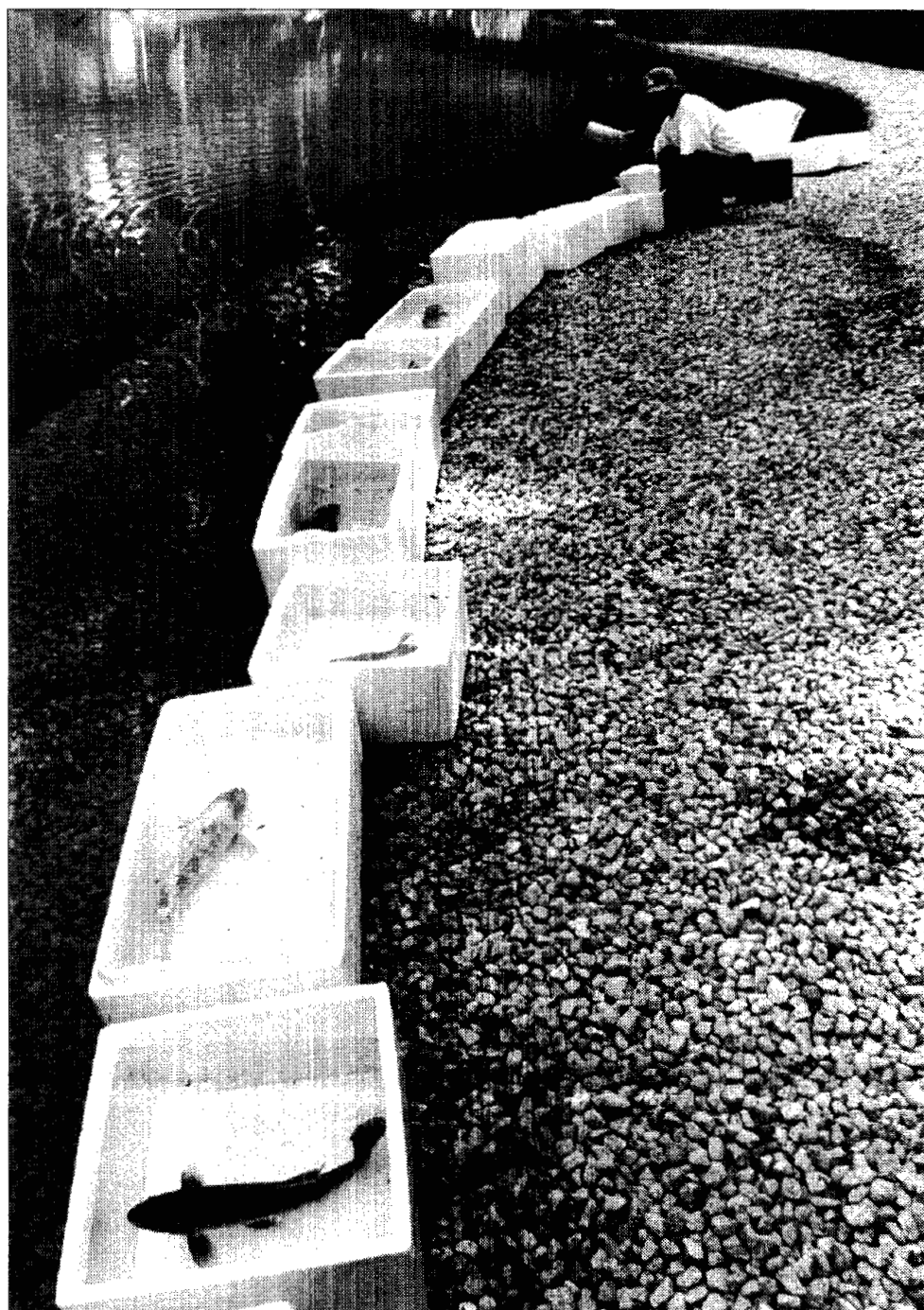
She supported her studies in the

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Taking stock of the electorate
See story page 4

"Confused? Fed up to the teeth? You're new at UBC, you're not really sure what's going on, and now some crazy female wants your vote for Frosh President," Campbell said in *The Ubyssy*.

She won with the slogan "Kim is cuddlier," but Campbell was not one to take a back seat to men. Asked to respond to a sexist columnist's rant that women should stay in the home, and out of politics, she said:



Gavin Wilson photo

Flying Fish

Thirty Japanese carp, or koi, await release at the edge of a pond in the Nitobe Garden. The carp, a gift from Montreal's Botanical Garden, were flown in from Montreal last week. See story in *Offbeat*, page 3.

Lee to take over as chancellor

Robert H. Lee, a UBC graduate and president of Prospero International Realty Inc., will be installed as the university's 14th chancellor on June 25, succeeding Leslie R. Peterson, who has served as chancellor since 1987.

Born in Vancouver in 1933, Lee earned a Bachelor of Commerce degree from the university in 1956. He was presented with a distinguished alumnus award from UBC in 1982.

Lee served two terms as a member of

UBC's Board of Governors and was a founding director of the UBC Foundation. He is currently a member of the leadership committee of A World of Opportunity, the university's fund-raising campaign.

In 1990, Lee was invested as a member of the Order of British Columbia in recognition of his outstanding achievements and service to the province.

Lee and his wife Lily (UBC Nursing '56) have four children, who are also graduates of the university.

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Campbell

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Faculty of Arts with summer jobs skinning halibut in a Prince Rupert packing plant, working on the mayonnaise line at Kraft Foods and as a sleepwear clerk at The Bay.

She graduated with honours in Political Science in 1969. Her honours thesis was called *The Size Principle and Grand Coalitions in China: A Date with a Model*.

From 1968 to 1969, Campbell

was a research assistant for Political Science Prof. Michael Wallace, under whom she began graduate studies in the master's program.

"She was certainly one of the brightest students I had," said Wallace, who also described her as "very chatty, feisty and witty."

"She also had a very sharp tongue, which is no great surprise to anybody, but she could be fun, too," he said.

Campbell did not complete

her graduate degree at UBC before transferring to the London School of Economics. While she was abroad in 1972 she married UBC Mathematics Prof. Nathan Divinsky, whom she had met on campus. They divorced nine years later.

Campbell returned to the university in 1975 where she taught in a combination of part-time and sessional positions until 1978. Her main teaching responsibilities were second-year lecture courses in contemporary political ideologies and foreign governments.

Campbell began studying law at UBC in 1980.

Always musically inclined, she wrote, staged and scored the annual Law Review musicals, including one titled *The Best Little Court House in Canada*, produced just as the Supreme Court was rewriting the solicitation laws.

She received her law degree in 1983 and became a lawyer with the Vancouver firm of Ladner Downs. By now she had begun her political career in earnest, writing her final exams while running for the Social Credit party in the provincial election.

According to her former professor Wallace, Campbell's rise is markedly different from that of previous prime ministers because of her relatively modest background and lack of old boys' network.

"She had some good breaks along the way," he said, noting her timing in joining, then leaving, B.C.'s Social Credit party, her election in a hotly contested, key federal riding, and being catapulted into the justice portfolio just as a number of high-profile issues were dealt with.

Despite her meteoric success, maintaining power will prove to be her greatest test, he said.

"Whether she can build and hold together a political coalition without alienating people is an interesting question that hasn't been answered yet," Wallace said.

"Just being bright isn't enough."



Abe Heffer photo

Dedication Dance

Chief Henry Seaweed of the Nakwaktok tribe took part in a ceremony that re-dedicated the Thunderbird name and emblem to UBC. The re-dedication took place during the UBC Sports Hall of Fame and Heritage Centre induction ceremonies at the Faculty Club in April.

NOTICE: CRANE OPEN HOUSE

The Crane Library Open House planned for Tuesday, June 29 has been postponed until late September. For more information call 822-6111.

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The Department of Pathology has positions available after July 1, 1993 for recent post-doctoral scientists (PhD) and/or MD) devoted to studies of inflammatory diseases of heart and blood vessels. Particular pathobiological, cellular and molecular approaches are being taken to address questions regarding the basis of transplantation-related vasculopathy, immune-mediated and virus-mediated vascular, myocardial and valvular diseases. Specific projects focus on cell-cell and virus-host interactions in the pathogenesis of disease. Independent researchers will work in an exciting, collegial and progressive investigative unit and interact with many others in vascular biology, atherosclerosis, genetics, virology, immunology and transplantation biology. Salary will be according to current UBC guidelines and level of experience.

The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities, and persons with disabilities. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

Deadline for application and possible starting date is open.

Please forward curriculum vitae, statement of research experience and goals, and names of three referees to:

Dr. Bruce McManus, MD, PhD
Professor and Head
Department of Pathology
University of British Columbia
Cardiovascular Research Laboratory
St. Paul's Hospital
1081 Burrard Street
Vancouver, BC V6Z 1Y6
Canada

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Kersti Krug photo

Cantonese Tragedy

Elizabeth Cheung, left, and Lisa Wan, members of the Jin Wah Sing Musical Association, perform a segment from a Cantonese Opera at the opening ceremony for the Museum of Anthropology's exhibition, *A Rare Flower: A Century of Cantonese Opera in Canada*. Exhibition continues until Nov. 7.

Offbeat

by staff writers

The boxes were marked with ominous warnings. "Live wild animals, handle with care. Keep fingers away from openings."

Inside, however, were the most benign of creatures: 30 Japanese carp, or koi, for the pond at the newly renovated Nitobe Garden.

The koi, an integral part of all traditional Japanese gardens, were a gift from Montreal's Botanical Garden. They join about 20 koi already living at Nitobe.

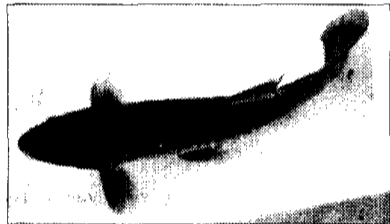
Koi are considered the national fish of Japan, where they are specially bred for the beauty of their markings. They can be worth several hundred dollars apiece.

The shipment was flown here by Canadian Airlines, who donated cargo space aboard one of their regularly scheduled flights.

Each fish was carefully packed in a plastic bag containing a minimum of water and a maximum of oxygen. The bags were then placed into 20 styrofoam boxes, which protected them from damage and temperature fluctuations.

The fish arrived in good condition and seemed to take to their new home with aplomb, which pleased Botanical Garden Director Bruce Macdonald, who negotiated the gift while on a recent visit to Quebec.

"This is a colourful new addition to Nitobe Garden," he said of the pond's new denizens, each sporting a unique pattern of gold, white and black markings. "We couldn't be more pleased."



Koi: new tenants

Don't tell Bill Clinton and Boris Yeltsin, but the Museum of Anthropology wasn't spruced up on their behalf.

Yes, the museum was cleaned inside and out, from the carpets to the top of the tallest totem pole, just before the summit. But the job was done by Paramount Pictures for filming of its movie *Intersection*, starring Richard Gere and Sharon Stone.

"It just happened to be in time for the presidents' visit," said Jill Baird, a student intern who works as a communication assistant at the MOA.

Baird's job involves working with movie directors and technical staff to sort out logistics and make sure crews comply with the museum's rules and regulations.

With a budget of \$40 million, *Intersection* is the biggest, most expensive film ever shot in Vancouver, and Baird was on the scene as filming took place over four nights at the museum.

During filming, which went until dawn each morning, the exterior of the museum, including the Haida houses, was brilliantly illuminated with huge crane-mounted spotlights.

"It looked absolutely spectacular. It was really quite beautiful to see the whole thing transformed," Baird said.

In the movie, Gere plays Stone's husband, an architect celebrating the opening of his latest project, the museum. Eighty extras, including the museum's own Dena Klashinsky, co-ordinator of the Native Youth Program, played the guests.

During the party, Gere's character's girlfriend, a writer for the now-defunct Vancouver *Step* magazine played by Canadian actor Lolita Davidovich, arrives unexpectedly and causes a scene.

Unlike many Hollywood films shot here, this one is actually set in Vancouver and the museum goes by its own name.

"The publicity should be great; the museum looked fabulous," Baird said. Directed by Mark Rydell, *Intersection* is slated to be Paramount's major release for the Christmas season.

This is the third television or film production shot at the museum in the two years Baird has worked there, and it certainly won't be the last.

"Disney phoned the other day. They might want to do something up here, too," she said.

Local companies rally to save B.C. Research

by Gavin Wilson

Staff writer

A consortium of private companies has reached an agreement to purchase the assets of B.C. Research Corp., giving the south campus facility a new lease on life.

The Terracy Consortium announced earlier this month that it is investing more than \$2 million in the bankrupt centre for applied research and development.

The consortium is a group of three B.C.-owned corporations with experience in research technology and product development, engineering and business management. Its members are Terracy Inc., NORAM Engineering and Constructors Ltd. and Stothert Group Inc.

The B.C. Research Corp. went into receivership in March after the provincial government refused to give it a \$1-million loan guarantee and continued annual research funding of \$1.5 million.

The new owners say their goal is to make B.C. Research an engine for international business development in the province. It will continue to offer research and development services to small and medium-sized companies and allow UBC scientists and engineers to make use of its unique facilities.

The facility's uncertain future had threatened to undo several joint research projects involving UBC faculty members, disrupt the work of graduate students, and rob naval architecture students of needed facilities.

The purchase will also maintain about 100 knowledge-based research jobs.

Hugh Wynne-Edwards will serve as the new president and CEO of B.C. Research. He is currently president of Terracy Inc. and a former UBC professor with a wide range of government and industry experience, including several years with Alcan as chief scientific officer and vice-president of research and development.

Wynne-Edwards praised UBC and the provincial government for their roles in resurrecting B.C. Research.

"We received encouragement from the provincial government and the co-operation of the university and CIBC in negotiating the lease for the facility," he said.

"This is a winning arrangement for all concerned. Jobs are maintained, the university receives a market-rental return, the province's research abilities are enhanced, B.C. business has improved access to research, and the government's overall research, development and export objectives are furthered."

Nason named vice-provost

by Connie Filletti

Staff writer

Libby Nason has been appointed vice-provost to support Daniel Birch, vice-president, Academic and Provost, with functions and projects of university-wide significance. Nason has served as provost's assistant since 1989.

Her major responsibilities include policy development and redevelopment, faculty and staff relations, co-ordinating UBC's partnership agreements with university colleges, and chairing the President's Advisory Committee on an Employee Assistance Plan.

She will also continue to initiate campus publications to inform the university community about services and policies, prepare submissions on UBC activities for Senate and government, and suggest communications strategies and organizational structures to meet the

developing needs of the university.

Nason, a graduate of McGill University, also attended the Universite Aix-Marseille,

and joined UBC in 1981 as a labour relations specialist in the Human Resources Dept.

As manager of employee relations between 1986 and 1989, she was responsible for labour relations, employee compensation and

training for all non-academic staff.

She recently spearheaded the development of UBC's conflict of interest policy and is currently developing initial drafts for policies on the environment and on sustainable development.



Nason

Women's safety committee cited as model for universities

by Connie Filletti

Staff writer

UBC's President's Advisory Committee on Women's Safety on Campus has been cited as a model for other Canadian universities in a survey of the status of female faculty and students at Canadian universities.

The committee was established in 1991 to advise on safety policies at UBC and monitor, review and make recommendations on existing safety programs.

"We have successfully brought together university administrators with responsibility for campus safety and campus users to explore the safety concerns of women and possible solutions to these problems," said Florence Ledwitz-Rigby, chair of the committee.

"As a result of the committee's efforts, more attention has been paid to safety issues and concerns."

Since the report's release, Ledwitz-Rigby has received requests for information from other Canadian universities which plan to develop women's safety committees.

The report, prepared for the Canadian Federation of University Women (CFUW), is based on findings from 45 universities across Canada. It identifies more than 50 features that an ideal "woman-friendly" university would have or ensure.

In addition to a university-wide commitment to personal safety, other items include: support services such as on-campus child care; a policy on gender neutral language; a sexual harassment policy; a greater variety of scholarships for female students; and an employment equity policy.

The CFUW report concluded that progress is being made in improving the status of women at Canadian universities, but expressed concern that the pace of change was slow and uneven in focus.

The greatest advance has occurred in recognizing the existence of sexual harassment and creating policies to address the issue, the report said. It identified a dearth of women professors as the major problem existing for females on Canadian campuses today.

A copy of the complete report is available in each faculty office and at the Main Library.

Public review of campus plan under way

by Gavin Wilson

Staff writer

UBC planners have begun an extensive public process to discuss proposals for the greater campus plan, a guide to the potential growth and development of the southern half of campus.

The plan's first draft is a discussion paper which sets out possible land use for a 242-hectare area of campus outside of the main academic core.

Together with the main campus plan, which was approved by UBC's Board of Governors last year, it will form a complete development plan for UBC's Point Grey campus.

"Aligning the university's land use plan with the visions of the many and varied interests within our community is a challenging task for UBC and for Campus Planning and Development in particular," said UBC President David Strangway.

The discussion paper was the topic of two well-attended public meetings held recently on campus, one with residents of the Acadia Park area and the

other with the University Endowment Lands Ratepayers' Association. More public forums will be held during the next few months.

Many at the meetings expressed concern that the plan would be approved without adequate public participation.

"There is absolutely no rush to get the plan approved," Strangway said. "We want to remain very flexible with the timetable and with the proposed plan."

"The discussion paper is a way for us to discuss the issues and get input from the campus community and people living in neighbouring communities."

Campus Planner Andrew Brown said the draft plan aims to increase land use efficiency, better reflect the university's identity, integrate what are now isolated areas of campus and improve access for the off-campus and campus communities.

The discussion paper suggests that 36 hectares could be set aside for associated research on campus, as an important adjunct to the

university's academic activities. Most of this land would be located south of 16th Avenue, adjacent to an area already leased for this purpose by Discovery Parks Inc.

The plan also calls for proposed market housing in two areas: adjacent to the existing Hampton Place development, south of 16th Avenue, and a small parcel south of 16th along Southwest Marine Drive.

Proposed student housing sites include an extension of Acadia Park residences to Wesbrook Mall and up Fraternity Row, between Thunderbird and Agronomy roads, to East Mall. Another block of university housing would sit between Thunderbird Boulevard and Stadium Road, adjacent to Totem Park residences.

At one meeting, Acadia Park residents said they were concerned with a proposed realignment of campus roadways.

The plan proposed extending Acadia Road south across 16th Avenue, continuing to Southwest Marine Drive. It also proposed that Thunderbird Boulevard be extended east to University

Boulevard bisecting the Acadia neighbourhood, which contains family housing.

"If Acadia Road is extended as shown here it will jeopardize the safety of our children," said one resident.

Brown said an expanded and improved road network was recommended to connect a disjointed and confusing street system and distribute traffic over a greater number of roads, eliminating the need for multi-lane thoroughfares on campus that are "hostile to pedestrians."

He added that the Acadia Road extension would also demarcate what is now a little-understood boundary between the university campus and Pacific Spirit Park.

Brown said planners will review the roadway extensions in light of public concern.



For more information call the UBC Alumni Association at 822-3313

UBC stock market linked to whims of Canadian electorate

by Abe Heffer

Staff writer

Buy low, sell high.

You'll get a chance to do just that while learning first-hand about the operation of a financial market, and more about Canada's election process, when the 1993 UBC Election Stock Market (UBC-ESM) opens for business July 5.

The UBC-ESM is a financial market in which the ultimate values of the contracts being traded are based on the outcome of the 1993 Canadian federal election.

Participants invest their own funds, buy and sell listed contracts, and bear the risk of losing money as well as earning profits.

"The UBC-ESM is being operated for educational and research purposes. It is designed to help us study the predictive power of markets, the behaviour of traders and the dynamics of the political campaign," said Associate Prof. Tom Ross of the Faculty of Commerce and Business Administration.

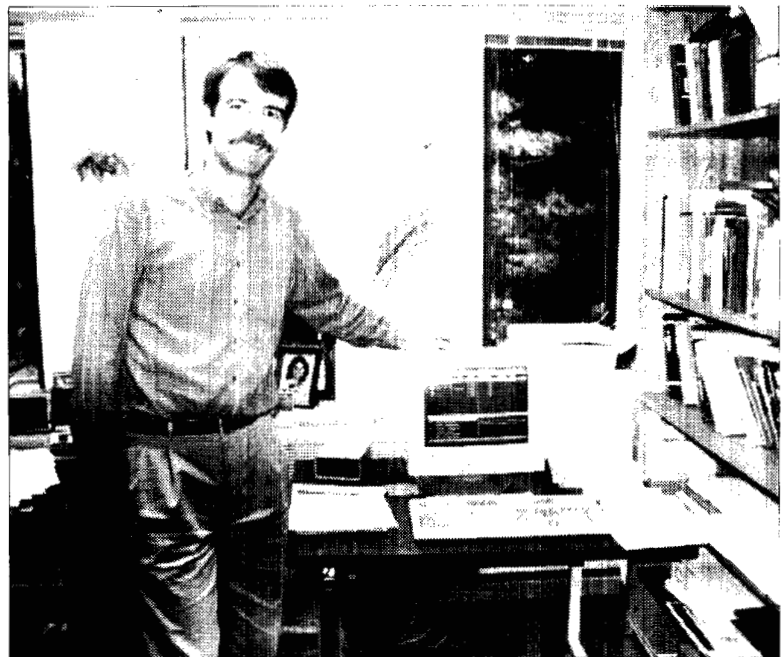
"It also affords students an opportunity to learn more about how markets work and motivates them to follow more closely the upcoming campaign."

Modelled directly on the University of Iowa political stock market, which has been running since 1988, the software has been customized to reflect the Canadian political system, added Ross.

Ross and faculty colleagues Vasu Krishnamurthy and Murray Frank are directors of the UBC-ESM, along with Robert Forsythe of the University of Iowa.

Traders on the exchange will buy and sell financial contracts representing political parties participating in real elections.

This year, the exchange



Associate Prof. Tom Ross is putting the finishing touches on the UBC Election Stock Market, which will be up and running July 5.

includes two markets involved in the Canadian federal election, expected to be called this fall.

The principal market is the House of Commons market, with six contracts to be traded: Bloc Quebecois, Liberals, New Democrats, Progressive Conservatives and the Reform Party, with a final contract covering all other parties.

At any point in time, the market's estimate of the share of seats to be won by a party can be inferred by looking at the current price of that party's contracts.

This way, Ross said, the market acts as a continuous poll that can respond quickly to significant campaign events such as leadership debates.

The second market operated by the UBC-ESM is the majority government market. There will be three contracts in this market corresponding to a Liberal majority government, a Progressive Conservative

majority government, or neither.

The minimum investment in a UBC-ESM account is \$5.00, and the maximum is \$1,000. The amount you invest will be posted to your cash account.

Funds can then be used to buy individual contracts from other traders or from the UBC-ESM exchange system, a fully computerized market, open 24 hours a day.

Funds remaining in the cash account, plus the liquidated value of contracts held at market closing, will be refunded to the traders. All the money that comes in will be paid out.

The software for the UBC-ESM is currently operational in the faculty's local area network. The market is open for practice trading by those wishing to see how the system works.

If you're interested in opening a funny money account, or becoming a trader on the real market, call 822-8614.

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QUESTIONS AND ANSWERS ON THE UBC LIBRARY ACQUISITIONS CRISIS

Q 1. What have been the Library acquisitions budgets over the last 10 years?

Year ending	Actual (\$,000)	Constant 1993 \$
1985	3,600	5,015
1986	4,050	5,431
1987	4,612	5,937
1988	5,053	6,230
1989	5,313	6,298
1990	5,569	6,288
1991	6,009	6,473
1992	6,301	6,427
1993	6,443	6,443

See Graph 1, "Library Acquisitions Budget, 1984/85 to 1992/93".

NOTE: These amounts do not include expenditures on library materials and service paid by departments and faculties.

Q 2. What have been the Library acquisitions expenditures over the last 20 years?

Year ending	Actual (\$,000)	Constant 1992 \$
1973	1,309	4,946
1974	1,349	4,729
1975	1,502	4,751
1976	1,741	4,971
1977	1,954	5,191
1978	2,473	6,084
1979	2,723	6,147
1980	2,873	5,944
1981	3,311	6,218
1982	3,716	6,211
1983	3,972	5,989
1984	3,840	5,476
1985	3,649	4,984
1986	4,267	5,609
1987	4,853	6,124
1988	4,769	5,765
1989	5,243	6,093
1990	5,575	6,172
1991	5,898	6,229
1992	6,111	6,111

See Graph 2, "Library Acquisitions Expenditures, 1972/73 to 1991/92".

NOTE: These amounts do not include expenditures on library materials and service paid by departments and faculties.

Q 3. The ARL rankings of libraries in North America are based on a complex formula involving size, acquisitions, operating expenditures etc. How has the UBC Library ranking varied over time in the past 20 years?

Year	ARL Rank
1991/92	27
1990/91	25
1989/90	26
1988/89	27
1987/88	30
1986/87	28
1985/86	26
1984/85	19
1983/84	18
1982/83	15
1981/82	15
1980/81	15

Also see Graph 3.

See Appendix 1, ARL Membership Index, 1991-92, which shows Toronto in 5th place, UBC 27th, Alberta 33rd, McGill 40th, Laval 52nd, Western Ontario 56th, York 61st, Queen's 82nd, Waterloo 85th, McMaster 87th, Saskatchewan 91st,

Manitoba 99th, and Guelph 100th.

As shown in the 1991-92 ARL Survey, in the category "total operating expenditures in the Library", UBC was in the 19th place. Moreover, in every single category (staff, subscriptions, total holdings, etc.) UBC was in the 2nd or 3rd place in Canada.

Q 4. Using the ARL information base, we show plots of acquisitions versus operating and total expenditures for all university libraries that today have 3,000,000 volumes or more.

See Graphs 4a - 4g, Acquisitions vs. Library Operating Costs, and Acquisitions vs. Total University Expenditures.

See Appendix 2 for data.

Q 5. What steps have been taken to reduce operating costs?

(a) Reduce Library staff:

The Library has continuously reduced the number of Library staff since 1972. This reduction has been possible because of increased productivity resulting from investment in computers and telecommunications, as well as from improved and more efficient operations.

See Graph 5, "Student, Faculty, and Library Staff Growth - Scaled Comparison".

See Appendix 3, "Salary Budget Cuts; Reallocations to Collections; New Collections Funding 1986/87 - 1992/93". This shows the last seven years' history of reallocations to collections.

During the past 18 months, the Library has restructured its organization to increase the size of management units, reduce the number of managers by nine positions, and reallocate to meet unbudgeted needs. The following Assistant University Librarian and division head positions have been eliminated or transferred to the ETA pool: Assistant University Librarian for Public Services, Central Libraries; Assistant University Librarian for Technical Services, Systems and Finance; Head, Hamber Library; Head, Biomedical Branch, VGH; Head, Health Sciences Network; Head, Information & Orientation; Head, Special Collections; Head, Catalogue Records; and Head, Government Publications. The Library is organized to operate with 30% fewer managers than was possible two years ago.

(b) Introduce automation into cataloguing:

Since the mid-1960s, the Library has been making extensive use of technology to improve productivity in all major processing areas such as circulation, cataloguing, and other technical services areas.

Automation of cataloguing began around 1968, when the In-Process list was used to generate "processing packets" — carbonized decks of slips that saved typing such things as temporary records and marking slips individually. In 1978 the Library contracted for on-line cataloguing services with UTLAS and closed its card catalogue, saving the staff time previously devoted to card production and most of the card filing time. Substituting the Library's own local



June 17, 1993

Dear Colleague:

For a recent meeting of the Board of Governors, my office prepared a set of Questions and Answers about the problems facing UBC and other universities with respect to maintaining and supporting their library collections. These Questions and Answers are reproduced here. Your comments and suggestions are most welcome.

Sincerely,

K.D. Srivastava
Vice President, Student & Academic Services

system for UTLAS in 1985 saved about \$250,000 per year in real dollars, and enabled the Library to automate more cataloguing functions such as the establishment of name and subject headings. (It also provided an on-line catalogue for Library users.)

Cataloguing and the other technical services divisions are examples of areas where the workload has remained fairly constant, but the number of staff have been reduced significantly as a consequence of implementing automated processing systems. In 1970, there were 149 staff; by 1986 this had dropped to 123 staff; and by 1990 it had decreased to 113 staff.

The technical services areas are heavily automated and further productivity gains are not likely to be achieved by the sole application of technology. The Library's recently completed Services Review has proposed some organizational and workflow changes for these areas that are more likely to contribute to improved productivity.

(c) Introduce automation into circulation systems:

Circulation is an example of an area where workloads have increased dramatically since the mid-1960's when the automated circulations system was first implemented, and the punch-card circulation system replaced a manual system, but staff levels have remained almost constant. In 1965, there were 35 staff for 5,000 patrons and 792,918 loans. In 1991, there were 36 staff for 35,000 patrons and 2,097,962 loans.

In September 1992 the first phase of a re-developed circulation system was implemented. Further productivity gains are possible, but may be offset by increased patron use of new or enhanced features. In almost all libraries, the introduction of new technology or improved systems that are directly used by patrons generates more activity that results in increased workloads for staff. However, the automated system usually also permits the increase to be absorbed

within existing staff levels.

Q 6. How much does it cost to catalogue a book?

The Library estimates the cost to catalogue a book is \$26.50.

Q 7. If the Library had not introduced automation, how much would it cost today to catalogue a book?

In 1970, the Library had 36 more staff in cataloguing, a combination of librarians and support staff. If one were to calculate what those number of staff would be earning today, the figure would be a very high one. One would also have to include the Library of Congress card service costs, and prices for card stock, photocopies, and card catalogues. A year's output of cards took about ten new 60-drawer cabinets a year. In addition, the Library would have needed all of the space for all of those drawer cabinets. (The Library would need to more research to come up with how much all of this would cost.)

Q 8. UBC takes great pride in the fact that it has a high circulation of books and journals. Does this have a cost?

Yes, it is a major cost and the Library has been experimenting with anchoring selected journals. It is planning to anchor all journals in 1993/94 for significant savings in operation.

(Experience to date on the last five years indicates that anchoring journals has significant costs rather than savings. See details below.)

UBC Library circulation is high relative to most other research libraries; however, circulation statistics over the last 6 years have been decreasing while the use of library materials as demonstrated by the photocopy statistics have increased dramatically.



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Total copy volume	Circulation
1986/87 3.8 million	2.284 million
1987/88 4.6 million	2.274 million
1988/89 6.6 million	2.246 million
1989/90 7.9 million	2.200 million
1990/91 8.9 million	2.097 million
1991/92 9.3 million	2.084 million

Circulation represents the process of signing out library material, processing its return, and sorting and shelving the material. In addition it includes gathering material used in the Library, and sorting it and returning it to the shelves. Anchoring journals has increased their availability and it is likely that while a volume used to be checked out for a week to one user, it is now consulted in the Library 2 to 3 or 4 times during that week requiring reshelfing each time. Certainly, increased internal use has consumed any staff savings from reduced circulation and is likely to continue to do so. Shelving backlogs in the Main Library were the source of many complaints during the fall term; the Library has reallocated resources to maintain photocopiers and reshelve materials from copy areas.

For those collections where use of serials is high or where duplicate subscriptions are being eliminated, the Library is adopting an anchoring policy to improve availability.

The Library has continued a cautious approach to anchoring journals for the following reasons:

Limited study space:

Education Library has only 21 study seats and room for only 3 photocopiers in its present facility. Journals circulate for 2 hours to enable students to read or copy articles elsewhere.

The MacMillan Library shares the same space problems experienced in the Education Library and circulates most of its journals also.

Hours of access:

Main Library is not currently open evenings and weekends in the spring and summer sessions when research programs are most active and journal material is required. A proposal to anchor all science journals faltered on this issue in 1989. The Library is committed to reallocating resources to improve hours of access and will then anchor journals in this collection.

Journal anchoring:

Life Sciences Libraries are moving to complete anchoring by fall 1993.

Law Library will complete anchoring journals by fall 1993.

See Appendix 4, "Journal Circulation - Statistical Summary", which summarizes journal circulation in 1988.

The costs of circulation are mainly in the staffing of checkout desks and reshelfing of materials once they are returned. If the Library anchors journals, checkout desks will still need to operate, while reshelfing costs will increase as more journals are used and copied in-house.

Prospects for savings lie in the reduction of service points and in a new circulation system which will include self-service features. The Library is currently working actively on reducing the number

of service points. Some minor savings have been achieved with Phase I of the new circulation system, with additional savings anticipated late in 1993 when Phase II of the system is in place.

Anchoring should, however, save some costs for ordering multiple copies.

Q 9. When will the new automated circulation system be in place and what savings will this introduce?

The UBC Library was one of the first libraries to implement an automated circulation system in 1965, almost 30 years ago. The current redevelopment project of this original system commenced in September 1991. It is utilizing a client-server model and will be the first major local application to reside entirely on the Library's UNIX computers.

Phase I was completed on schedule in September 1992 with the barcoding of most of the UBC Library's circulating collection and the replacement of the old EPIC card reader terminals with microcomputer based workstations. Phase II is scheduled for completion in September 1993. It will complete the upgrading of the circulation system software to be compatible with the rest of the Library's automated systems and introduce many new features and enhancements.

The implementation of the "first generation" circulation system at the UBC Library in the 1960s resulted in major productivity gains without staff increases. The new circulation system will put the library in a similar position for the next 5 to 10 years.

Many of the new features will provide more direct and efficient benefits to users. For example, patrons will be able to place holds on items from online terminals in the Library or elsewhere instead of having to come into the Library and fill out a Hold Request form. Historically, the introduction of new automated systems in libraries usually generates increased activity, especially if new features are directly available to users. It is too early to measure these improvements and their potential impact on workloads.

The UBC Library has also identified some further enhancements that it would like to develop and implement in the local circulation system as a Phase III to commence after September 1993. One of these — self-serve check-out of items — has potential for significant productivity gains. However, it will also require closer integration of anti-theft devices with the circulation equipment and check-out procedures.

Q 10. Do Interlibrary Loans cost UBC to service other library users?

Yes, since the UBC Library is the major library in Western Canada, we lend a lot more than we borrow. A new policy has been introduced that requires total expenditures in borrowing to be offset by income from lending to other libraries.

Incremental staff costs to gather, photocopy and mail material to other libraries are recovered. Costs of purchase, processing and storage of library materials are not currently recovered. The Library is analyzing its lending data to identify groups of borrowers who do not lend an equivalent number to us.

Commercial services which supply documents to libraries are highly efficient and almost match UBC current retrieval costs. To recover the capital investment in the collection would price UBC out of

the document delivery market. In an effort to remain competitive in the lending market and to begin to recover sufficient costs to assist with borrowing, the UBC Library has been streamlining operations and reducing costs.

The Library is able to lower its costs of lending and borrowing because of reciprocal arrangements with other libraries. For example, the balance of its lending and borrowing with other members of the Canadian Association of Research Libraries is equal. The Library is experimenting with not charging each other to streamline the service and thus decrease the delivery time as well as eliminating charging costs. The Library is monitoring this to see that it remains in balance. Right now it is.

The Library also has a similar arrangement with the University of Washington; however, UBC usually borrows more from them than we lend to them. In a phone call with the Collection Development Librarian on February 5th, the University Librarian was informed that if the UBC Library cancels 25% of its serials, then UofW may want to question the reciprocity of the agreement, and the Library may need to start paying for it. Thus UBC's value as a partner with them will be diminished, and the Library may be incurring new costs.

The Library is analyzing its borrowing/lending data to identify what set of borrowers account for the imbalance between our lending and borrowing.

Q 11. Has the new policy (1987-88?) of requiring that copying costs be cost recovered been successful?

Yes, on four counts:

(a) copying is now much more convenient and easy for users;

(b) circulation has been reduced sharply (see Q 8 for data);

(c) the Library is able to have modern copying capacity available to users;

(d) no GPOF subsidy is provided to this area.

Q 12. How has the networking capacity of the catalogue improved both the effectiveness of the service and introduced efficiencies?

Basically, the UBC Library's online catalogue system is available 24 hours a day, seven days a week to any user able to connect to UBCnet from terminals/work-stations on campus or via the Internet, Datapac, and local dial-in. All information is available and current for staff in both technical and public service areas. Labour intensive card catalogues and various printed lists are no longer required. During the past year, the Library has installed over 50 new OPAC inquiry workstations in various Library locations and will now be able to discontinue the production of various microfiche catalogues and lists by mid-1993. There have been cost savings to the Library operations.

Perhaps most important, users do not have to come to the Library to find out what is available. They can access the online Library system from their campus offices and labs, or from home; search in numerous local databases and commercial databases such as ERIC, Psychinfo and Medline that are available on the local systems; and retrieve and print out citations for desired items.

Q 13. All this automation for catalogue access and circulation systems must require large computing capacity. How have these costs been dealt with?

Computing capacity costs have been coming down on a unit basis and the Library has been able to provide substantial increases in capacity at very little additional cost.

Some general statistics provide an overview of the size and capacity of the UBC Library's online systems. The Library has almost 40 different databases available for general inquiry. These range from fairly specialized finding tools such as union lists of B.C. newspapers, serials, and media items; patents databases; bibliography collections; maps; and archival items to large indexing and abstracting databases such as ERIC and Psychinfo that contain hundreds of thousands of records. The merged UBC Library CATalogue file has over 2 million records in it. Several of the MARC source files mounted locally collectively contain over 1 million records.

At present, the UBC library has almost 45 gigabytes of magnetic disk storage utilized on both its IBM mainframe and 4 UNIX servers. At peak periods, there are between 250 and 300 users, both staff and patrons, performing searches and other online activities simultaneously. Use of the existing systems and demands for new files and functions will probably continue to grow for the foreseeable future.

The Library is addressing this demand and its associated requirements for computing capacity by undertaking a migration of its local system from an IBM mainframe based environment to one based on multiple, low-cost UNIX platforms. For example, since January 1993 the main online inquiry facility known as UBCLIB has been supported on a SGI Iris R4000 UNIX computer with 11 gigabytes of disk and an estimated capacity of at least 150 simultaneous users. (The high user capacity also reflects the efficiencies of the software shell the Library has implemented: 20-30 users is a more typical load on this size of machine.) This machine cost \$45,000 and is comparable in capacity to the IBM 3081 mainframe still utilized by the Library. The latter cost approximately \$1.5 million when originally purchased.

Q 14. How does the policy of decentralizing all computing budgets to users affect the Library?

The Library system is largely on a stand-alone basis now and the Library must make its own priority decisions.

The decentralization policy has certainly provided the Library with more financial resources and flexibility in establishing priorities and making system-related decisions. However, it has also generated some financial and service issues, since the Library is fully responsible for its computing facilities.

Connectivity is absolutely critical for the Library and the university community has high expectations for online access to the Library's online systems. The Library has continued to work closely with University Computing Services in the re-design of the Library network so that it is fully compatible with and connected to UBCnet and also appropriately maintained. As University Computing Services has migrated to a cost-recovery-based operation, this has resulted in new operating costs for enhanced network communications that the Library must support directly from its budget.



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At present, the dividing line between "campus network infrastructure" and local or departmental networks and systems is still in transition. Departmental systems support and expertise varies considerably and this contributes to more confusion with respect to not just distribution of budgets, but distribution of responsibility. As one of the major online facilities that is probably used by almost every member of the UBC community at some time during the year, the Library is fielding an increasing number of queries and/or complaints about network access and/or equipment problems.

Q 15. Within Canada how do acquisitions and operating budgets at various universities compare?

We often compare ourselves with the following universities:

McGill, UofT, UWO, Man, Sask, Alta, SFU, UVic

See Appendix 5 for data.

Q 16. Are further savings possible in the Library operations?

Yes, when we compare our costs to those of comparable libraries. The Library has analyzed its operation costs in detail. Some of the reasons for higher costs of UBC may be:

- too many specialized branch libraries;
- higher wage rates for student assistants.

Some of the branch libraries, for example Data and Social Work, have been integrated into the Main Library, and similar plans are under consideration for some others (Wilson Recordings Collection and Sedgewick Undergraduate Library).

Savings have been realized in Library operations in the past, and seeking efficiencies is a major value and strategy of the UBC Libraries. In 1992-93, as part of the Strategic Plan, the Library began a rigorous analysis of major Library services with a goal of reducing staff and operating costs by 10% over two years. The realized savings would be used to pay for anticipated salary settlements (outside of the control of the Library) and for shortfalls in other areas of the Library budget: computer costs needed to maintain the present level of service as well as the transition towards the electronic library, preservation costs (projected at \$120,000 annually), university archives processing, retrospective conversion of Library holdings prior to 1978, and special projects such as dealing with the vandalism that occurred during the recent strike.

The UBC Library is expensive to operate because of the historical development of libraries that occurred, partly in response to the large size of the campus, with many branches and divisions. Indeed, the Library has 42 service points. The Library is in the process of reducing the number of service points and branch libraries. One of the limitations that prevents the Library from proceeding further in this area is the dysfunctional structure of the Main Library.

Q 17. Why did all the major libraries in Canadian universities rank so low in Maclean's survey when ARL ranks us number 2 in Canada?

Because they totally ignored the size of the library collections, preferring instead to rank on the basis of acquisitions per student. They also ranked libraries on

the size of the operating expenditures. The criterion favours inefficiencies in libraries.

Q 18. Is there a cost to maintaining branch libraries?

Yes, there is a cost, but provided each branch is large enough to have efficiencies of scale, and they are fully automated, the costs can be kept to a minimum when users can locate the volume and walk to retrieve it.

UBC Library is integrating small branches with larger units - the Film Library, Social Work Library and Data Library have been closed and integrated. The Wilson Recordings Collection will be integrated into another part of the Library this spring.

Because of historical agreements we maintain libraries at VGH, St. Paul's and the Shaughnessy site at considerable cost. In 1988 the Library received almost \$1 million recurring funds from the Medical School Expansion Program to support these services. Efficiency resulting from technology has enabled the Library to maintain the services at the funding base level.

Q 19. Does the province recognize the uniqueness of our Library?

No, in spite of many requests and interventions UBC receives no special consideration. We did, however, receive a provincial grant to help us catalogue back issues for automation and for retrospective conversion, as did the other universities and colleges, from 1978 to 1982. We have a complete automated catalogue for books and journals from 1978 on, and records for earlier materials in the branches have been converted. We should fully complete the retrospective work not only for ourselves but to serve the other institutions in B.C. 800,000 records need to be converted at a cost of approximately \$2 million.

Q 20. Do we have any costs associated with the new university colleges?

All UBC costs for lending materials to the new university colleges are cost-recovered. However, we do subsidize lending to the extent that our fixed costs of building, cataloguing and housing the collection to support this lending are not recovered.

Q 21. What are the factors that affect book and journal acquisition costs?

- (a) Inflation;
- (b) Exchange rates;
- (c) Inflating costs that are above the combination of (a) and (b).

See Graph 6, "Indicators of Library Acquisitions Costs", and Appendix 6, "Average Book Prices"; "20 Year Index of Periodical Increases".

- (d) Increasing volume of published material:

See Appendix 7, "Number of Book Titles Published"; "Book Production - United Kingdom"; and "Book Production - United States".

Q 22. What steps have been taken to deal with these issues?

We use a 10-year rolling average to protect against (a) and (b). We also partly

address (d) by providing a further 1.5% for growth. We are completely unable to deal with item (c). This is largely driven by private sector publishers who have discovered that libraries are captive markets and that the libraries are constantly under pressure to keep buying their journals. Many of these private sector publishers will sell subscriptions to individuals at prices often considerably less than they will to libraries and require these individuals to sign that they will not donate these to libraries.

At its March 25, 1993 meeting, the Board of Governors urged the University Administration to find ways of moving UBC in the ARL ranking to 20th or better. An analysis of the ARL ranking is being conducted, and strategies are being developed to make more effective use of the total resources available to the Library.

Q 23. What steps have been taken to reduce the level of duplicates purchased from university funds across the campus?

Since 1981 the Library has targeted duplicate subscriptions in each round of cancellations. In 1983 approval was obtained for the Library to divest itself of involvement with the departmental reading rooms. About 50% of the library collection cost for reading rooms was transferred from the Library to the various deans' budgets. Most of the reading room collections were duplicate. Since that time the Library has not been involved with reading rooms; their budgets are controlled by deans and department heads. In 1988 and especially in 1992 the Library looked intensively at duplicate subscriptions. The remaining pockets of duplications (other than isolated titles) were found to be:

- (a) between Sedgewick and Main;
- (b) between the four health science libraries;
- (c) internally within Law (multiple copies of large legal sets which are intensively used by students and faculty);
- (d) reference materials which are in daily use in two or more sites.

Much of the duplication between Main and Sedgewick was cancelled this last summer. The rest will go by 1995 (with the Phase I building). The duplication between the health science libraries was significantly reduced, but there is a core collection of titles which must be at all sites for accreditation purposes and for good student education. A survey of the large law libraries in 1988 showed that UBC had no more, and in some cases fewer, duplicate law sets than other law libraries of comparable size. The Library will, however, examine this issue in detail.

The duplicate reference materials are being reviewed and will be reduced. In some cases consolidation of units will bring savings. There are a few cases where tapes could be mounted centrally, but the cost equals the cost of several paper copies.

The issue of duplication between the library system and the departmental reading rooms is a thorny one. Faculty members may also use research grant funds for office subscriptions. The issues involved tend to be in the realm of hours of access; availability on the shelves; security against theft, fire and flood; and proximity to the academic buildings. The quirks of history have also played a part in determining whether a faculty or department has a reading room or a

branch library. The long term solution would seem to be to establish a few unbound periodical reading areas at strategic locations within library buildings; to have enough space for readers and adequate photocopiers; to allow no removal from these sites (requires detection devices and staff on hand); to provide for frequent reshelving; and long hours of access. All these factors have costs attached - some capital, some continuing. Further analysis will be done.

More duplicate subscriptions will be cancelled, especially in the health sciences. After the next round of cancellations the health science libraries expect to have duplicate subscriptions down to no more than 11% of their total subscriptions, from 20%. The libraries are working with the clinical departments to establish one site library for each specialty. For example, Ophthalmology has agreed that ophthalmology journals will be held exclusively at the branch library at VGH and no longer on campus. The health science duplicate subscriptions should this year be down to 300 to 350 copies costing no more than \$50,000. Overall, duplicate subscriptions are costing no more than 2% of the collections budget this year and should be down to about 1% by the end of 1995 if present building plans come to fruition.

Q 24. Is there any end in sight to the obscene rises in prices of journals to libraries?

The situation we are facing is not unique. In North America there are only 68 research libraries which have holdings of 2 million print volumes or more. All these libraries are facing the same issue of not being able to continue to acquire the same slate of subscriptions. Many have cancelled hundreds of thousands of dollars worth of subscriptions in recent years. If purchases of lower quality journals are reduced, the suppliers may have to start phasing out the less important journals. It is particularly important to assess quality and content against current price. Over the last couple of decades societies and associations have often handed over publication of their journals to commercial publishers. There are still many fields where the highest quality journals are published by societies. Non-profit organizations generally try to keep cost increases to a minimum. The large commercial conglomerate publishers seek to maximize profits and costs go up accordingly. Many such publishers charge a library subscription rate which is several times the personal subscriber rate. A move back to more non-profit publishing and a more active role by members in monitoring their society's publishing practices would help to contain costs.

Meanwhile, the mergers and growth of the commercial publishers continues. Reed and Elsevier have merged in a \$9.4 billion deal. See Appendix 8, "Reed and Elsevier to Merge".

Q 25. What has happened since the university decided to let the Library keep the library fines rather than take the money into general revenue?

The amount collected has risen from \$94,864 to \$136,252 since 1988/89. This money in turn is used for Library acquisitions.

Q 26. If the university is basically a "no growth" institution, why are Library costs such an issue?

Library materials increase every year and so libraries must continue to grow.



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The Library purchases about one mile of books each year. These must be catalogued, circulated and housed on a growth basis. It is for this reason that a major campaign project is the Library. It also puts immense pressure on librarians who must handle an increasing volume of materials with increasing efficiencies.

Q 27. Will automation, CD-ROMs help to reduce this pressure?

Automation has already been a major tool in keeping ahead of the deluge. CD-ROM or other technology may help in the longer run, but this will not save anything until international standards are adopted.

So far, automation and the associated information technologies have only indirectly or partially addressed the major issues associated with acquiring and/or sharing scholarly information. First, it is primarily the various access tools that are available online; full text and images are only starting to become available and usually in limited or prototype situations. Second, actual document delivery systems, whether based on machine-readable data or hardcopy, have only started to appear during the past few years and are still limited in their coverage and often expensive. Many of these prototype systems are not easy to use, or are often inefficient or non-standard.

While automation and electronic information products have improved efficiency in processing and in the research process, they have resulted in increased requirements for teaching search skills to end users. Last year more than 14,000 students, faculty and staff attended training sessions to improve searching skills on the Library's databases and CD-ROM products.

Q 28. Will the new Library provide efficiencies?

Yes, it is being designed for this purpose but these efficiencies will have to be used to handle increasing volumes of material.

The new building will permit the library to reorganize services for efficiency and flexibility rather than to organize according to space available as is the case in the old Main Library building. Reference services now offered from Sedgewick Library, Humanities & Social Sciences Division, Government Publications Division, Data Library and Interlibrary Loans will be integrated into one service point in the new building. Periodicals and Microforms now served from two locations will be consolidated into one. A minimum of five staff are required to open the present library building. The Phase I building will require only two.

The Library is already adjusting the organizational structure in anticipation of the Phase I building: Humanities & Social Sciences Division and the Government Publications Division are now directed by one head. Physical integration is not possible because of space constraints. Main Library Circulation Division and Fine Arts Circulation are being integrated at the present time. Interlibrary Loans will be decentralized to some reference divisions over the next six months and Main Library Circulation and Sedgewick Circulation are developing an integration plan.

Q 29. Can donations of books and journals help to solve the problem?

Yes, but only in limited ways.

(a) Donations of cash to buy needed books or journals are the most helpful.

(b) Donations of current issues of journals as they are received can be helpful for the more expensive journals. Since there is a staff cost in following up with donors who are tardy, in evaluating the cost and issuing annual tax receipts, it may not be cost effective for cheap titles.

(c) Gifts of personal collections are very variable in value and content. Much staff time can go in personal conversations with donors, visiting their houses to assess collections, checking holdings, selecting individual items, arranging appraisals and issuing tax receipts, not to mention cataloguing. These gifts add to the research value of the library collection but they are rarely of a suitable nature to replace current acquisitions, and they can have a significant staff cost. The library staff try to be sensitive to donors' feeling and the University's good name when offers must be turned down.

(d) Donations of current books and journals from foreign governments or organization are usually valuable because they have less of the staff costs associated with them and are usually current publications or 'starter' collections.

(e) The mass of duplicate material which the library ends up with as a result of gifts can be expensive to dispose of. The Library normally invites other B.C. institutions (especially the new university colleges and UNBC) to come and take their pick. Sending material to third world countries costs staff time to sort and pack (minimum is almost \$13 per hour) and in some cases the Library would have to pay shipping costs. The Library's foreign exchange partners usually want current journals and books which normally are not available to us as gifts. The Library is required to pay for most of the UBC publications which are sent to our exchange partners.

(f) The Library has in the past received endowment funds for specified library purposes, both as donations and bequests. The current value of the endowment capital is approximately \$1.8 million.

Examples are:

David Lam Management Resource Library
Urban Land Real Estate Collection
Burwell bequest - social sciences
Coolie Verner bequest - cartography
Crane Library
Various other small endowments

(g) The Provincial Centres of Excellence provided \$145,000 recurring funds for acquisitions in the Pacific Rim area.

(h) The National Centres of Excellence has provided \$546,000 over 4 years, which has been used to acquire and mount the CD Plus databases, including Medline for the health sciences, and to provide remote access to Engineering Index from campus offices and labs. Additional databases for the physical sciences are being acquired. There will be future annual costs for the databases which will have to be met from other sources should this funding not be renewed.

Q 30. What strategies has the Library used to address the serials problem?

1. Education — understand the problem and develop solutions

. Symposium for the university community, March 14, 1991.

. The University Librarian met with the Deans, and arranged for meetings with Ann Okerson, Director of the Office of Scientific and Academic Publishing of

the Association of Research Libraries, March 14, 1991.

. UBC LIBRARY NEWS articles, February 1991, April 1991, January 1992, November 1992.

. The UBC Library Strategic Plan—distributed in UBC REPORTS, January 9, 1992, and to department heads and directors.

. The University Librarian arranged meetings with individual deans and their department heads, Graduate Students, and the AMS to discuss the Strategic Plan and the serials inflation problem during 1991-92, 1992-93. (Only two deans did not meet with the University Librarian.)

. The University Librarian works with the Senate Library Committee on solutions.

2. Attempts to obtain more funding

. In the meetings with the Deans, the University Librarian alerted them of the serials problem and asked for their assistance. Several strategies were explored:

. In their fund raising, they could seek endowments specifically for library materials.

. New endowed chairs could be accompanied by an additional amount for library materials in that area.

. In its 1992-1993 budget request the Library informed the University Administration (as recommended by the 1988 Library External Review Committee) of the decline in the purchasing power of the acquisition dollar and included in the request the amount needed to maintain the purchasing level. No university is able to do this. The actions taken include reductions of subscriptions.

. The Library received an increase for new programs and for the currency change (as computed on a ten year rolling average); however, it received no increase for inflation.

. In 1991-1992, The Senate Library Committee, apprised of the pending disaster with serials, recommended to Senate and to the Board of Governors a plan of action to increase the Library acquisitions budget. The GPOF allocation to the acquisitions budget has remained fairly close to 2%, although there are annual variations due to freeze in provincial grants and/or transfer of Library operating budgets to collections. A funding formula for the acquisitions budget has been put into place since 1990.

3. Ensure that new academic programs are assessed for the adequacy of existing Library materials and services, or plans to obtain the needed resources

. The Graduate Dean arranged for the Library to review all proposed programs for the adequacy of library materials and services.

. Missing from assurances that a thorough review of Library adequacy has been conducted are: new endowed chairs, new centers, new institutes.

. Submissions for changes to the Senate Curriculum Committee are accompanied by an assessment of library resources and services. (It is likely that this assessment has been pro forma rather than real; however, the Senate Curriculum Committee recently announced closer scrutiny of Library materials needed in light of the serials problem.)

4. Attempts to change the scholarly communication system

. The Library has been working with other research libraries in Canada and the United States and with the academic community in general to discourage transfer of copyright to commercial publishers and to examine to "publish or perish" syndrome.

Q 31. What are other academic research libraries doing?

Some have cancelled or are planning to cancel journals. Some have received funds to help them in the short term, while long term solutions are being developed. Some are starting from a higher advantage point because they have larger budgets.

The Association of Research Libraries and librarians have made this crisis of serials inflation a high priority. Activities include: meeting with publishers, tracking the size of the increase and analyzing why, funding an Office to deal with this problem, meeting with academic associations and the American Association of Universities and obtaining their attention and involvement.

Library agencies are experimenting with publishing electronic serials.

That other libraries seem to be cancelling the more unique and lesser used serials and keeping the same core serials can either pacify or alarm us. We can say, "Everyone is having to do this difficult, unpleasant and inevitable thing of cancelling."

See Appendix 9, report on the Andrew W. Mellon Foundation study.

Reports indicate cancellations by ARL libraries of \$3 million in 1991, \$7 million in 1992, and \$13 million in 1993.

See Appendix 10, "Serials Cancellations Survey Shows Steepening Trend".

Q 32. What are possible University strategies for the Library collections?

So long as the prices of serials and monographs keep on increasing at a rate significantly higher than the increase in the University's general purpose budget, we will not have an "optimal" solution! One-time additions to the collections budget are only temporary relief. This is a long-term crisis. There are, however, certain strategies the University could adopt. See Graph 6 for changes in CPI, periodical prices and exchange rates affecting the acquisitions expenditures.

Short Term Strategies:

We need to take action in April 1993. We need to cancel serials or be certain that we have the funds to pay for the anticipated increase in price. A three-pronged approach to lessen the negative short term impact while we develop long term solutions could involve three major areas and look like this:

Library Options:

. Trace to the extent possible the increase to large academic areas, e.g., humanities, social sciences, life sciences, other sciences, and differentiate the inflation amounts that need to be cancelled.

. Use a larger amount of the stabilization fund, realizing that this is one-time money and that we will have reduced our ability to deal with



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QUESTIONS AND ANSWERS ON THE UBC LIBRARY ACQUISITIONS CRISIS

unexpected, sharp, increases in the currency rates and we will only have deferred the problem for one year. Use every opportunity to transfer one time cash savings to this fund.

- Work with individual areas and change the ratio of funds spent on monographs, slightly.

- Use some of the funds intended for new program support.

- Discuss with specific faculties and departments various options of cancelling serials, and if any cost sharing for services and acquisitions is feasible.

- Pay the serials inflation bill by eliminating Library staff positions and Library services. (The Library is already planning a 10% reduction/reallocation over the next two years, so this option would involve reductions in the range of 10% to 20% of existing staff positions.)

- Charge for more Library services, especially to the non-UBC community.

University Administration Options:

- Continue to support the Library as it has in the past within the limits of the constraints upon the University budget.

- Continue the sensible, three part formula addressing currency fluctuation, inflation, and new program development with some enhancements:

- Encourage the Library to include additional endowments for collections in its fund-raising priorities.

- Peg the inflation increase to the Canadian Consumer Price Index, instead of the GPOF increase to the S&E budgets.

Dean and Faculty Options:

- Support increases to the serials budget such as:

- Include a component for Library materials in research grant and contract

proposals to ensure that researchers have access to the serial literature and that their published research results are available for future researchers, and scholars.

- Examine the impact of new academic programs on Library acquisitions, and proactively include enhancement of acquisitions budget when new programs and endowed chairs are established.

Mid Term Strategies:

Implementing the Library Strategic Plan will lead to a restructured and more cost-effective Library. Savings will also result after the move into the Phase I of the New Library Centre. Some of these savings can be reallocated into collections.

Long Term Strategies:

Work with other research universities through professional associations and with publishers on redesign of the scholarly communication system:

- (a) Continue to put pressure on the academic scholarly community to take back the control of journals/serials from commercial presses. Also to exercise similar pressures on professional and learned societies, to keep their inflationary cost increases close to the Consumer Price Index.

- (b) University presses should explore ways of enhancing their revenues; for example, through a parallel/complementary imprint for "trade-books". This may, in the long-term, permit university presses to become self-sufficient and hopefully profitable to subsidize scholarly publications.

- (c) University libraries in a region may work cooperatively to develop complementary collections and enhance the interlibrary loan services. Interlibrary loan charges must take into account the "capital" investments of larger libraries in space and collections. Current interlibrary loan charges financially discriminate against larger institutions.

(d) UBC Library in consultation with the Senate Library Committee and departments is reviewing its policies and developing a strategy for:

- * duplicate subscriptions
- * division between expenditures on monographs and serials
- * division of expenditures between Sciences and Social Sciences/ Humanities

- * identify "core" services versus "convenience" services and identify which services should be discontinued and which services should be cost recovered aggressively

- * circulation policies with respect to the length of lending period and "anchoring" of serials/journals

- * liaison with academic units with respect to new research initiatives and/or instructional programs. This should enable the Library to identify service and expenditure impacts on its operations early in the planning stages.

- * balance between the UBC Library as a "reference" library and as a "circulation" library. Since the research universities are under severe financial constraints, a major part of the Library services may have to be for reference services

- * role of technology in delivering all services including reference enquiries.

(e) In the funding formula for the Library collections, an essential component is the "Stabilization Fund". The University and Library will continue to work for enhancing this fund and at some stage treat it essentially as an endowment fund and only use interest earning when emergencies occur. It is useful to note that if the Library's annual collections budget is to be incremented by \$1 million, an endowment capital of approximately \$16 million is needed for the first year. For a perpetual annual

increase at this rate, additional \$16 million endowment capitals are needed in each of the subsequent years. In other words, an initial endowment capital of approximately \$150 million would be required to sustain the current rate of increases needed by the Library to maintain its current subscriptions for serials and purchase of monographs. Clearly, such a large endowment capital cannot be achieved in the foreseeable future.

In the immediate future, however, the Library will continue the consultation process with the Senate Library Committee and the campus community and identify the cancellations, internal budget reallocations, curtailment of services and cost recovery measures. In parallel a longer-term strategic plan is also being developed for collections and services.

Index to Graphs

Graph 1 Library Acquisitions Budget, 1984/85 to 1992/93

Graph 2 Library Acquisitions Expenditures, 1972/73 to 1991/92

Graph 3 (not shown) UBC in ARL Ranking

Graphs 4a-4g (4g not shown) Acquisitions vs. Library Operating Costs, and Acquisitions vs. Total University Expenditures

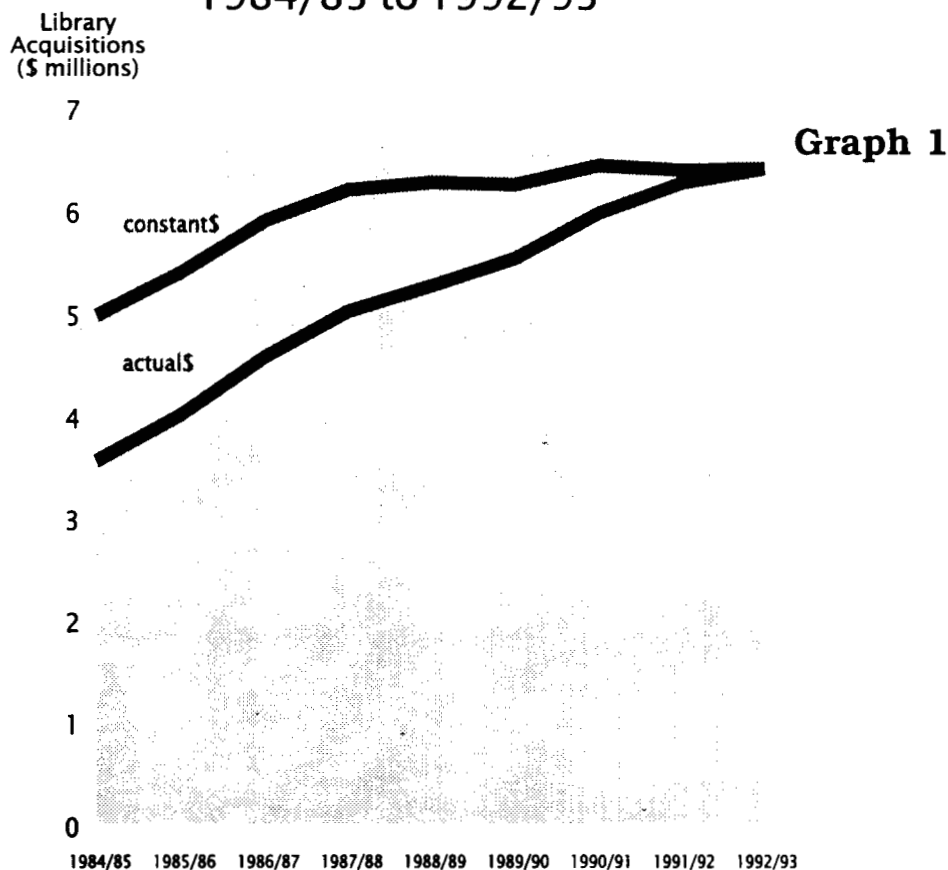
Graph 5 (not shown) Student, Faculty, and Library Staff Growth - Scaled Comparison

Graph 6 (not shown) Indicators of Library Acquisitions Costs

PLEASE NOTE: Some of the graphs and all of the appendices as mentioned in the above text have been omitted from this reproduction. For more information please contact Jean-Philippe Wilmshurst at 822-3310.

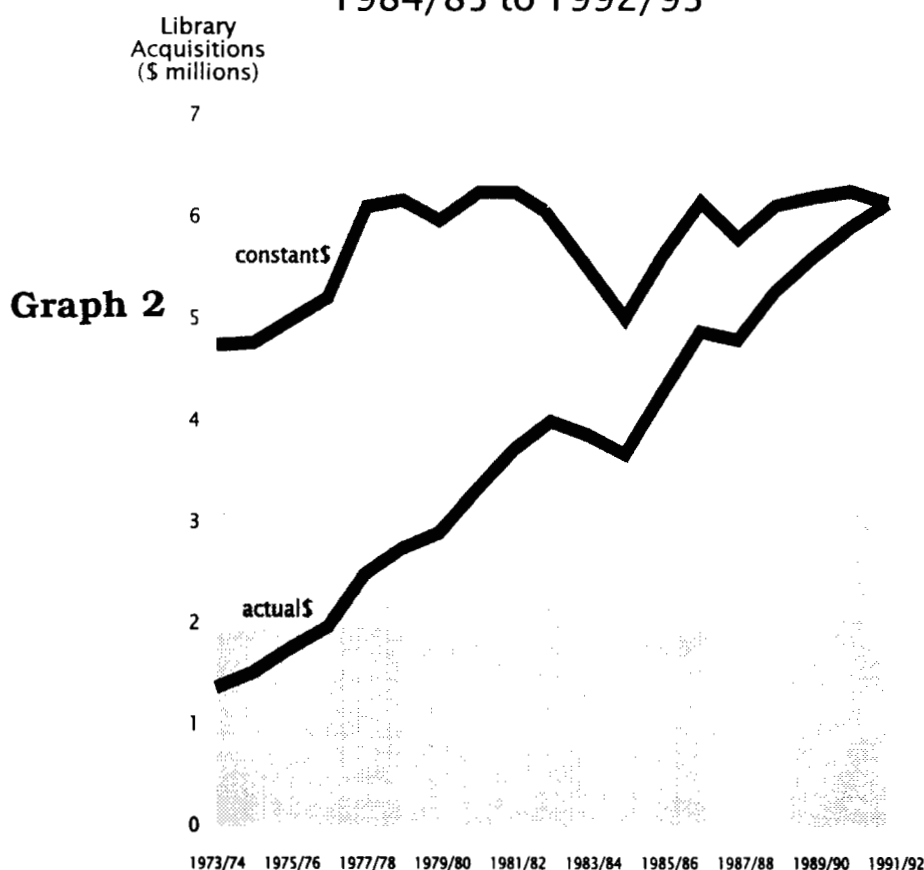
Library Acquisitions Budget

1984/85 to 1992/93

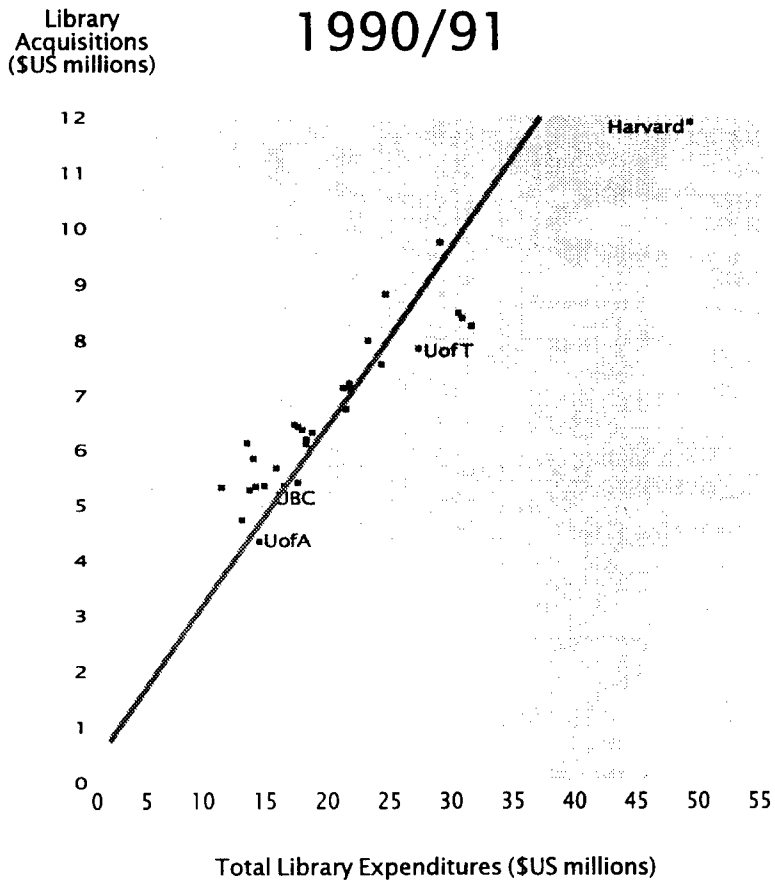


Library Acquisitions Expenditures

1984/85 to 1992/93

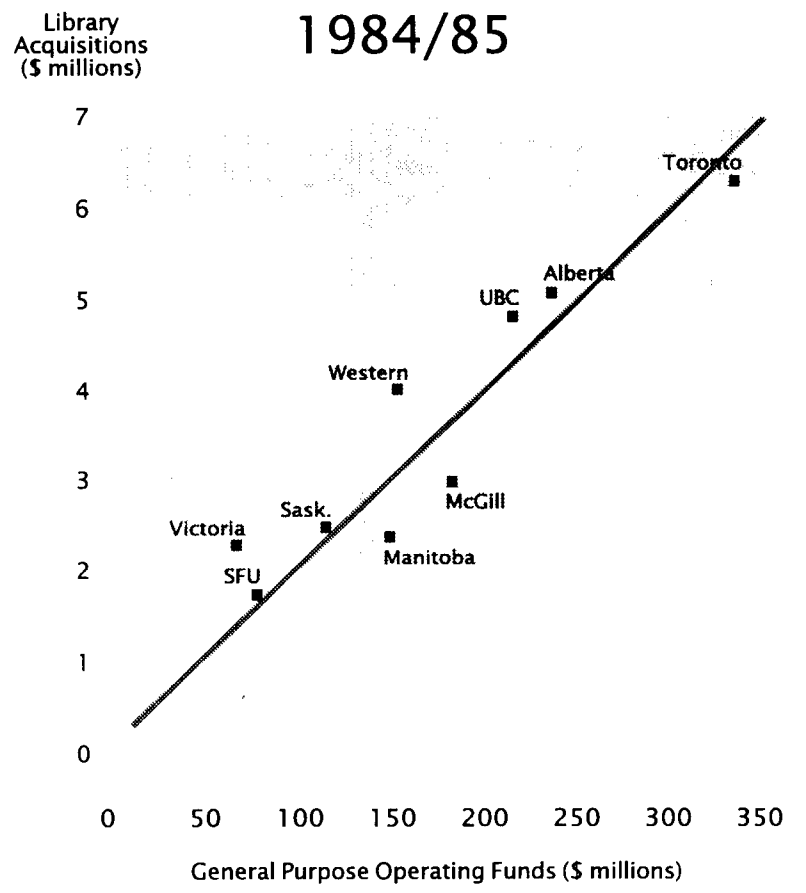


Library Acquisitions



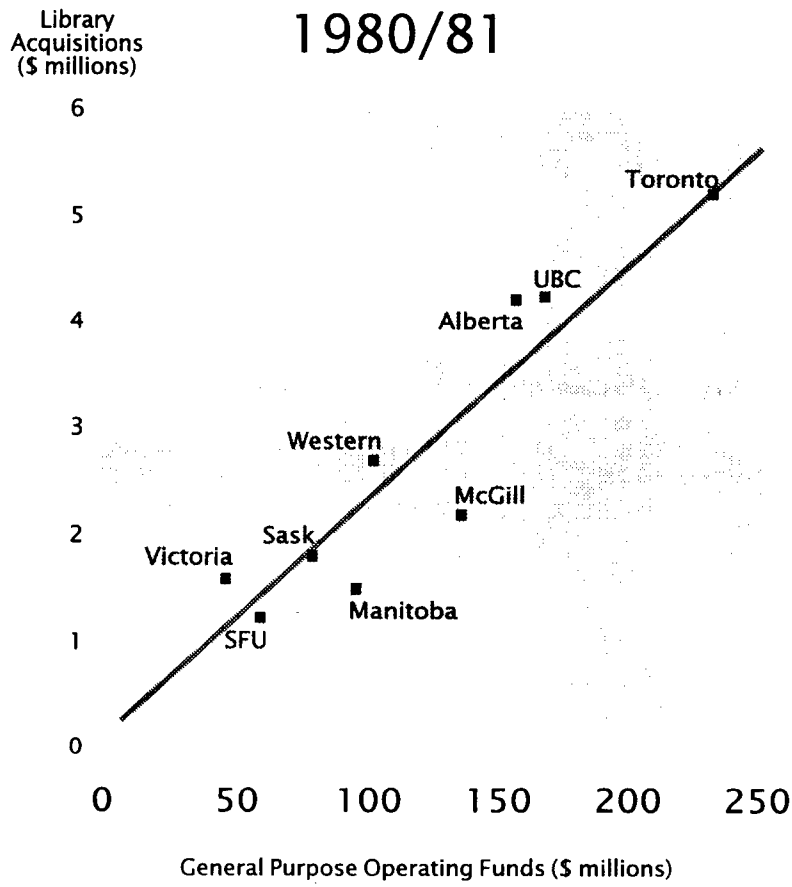
Graph 4a

Library Acquisitions



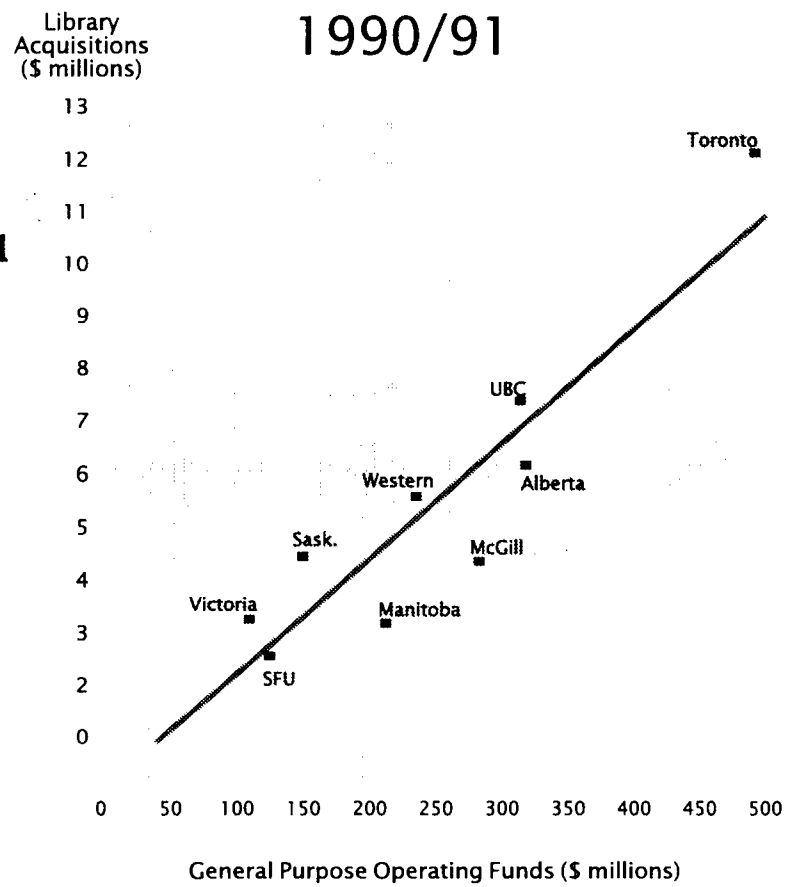
Graph 4b

Library Acquisitions



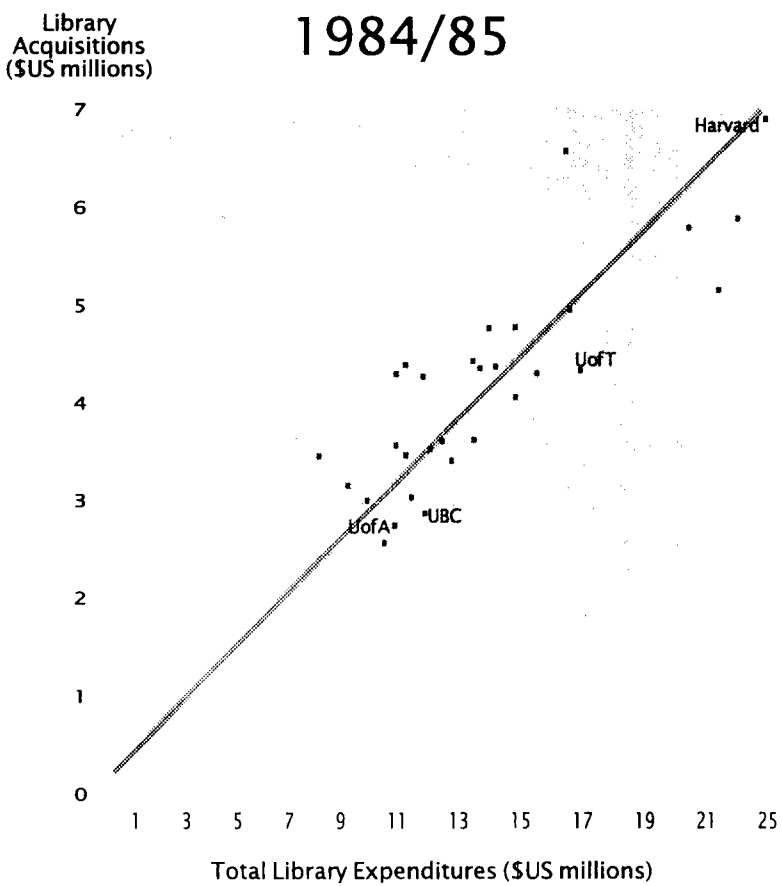
Graph 4c

Library Acquisitions



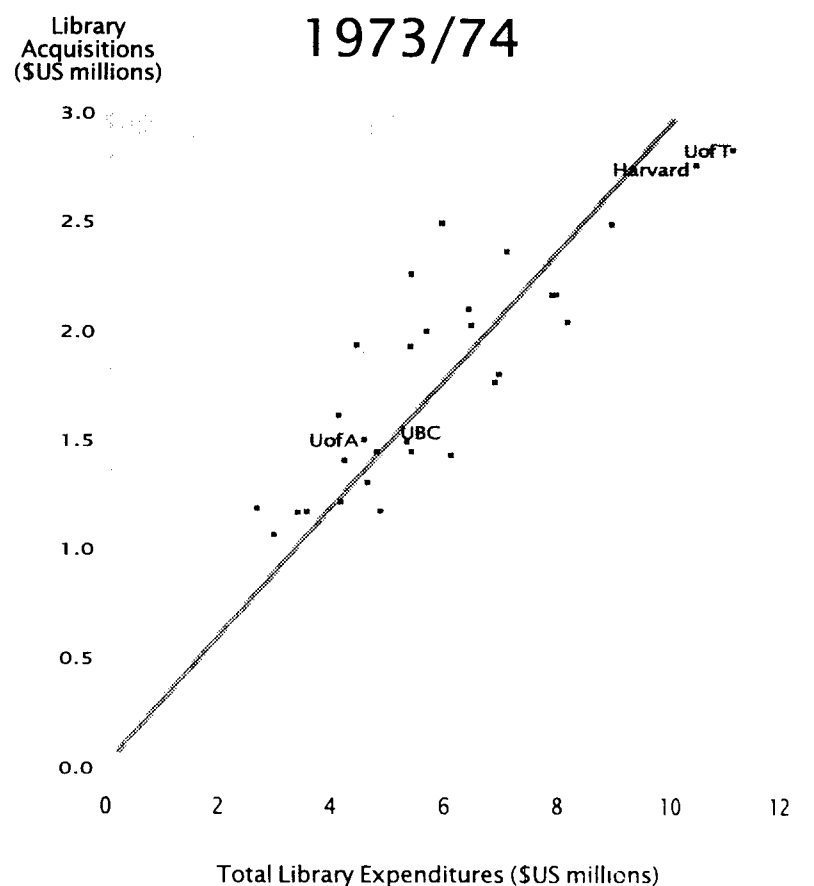
Graph 4d

Library Acquisitions

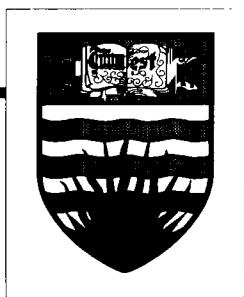


Graph 4e

Library Acquisitions



Graph 4f



A GUIDE TO "REPOSITIONING" AT UBC

Department of Human Resources

POSITION PAPER FOR REVIEW AND DISCUSSION PURPOSES, PLEASE DIRECT COMMENTS TO PETER LEE OR MARCELLE SPRECHER, c/o HUMAN RESOURCES.

WHAT IS REPOSITIONING AND WHY IS UBC GETTING INVOLVED?

It is clear that UBC must take actions to respond to major changes in the environment - one in which resources are increasingly limited and harder to come by. Repositioning is a major University initiative to redesign the ways in which we provide services to confront significant budget problems while meeting UBC's objective of excellence in research and teaching. That is, supporting core academic purposes requires a critical review of non-academic roles to determine which roles are the most essential, and then to make those work as well as they possibly can in a cost-effective manner.

As we look to the future, UBC's continued success depends on our ability to provide a stable support environment and thus we must embark upon a significant effort to restructure and streamline our operating processes and the services provided to faculty and students. This repositioning effort is much more than a simple budget cutting exercise, and should be seen as the beginning of a fundamental change in UBC's administrative culture as well as a journey of continually improving the way UBC conducts its business.

It is imperative that this repositioning exercise involve input from and consultation with the whole UBC community.

WHAT STRATEGY WILL UBC ADOPT?

The way we conduct much of the University's business is perceived to be slow and cumbersome - problems that drive up overall expenses. By streamlining the way we do things and simplifying the staff structure, we intend to save money and improve service. In some cases, this may mean "working smarter"; in other cases, it may mean trimming and/or dropping some types of services altogether, or having these services delivered on a decentralized basis.

However, we recognize that our people continue to be our most important resource at UBC. Therefore, the actions that must be taken to deal with budget constraints should be structured in such a way that decisions to reduce staff positions result in layoffs as infrequently as possible. Attrition, early retirement, flexible work options and other means must be considered before layoffs occur. In short, we must exhaust the limits of all our creativity to avoid the loss of our people. However, should layoffs be necessary, UBC will make a concerted effort to assure a fair process that provides adequate assistance to those who will be leaving. Moreover, any changes in operations and staffing will be made in accordance with the contracts and/or commitments covering those respective employees.

In this document, you will find information regarding a variety of measures that provide options other than traditional layoff practices.

WHAT PROCESS WILL UBC FOLLOW?

Accomplishing these outlined objectives will require participation, creativity, and understanding from every member of the community. A Repositioning Steering Committee (RSC), consisting of senior University officials, will lead and oversee this effort by creating a clear vision and identifying specific targets. This will result in the creation of task forces and project teams within vice-presidential organizational units whose challenge will be to achieve those targets. Staff from the Department of Human Resources will be assigned to work with these task forces and project teams to facilitate the repositioning process as well as provide operational guidance as required. Regular reports from the various task forces regarding specific implementation plans will be submitted to their respective Vice-President with final review by the Repositioning Steering Committee.

The Repositioning Steering Committee will be articulating a clear strategic plan including specific objectives and a strategic policy position to provide an integrated framework for this repositioning effort.

As outlined, this effort is much more than a simple budget cutting exercise and should be seen as a long-term process to "re-engineer" services and programs at UBC so that the University becomes a responsive learning organization that is focused on continually improving the way it delivers programs and services.

WHAT WILL REPOSITIONING INVOLVE?

The repositioning exercise should be seen as a journey incorporating a number of activities in different phases, including planning for repositioning, implementing identified strategies, and rebuilding efforts after the repositioning has taken place.

Preliminary Planning Activities

Initially, it is essential to plan for repositioning by clarifying objectives and services of the particular area and designing the repositioning strategy for the unit, keeping in context potential negative effects of high levels of employee uncertainty and anxiety. Specific interventions include:

- defining the new vision/key goals and/or services of the unit;
- determining the extent of reduction;
- developing communication strategies such as unit-wide communication plans to present to employees outlining the reasons for required workplace adjustments and repositioning;
- selecting a pre-designated repositioning team, which should include all levels of staff from the respective unit, to facilitate the process and ensure input is obtained from all relevant employees in the unit;
- establishing support systems at the individual and group level.

Implementing Identified Strategies

These activities involve implementing the identified strategies which could include the potential displacement and reduction of staff. At this stage, unit heads must consider ways to maintain credibility within the unit and yet

understand that employees may likely experience stress symptoms such as burnout, anger and resentment. Unit heads should recognize that this may be a difficult period of transition for many, calling for high levels of understanding and sensitivity towards employees. Specific interventions at this stage include:

- training for unit heads/managers on implementing repositioning plans;
- providing clear, candid and complete information to employees regarding the entire repositioning effort through individual and/or group meetings between managers and employees;
- providing outplacement opportunities to employees terminated as a result of repositioning including career planning and individual and/or family counseling, financial planning;
- providing workshops on stress and change management.

Rebuilding Activities

These critical activities are aimed at re-energizing and motivating employees who, at this stage, may experience and display low morale, low productivity, lack of commitment and general confusion. Specific interventions include:

- clearly communicating the vision and new objectives of the unit;
- providing training and re-training programs for those employees who have to take on new responsibilities and ensuring that new jobs or duties are clearly defined and fully understood;
- using work teams to streamline procedures, improve quality, and move from venting to action;
- providing regular feedback on the job;
- demonstrating a real interest in rebuilding morale through employee empowerment and involvement in the new unit.

Given the above repositioning stages, it is essential to bear in mind that the repositioning effort is a long-term strategy for UBC. It is acknowledged that the initial challenge will be to develop plans to deal with the anticipated 1993/94 budget cuts. However, more importantly, UBC must look beyond this initial repositioning stage and meaningfully review how it will continue to streamline and realign programs and services to meet ongoing, future challenges.

WHAT STRATEGIES CAN BE CONSIDERED?

This section provides a framework of strategies for unit heads to consider for their specific units in order to achieve outlined repositioning objectives. This guide presents a number of major strategies that provide other cost effective alternatives other than the traditional layoff approach which will help units meet their objectives and ensure fair human resources practices. It is important to keep in mind that the strategies outlined are options for consideration and not entitlements. Implementation of these strategies should be discussed with officials from the Department of Human

Resources and may also require approval from the Repositioning Steering Committee. The major strategies include (see detailed matrix charts):

- Strategy #1: Program Service Management - managing the effectiveness, size or scope of services and programs.
- Strategy # 2 : Work Schedule Management - adjusting FTE allocation to meet program or service objectives.
- Strategy # 3: Turnover/Attrition Management - managing permanent change to the composition of the workforce.
- Strategy # 4: Hiring/Recruitment Management - identifying and hiring candidates for new or vacated positions.
- Strategy # 5: Classification and Compensation Management - identifying the appropriate level of job classification and remuneration for work performed.

Consultation

In using the matrix, an important guideline regarding "consultation" should be kept in mind. The purpose of consultation is to increase the flow of ideas and alternatives, to test the feasibility of alternatives, and to build a degree of participation leading to ownership or acceptance of the decisions finally made. In this repositioning effort, the following groups should be consulted:

- the unit itself - through processes appropriate to each area, members of the designated unit should have opportunities to provide ideas and advice on alternatives, especially regarding balancing the work remaining with the reduced capacity of the unit;
- other functionally related units - as necessary, units whose responsibilities may be affected by your unit's alternatives;
- clients - where actions will modify, reduce or eliminate services, client groups should be consulted for feedback.

How To Use Strategies Matrix :

The attached matrix is most useful after you have spent time carefully reviewing and clarifying your unit's key objectives, programs and services through appropriate data analysis and consultation with key stakeholders. When using the matrix, keep in mind the following:

- Review action steps and associated pros and cons.
- Draft an action plan that incorporates as many of the options as possible considering the cost/benefit to your unit.
- Examine the time frame to determine if the reposition/reduction goals can be met in a timely fashion.
- Consult with appropriate employees, bargaining agents, clients, and other stakeholders.
- Discuss the plan of action with your HR Generalist to ensure all alternatives are fully considered especially before authorizing the provision of layoff or termination notice.



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STRATEGY #1

PROGRAM SERVICE MANAGEMENT: Managing the effectiveness, size, or scope of services and programs to meet identified needs.

ACTION STEP	PROS	CONS	TIME-FRAME **
*1. Reduce/eliminate non-essential service/program or consolidate a service or program that results in cost savings in salaries and benefits. (Review opportunities for cost-recovery services).	<ul style="list-style-type: none"> - Better reallocation and re-alignment of limited resources through work flow restructuring and job re-engineering. - Efficiencies of scale. - Challenge old assumptions. - Involvement of employees 	<ul style="list-style-type: none"> - Loss/and/or reduction of staff, programs and services. - Short-term loss of productivity during retraining/restructuring. 	Long-term.
2. Hire for 9-10 month appointments where appropriate and/or convert existing 12 month positions.	<ul style="list-style-type: none"> - Saves salaries and benefits for 2-3 months. - Most effective for new hires. 	Difficult to convert 12 month employee.	Short-term.

Criteria to consider

- * • Weigh the effect of service reduction on other areas - no point cutting services that have to be taken on by another area.
- Assess the effect on diversity/equity/human rights to ensure you are maintaining your programs.
- Assess the rights and obligations of staff affected.
- Review centrality of the program to the mission of the unit/university, i.e., the extent to which the program is essential to the objectives of the unit and the university's profile.
- Review the quality of the program in relation to other programs.
- Assess the demand for program service from "clients".
- Evaluate the cost of the program/service relative to the cost of comparable programs both at UBC and outside UBC.
- Review the potential redistribution of resources that will be available as a result of termination/reduction of the program/service.

- ** Long-term = 7 months or longer to implement.
Short Term = 1-6 months to implement.

STRATEGY #2

WORK SCHEDULE MANAGEMENT: Allocation of FTE to meet program or service objectives.

ACTION STEP	PROS	CONS	TIME-FRAME **
1. Develop programs to support leaves of absence without pay but with continued benefits for a specified period of time.	<ul style="list-style-type: none"> - Re-examine priorities - Management flexibility to develop programs that are voluntary/involuntary and scaled to salary level. - Retention of workforce. - Controlled reduction. 	<ul style="list-style-type: none"> - Loss of productivity. - Critical services need to stay open. 	Long-term.
2. On a permanent or temporary basis, reduce hours where workload allows. Improve the management of overtime to contain or reduce costs.	<ul style="list-style-type: none"> - Immediate cost reduction. - Management flexibility to develop voluntary and involuntary reductions through employee participation. 	<ul style="list-style-type: none"> - Potential for increased temporary help. - Loss of productivity. - Reduction of service. 	Short-term.
3. Explore possibilities of work redesign and innovative cost-effective uses of technology.	<ul style="list-style-type: none"> - Efficiencies in work processes. - Re-examine core business. 	Reduction of staff/and or elimination of functions.	Long-term.
4. Review and reduce through a "delayering" approach the number of "middle management" employees required to meet program/service objectives.	<ul style="list-style-type: none"> - More effectively balance supervisor versus employee ratio. - Efficiencies in work processes. - Long-term cost savings. 	<ul style="list-style-type: none"> - Additional workload for remaining supervisors. - May eliminate levels of skill and job content that would be effective over the long-term. - May create conflict among respective management employees. 	Long-term.
5. Utilize temporary layoffs through sessional positions where workload allows and as per collective agreement.	<ul style="list-style-type: none"> - Controlled costs. 	<ul style="list-style-type: none"> - Loss of productivity. 	Short-term.

- ** Long-Term = 7 months or longer to implement.
Short Term = 1-6 months to implement



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STRATEGY #3

TURNOVER/ATTRITION MANAGEMENT: Managing permanent change to the composition of the workforce.

ACTION STEP	PROS	CONS	TIME-FRAME **
1. Resignations: - Examine resignations where position can remain unfilled. - Examine resignations where a cost savings can be achieved by an equally qualified lower cost replacement.	- Opportunity to hire staff with new skills (possibly at lower salary). - Where positions are not filled, opportunity to save or redirect funds.	- Training costs when hiring less experienced staff. - Loss of skilled staff.	Short-term.
2. Early Retirements: *** Examine early retirement options such as special early retirement or regular early retirement.	- Voluntary. - Opportunity to hire staff with new skills and/or lower cost. - Capture funds and save or apply to repositioned environment.	- Cost - Uncontrolled departures. - Retraining costs.	Long-term.
3. Buy Outs :*** - Offer to buy out positions on a voluntary basis and capture funds (e.g. flat dollar bonus). - Can link with pension incentives.	- Voluntary. - Unit Head approval required. - Can apply future savings to repositioning funding pool.	- Retraining costs. - Less experienced replacements. - Loss of skilled staff. - Self funded by the department.	- Long-term to fund. - Short-term to administer.
4. Implement permanent layoffs as a result of a reduction or elimination of a service/ program through reorganization.	- Appropriate management decision/control.	- Cost of severance may be significant. - Position cannot be replaced/filled.	Long-term.
** Long-Term = 7 months or longer to implement. Short Term = 1-6 months to implement.		*** For employees who are at least 55 years of age with at least 20 years of service in the UBC Pension Plan, UBC will pay up to 12 months of salary and benefits. If there is interest, incentives will be developed for employees less than age 55 with less than 20 years service. Unit head approval is required on all incentives	

STRATEGY #4

RECRUITMENT MANAGEMENT: Identifying and hiring candidates for new or vacated positions.

ACTION STEP	PROS	CONS	TIME-FRAME **
1. Implement a hiring freeze for a specific period of time. Use this time to plan reposition strategy.	- Immediate one-time savings. - Permits retaining current staff.	- Loss of productivity.	Short-term.
2. Implement a hiring reduction or slowdown for a specified period.	- Evaluate priorities. - Manage staff size.	- Additional workload for remaining staff. - Increased overtime and training expense.	Short-term.
3. Reduce cost of temporary help or consultants when existing permanent staff can be utilized.	- Better use of existing staff - More cost effective	- May increase staff workload. - Could reduce expertise which outside help can bring in.	Short-term
4. Reduce reliance on or cost of external search firms.	- Use existing expertise at UBC.	- May be more time consuming.	Short-term.
5. Reduce interview and relocation costs by recruiting locally when appropriate.	- Immediate savings.	- May be more difficult to recruit if these restrictions are in place.	Short-term.
** Long-Term = 7 months or longer to implement. Short Term = 1-6 months to implement.			



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STRATEGY #5

CLASSIFICATION/COMPENSATION MANAGEMENT: Identifying the appropriate level of job classification/remuneration for work performed.

ACTION STEP	PROS	CONS	TIME-FRAME **
1. Review and take action on vacant jobs that may be appropriate for downward classification with reduced pay.	<ul style="list-style-type: none"> - Immediate and long-term cost savings. - Control inflated salary and classification. 	<ul style="list-style-type: none"> - May eliminate levels of skill and job content that would be effective over the long-term. - May create conflict with respective unions. 	Long-term.

** Long-Term = 7 months or longer to implement.
 Short Term = 1-6 months to implement.

WHAT TYPES OF SPECIFIC WORK OPTIONS CAN BE CONSIDERED?

Early Retirement Options

The UBC Staff Pension Plan allows a member to retire and receive an immediate pension at any time from age 55 to 65. Age 65 is the normal retirement date. Members retiring between age 55 and 65 with at least 20 years pensionable service are eligible for "special early retirement" incentives under the pension plan. The incentives include a smaller or no reduction in benefits for early retirement and an increased annual benefit paid to age 65 (bridge benefit). If a member retires before age 65 with less than 20 years service, their pension benefit is reduced to account for its receipt over a longer life. Qualifying for an early retirement pension gives the member more choices. Members may choose to start or defer their pensions. In either case, members may seek other employment or self-employment.

When members retire from the University, they may apply for medical and dental coverage through the Post-Retirement Benefits Group Plan. This Plan will cover the member for MSP (hospitalization), extended health benefits, and dental. The retiree covers the full cost of the premiums. The Group Life Insurance (and Optional Life) coverage ceases on retirement. Members may elect to convert their group life term insurance to an individual term insurance by applying to the carrier within 31 days of retirement.

The Pension Administration Office (now located in the Old Administration Building) can be contacted for more information and/or counselling regarding early retirement options.

Flexible Appointments

A number of flexible work options are available to offer staffing and incentive

alternatives for employees (see matrix). It is critical during this time of transition, and as the nature of the workplace changes, that UBC try to make the work environment and employees' needs as compatible as possible. An initial assessment of job design should precede all considerations for instituting work options. These options are offered with the following considerations in mind:

- these options are opportunities and not entitlements and offerings should be based on operational and customer needs at the discretion of the unit head;
- selection of appropriate candidates should take into consideration departmental needs, health and safety consequences, equity and diversity issues, employee performance and productivity;
- implementation of any of these

options should come after careful review with the staff member of the nature of the option, expectations of performance, and the logistics of the transition - a trial period is strongly recommended with regularly scheduled reviews;

- the effect of legal liabilities and funding source restrictions should be carefully reviewed;
- when evaluating options, unit heads and respective employees should examine the effect on employees' benefits;
- any modified work arrangements for employees covered by a collective bargaining agreement must adhere to any applicable provisions covered by the respective collective agreement - consultation with your HR Generalist is advised before entertaining considerations or implementing changes.

WORK OPTION	BENEFICIAL USES FOR:			CONSIDERATIONS FOR:		
	i) Workplace	ii) Customer	iii) Employee	i) Workplace	ii) Customer	iii) Employee
<p>VOLUNTARY REDUCTION</p> <p>Reduced Workload: Allows for staff under certain circumstances (55 years of age and 15 years of service) to reduce their FTE appointment while maintaining full pension and benefit entitlements.</p> <p>Part-time Work: Allows for reduction of the daily, weekly, monthly, or annual period of work required of the position. Employees receive salary proportionate to the reduced time. Benefits can typically be maintained with employees paying their share of costs. UBC continues to pay its share provided minimum time commitments are met.</p>	<ul style="list-style-type: none"> * Retains outstanding highly skilled employees. * Improves employee morale, commitment and productivity. * Fosters a better match between workload and worker availability. * Creates opportunity to cross-train or provide internships to staff covering for another employee during the leave period. * Can apply savings to repositioning funding pool. 	<ul style="list-style-type: none"> * Better match between workload and customer service availability. 	<ul style="list-style-type: none"> * Can improve employee morale, commitment and productivity by accommodating management's and employee's needs and/or family responsibilities. * Undisturbed time to work or increased personal time. 	<ul style="list-style-type: none"> * Requires supervisor's time to manage and redistribute the workload. * Key people may be unavailable during certain times. * Potential for inadequate employee communications, clear performance expectations, and accountability. * May require cross-training to ensure sufficient office coverage. * Collective agreement provisions (where applicable) regarding hours of work that have to be adhered. 	<ul style="list-style-type: none"> * Hours of available service may be a negative factor and affect productivity. 	<ul style="list-style-type: none"> * Scheduling staff may be difficult as responsibilities may need to be absorbed by another employee. * Supervisor/employee support needs to be carefully considered. * Ensure adequate employee communications, clear performance expectations and accountability, scheduling of meetings, coordinating work among employees, and/or keeping track of hours. * Benefits' impacts.



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WORK OPTION	BENEFICIAL USES FOR:			CONSIDERATIONS FOR:		
	i) Workplace	ii) Customer	iii) Employee	i) Workplace	ii) Customer	iii) Employee
<p>LEAVES An authorized period of time away from work with loss of salary but without loss of employment rights. Variations include:</p> <p><u>Developmental Leave:</u> leave granted to enable an employee to pursue job related education/training. Employees receive full benefits but must pay employee's share.</p> <p><u>Personal Leave:</u> Can allow for predictable leave periods and are frequently scheduled during times that coincide with school breaks. Employees receive full benefits if they pay employee and UBC share of costs.</p> <p><u>Seasonal Employment:</u> Provides a pre-determined work schedule whereby work occurs only during certain periods of the year (e.g. sessional appointments or the summer off with no pay).</p> <p><u>Deferred Leave:</u> Allows employees to defer a part of their salary tax-free so that when employees take leave, they will continue to receive salary. This option requires government approval and will require consultation with your Human Resources Generalist.</p>	<ul style="list-style-type: none"> * Retains outstanding highly skilled employees. * Expands the work force. * Improves employee morale, commitment and productivity. * Results in better trained employees through educational leave. * Fosters a better match between work load and worker availability. * Reduces cost in comparison to retaining a full-time employee. * Creates an opportunity to cross-train or provide internships to staff covering for another employee during the leave period. 	<ul style="list-style-type: none"> * Better match between workload and customer service availability. 	<ul style="list-style-type: none"> * Improves employee morale, commitment and productivity. * Accommodates management's and employees' needs. 	<ul style="list-style-type: none"> * Requires supervisor's time to manage and redistribute the workload. * Technical or highly specialized positions may be difficult to fill during leave period. * Cross-training of replacement may cause temporary reduction in productivity. 	<ul style="list-style-type: none"> * Decreased or eliminated services may result during leave. 	<ul style="list-style-type: none"> * Protection of jobs or employment rights of employee on leave. * Benefits' impacts.

WORK OPTION	BENEFICIAL USES FOR:			CONSIDERATIONS FOR:		
	i) Workplace	ii) Customer	iii) Employee	i) Workplace	ii) Customer	iii) Employee
<p>JOB SHARING A program wherein two employees voluntarily share the responsibilities of one full-time position with salary and benefits pro-rated depending on percentage time worked. Rather than the job being part-time, each of the employees who share a specific position are part-time. Commitment can be 50/50, 60/40, 70/30 or any variation thereof.</p>	<ul style="list-style-type: none"> * Reduces employee absenteeism, tardiness turnover. * Retains outstanding committed employees who need to work less than full-time. * Combines the skills and experiences of two people to meet the exact needs of one position. * Allows the department to maintain a 1.0 FTE position. 	<ul style="list-style-type: none"> * Guarantees 100% customer service availability during regular working hours. 	<ul style="list-style-type: none"> * Allows for undisturbed time to work or increased personal time. * Improves employee morale, commitment and productivity by accommodating management's and the employees' needs and/or personal responsibilities. * Provides option for employee to train successor while "phasing out" of the department" and allows for smoother transition of new employees. 	<ul style="list-style-type: none"> * Requires time on supervisor's part for implementation to ensure compatibility of two respective individuals. * Co-workers must be supportive for the arrangement to work. * Ensure adequate employee communications, clear performance expectations and accountability, scheduling of meetings, coordinating work among employees, and/or keeping track of hours. * Confusion/inefficiency may exist for clients and colleagues due to the discontinuity of two people providing the same service. * Potential cost increase to support both employees' benefits. 	<ul style="list-style-type: none"> * Clients may experience confusion due to two people handling a single service or issue. 	<ul style="list-style-type: none"> * Requires maintaining compatibility between job sharers.



THE UNIVERSITY OF BRITISH COLUMBIA

A GUIDE TO "REPOSITIONING" AT UBC

WORK OPTION	BENEFICIAL USES FOR:			CONSIDERATIONS FOR:		
	i) Workplace	ii) Customer	iii) Employee	i) Workplace	ii) Customer	iii) Employee
<p>FLEXTIME General term referring to flexible work schedules that permit variable starting and quitting times within limits set by management. Typically, flexible periods are at either end of the day with a designated "core-time" set in the middle, during which all employees must be present.</p>	<ul style="list-style-type: none"> * Redesigns schedules for positions/work units that need broader or more intensive coverage by providing more staffing options. * Better organization of work due to concentration on core hours for meetings/calls etc. * Reduces employee absenteeism/tardiness/turnover. * Expands use of work space and equipment. * Tends to reduce overtime costs. * Expands recruitment pool, especially for specialty skill jobs. 	<ul style="list-style-type: none"> * Expanded service hours to accommodate client needs at irregular times. 	<ul style="list-style-type: none"> * Broadens employee skills, due to cross training. * Retains employees with valuable skills that no longer want to work a full schedule and/or typical working hours. * Accommodates employees who need undisturbed time to work or have special community needs. * Improves employee morale, commitment and productivity. 	<ul style="list-style-type: none"> * Collective agreement provisions regarding hours of work have to be adhered. * Supervisor/employee support needs to be carefully considered. * Potential for inadequate employee communications, clear performance expectations, and accountability. * May require cross-training time to ensure sufficient office coverage and temporary reduction in productivity. * Key people may be unavailable at certain times. * Supervisors must be willing to allow employees to work more independently. * May reduce cost effectiveness of productive time if higher level position expected to routinely cover for lower level position. 	<ul style="list-style-type: none"> * May not have services at the time they prefer. 	<ul style="list-style-type: none"> * May miss out on particular office events or meetings. * Providing coverage for colleagues may mean less time to do own job.

WORK OPTION	BENEFICIAL USES FOR:			CONSIDERATIONS FOR:		
	i) Workplace	ii) Customer	iii) Employee	i) Workplace	ii) Customer	iii) Employee
<p>COMPRESSED WORKWEEK Refers to a workweek that is condensed into fewer than five days. 9-day fortnight is a typical example of a compressed work week.</p> <p>* This option requires consultation with your Human Resources Generalist as collective agreement provisions have to be adhered to.</p>	<ul style="list-style-type: none"> * Useful to decrease cost of operating capital equipment. * Improved allocation of labour time. * Higher productivity due to fewer interruptions during typical office hours. * Reduces absenteeism, tardiness, turnover. * Computer access may be improved with on-line activity during non-peak hours. 	<ul style="list-style-type: none"> * Expanded service hours to accommodate client needs at irregular times, i.e., students or those in other time zones. 	<ul style="list-style-type: none"> * Can improve employee morale, commitment and productivity by accommodating management's and the employees' needs and/or family responsibilities. * Undisturbed time to work or increased personal time. * Accommodates employees' commuting needs. 	<ul style="list-style-type: none"> * Collective agreement provisions regarding hours of work have to be adhered. * Supervisor/employee support needs to be carefully considered. * Potential for inadequate employee communications, clear performance expectations, and accountability. * May require cross-training time to ensure sufficient office coverage and temporary reduction in productivity. * Key people may be unavailable at certain times. * Supervisors must be willing to allow employees to work more independently. * May reduce cost effectiveness of productive time if higher level position expected to routinely cover for lower level position. 	<ul style="list-style-type: none"> * Hours of available service may be a negative factor and affect productivity. 	<ul style="list-style-type: none"> * Scheduling staff may be difficult as responsibilities may need to be absorbed by another employee. * Supervisor/employee support needs to be carefully considered. * Ensure adequate employee communications, clear performance expectations and accountability, scheduling of meetings, coordinating work among employees, and/or keeping track of hours. * Ensure health and safety requirements are maintained. * Providing coverage for colleagues may mean less time to do own job.



THE UNIVERSITY OF BRITISH COLUMBIA

A GUIDE TO "REPOSITIONING" AT UBC

HOW WILL COLLECTIVE AGREEMENT PROVISIONS AFFECT REPOSITIONING?

Altering the current profile and composition of bargaining unit employees to achieve repositioning objectives will be affected by relevant provisions of the respective collective agreements. The attached matrix reviews obligatory provisions of key constituent groups. It is recommended that in application or interpretation of these provisions the University utilize a "correctness" test to its actions. Although more restrictive interpretations of applications could be "reasonably" or "fairly" arrived at, it is important that the University's actions not merely comply with contractual obligations but are also the correct action to take under the circumstances. Consequently, a close review of re-allocation plans should be conducted by the unit's senior management with assistance from the respective HR Generalist to ensure full consideration is given to employee, union local, department and University factors.

Furthermore, a prerequisite to administering transfer and layoff of provisions is a systematic review of fiscal obligations, service requirements and all expenditures before formalizing a plan involving the reallocation of human resources. Full consideration is given to alternative efficiency, cost saving or staffing measures that may arise through subsequent reviews with staff members or other public individuals on campus.

Any unit not conducting a full review may be vulnerable to criticisms of not having made reasonable efforts to reduce the effect on bargaining unit personnel.

HOW WILL THE UNIONS BE ADVISED OF REPOSITIONING ACTIVITIES?

Initially, meetings with all employee

group representatives will be held to share current information. Moreover, the Department of Human Resources will be inviting the unions to participate in regular repositioning meetings to discuss repositioning impacts and provide input to repositioning plans.

Regarding any specific unit's repositioning plans, the bargaining agent for employees affected by changes in number of hours worked, schedule of hours worked, employment status etc., will be informed of any such proposed actions. Should the changes affect a significant number of employees or effectively alter the manner in which a service is provided, adequate opportunity will be made available to the bargaining unit to comment on the proposed changes or to recommend alternative service delivery methods.

WHAT TYPE OF SERVICES WILL BE AVAILABLE FOR DISPLACED EMPLOYEES

A Re-employment/Relocation Centre (RRC) will be set up to coordinate the potential placement of displaced employees to other jobs within the University and will provide assistance to those who wish to widen their employment search beyond the University.

The official layoff letter initiates the placement process by referring the employee to the RRC Coordinator located in the Human Resources Department. The RRC Coordinator will make the individual aware of the services available.

Attendance at the layoff orientation sessions will begin the placement process. All employees notified of layoff are encouraged to attend so that they may learn of the various services available to help them achieve successful results in their job search. At these sessions, employees will not only learn how the

recruitment process at UBC has been adapted to accommodate the displaced worker but they will also hear about special workshops that will be offered.

One of the workshops will be a skills and interests assessment. This workshop will help identify the skills and interests of an employee and will help the employee to focus on personal values. This assessment will not only help the employee determine what to do next but will also assist the RRC Coordinator in matching a displaced employee's skills and interests with open positions at UBC. The other workshop is the job search programme. It offers practical "how to" seminars in resume writing, interviewing, and other job hunting skills. The information and practical know how gained from these sessions will increase opportunities for re-employment at UBC or elsewhere. A workshop on stress management techniques for employees will also be made available.

Another integral part of the RRC is the ongoing marketing of our displaced employees to the business community of the Lower Mainland. A data base will be established so that employers in the Lower Mainland can contact the RRC to either post their job opportunities or receive from the RRC Coordinator resumes of employees who have expressed interest in the type of work and/or have the skills required by the employer.

This initiative will not only assist UBC employees but will provide an opportunity for employers to recruit without the high cost of advertising.

Participation in the programs offered by the RRC does not guarantee a new job at UBC, nor does it guarantee employment outside the University. Rather, the programme is designed to prepare individuals for a job search. Within UBC, it emphasizes that serious efforts will be made to place as many displaced employees as possible.

WHAT TYPE OF TRAINING WILL BE AVAILABLE TO ASSIST DURING THIS PROCESS?

Staff from the Department of Human Resources will be involved in providing both general and specific support to the community. A number of change management activities are proposed including serving as a resource and guide to unit heads in facilitating the respective repositioning effort, as well as delivering a number of related training programs through the MOST Program. Specific training will include:

- workshops for unit heads/managers on change management, dealing with strategic and human resources planning issues;
- workshops for unit heads/managers on how to implement repositioning strategies such as "how to streamline";
- workshops for unit heads/managers on "how to communicate layoffs";
- workshops on "quality improvement";
- workshops on stress management.

HOW WILL EMPLOYEES AND THE COMMUNITY BE KEPT INFORMED?

There will be an organized effort to keep people informed and to allow input to the process. The Repositioning Steering Committee will provide regular updates through UBC Reports and special newsletters. Special meetings with unit heads/managers will also take place. More detailed communication plans will be developed through task forces and project teams created in each vice-presidential unit.

THE UNIVERSITY OF BRITISH COLUMBIA

Reduced Workload Responsibility Appointments: Staff Members

POLICY

Under certain circumstances, staff members who hold continuing full-time positions may be permitted to hold a reduced appointment while maintaining full pension and other appropriate specified benefit entitlements.

ELIGIBILITY

Where it is to the advantage of the University and to the staff member (mutual and voluntary), a reduced workload appointment may be considered for a member of the full-time continuing staff who is at least 50 years of age at the time of the request, and has had at least 10 years full-time continuous service at the University.

PRACTICE

1. Reduced workload appointments may reduce the daily, weekly, monthly or annual period of work required of the position.
2. Reduced workload appointments would not be considered below 50% of that established for the equivalent regular full-time position.
3. The actual salary received will be proportionate to the reduced time worked.

4. The employee's contribution to all benefit programs will be based on basic full-time salary (before reduction) with the exception of income replacement (long term disability) which will be based on actual salary received.

5. The University's contribution on behalf of the employee to the pension plan and other benefit programs will be on the same basis as #4 above.

6. The employee's salary will be subject to the normal salary reviews appropriate to the salary policy relating to the employee's classification, occupational group or relevant collective agreement.

7. Where an employee works a reduced workload on a sessional or similar arrangement, salary payments may be spread out over the year to provide twelve month's coverage.

8. Reduced workload appointments concluded under the above practices shall continue until retirement or termination as may be appropriate.

BENEFITS

Employees who have reduced time commitments may maintain pension and benefits participation as follows:

1. Pension Plan

Contributions and pension credits will be based on the basic full-time salary in each calendar year.

2. Long Term Disability Benefit

Premiums and benefits will be reduced in the same proportion as the reduction in the individual's time commitment.

3. Group Life Insurance

UBC premiums and employee coverage will be based on the full basic salary.

4. M.S.P., Extended Health, Dental Plans, Tuition Fee Benefit Program

Coverage and premium cost-sharing will be continued.

5. Sick Leave

Paid Sick Leave will be accumulated on a pro-rata basis in keeping with the individual's reduced time commitments. However, it should be noted that Sick Leave may only be used during a period when the member is normally scheduled to work.

6. Vacation

The member will receive a

proportionately reduced amount of vacation credit.

7. Paid Holidays

Paid holidays will be paid when they occur on a day in which the reduced workload person is normally scheduled to work, at the reduced level.

8. Canada Pension, Unemployment Insurance, Workers' Compensation

These benefits will be available according to the applicable government regulations.

PROCEDURE

All reduced workload arrangements must be approved in writing by the Dean (Academic Departments) or Department Head (Non-Academic Departments) and the Associate VP, Human Resources or designate. Details of the final reduced workload arrangement will be confirmed in writing and signed by the employee. Because of the technical and legal complexity involved in such arrangements, no arrangement will be considered complete until such a document has been prepared and signed.

In cases involving employees covered under collective agreements, permission must also be obtained from the union to reduce hours without the necessity of laying off and reposting the position.





THE UNIVERSITY OF BRITISH COLUMBIA

Early Retirement Incentive Program for Staff Age 55 and Over With Ten or More Years Service

POLICY

Effective May 20, 1993 to December 31, 1993 staff age 55 and over who hold continuing positions may be eligible for an early retirement incentive. The cost of the incentive is to be paid by the department of the eligible employee.

ELIGIBILITY

Where it is to the advantage of the University and to the staff member (mutual and voluntary) staff members age 55 and over with at least 20 years continuous service may be eligible for an early retirement incentive according to the following matrix:

Years from age 65 as at July 1, 1993	Retirement Incentive	Monthly equivalent of incentive
5 or more years	100% of Annual Base Salary = 12.0 months of Salary Continuance	
4 to 5 years	80% of Annual Base Salary = 9.6 months of Salary Continuance	
3 to 4 years	60% of Annual Base Salary = 7.2 months of Salary Continuance	
2 to 3 years	40% of Annual Base Salary = 4.8 months of Salary Continuance	
1 to 2 years	20% of Annual Base Salary = 2.4 months of Salary Continuance	
within 1 year	1/12th of Annual Base Salary = 1.0 months of Salary Continuance	

For example, if a member is 61 years and 3 months old on July 1, 1993 with over 20 years of service and their annual salary is \$42,000, the retirement incentive would be:

$\$42,000 \times 60\% = \$25,200$ or 7.2 months of salary continuance.

Staff members with less than 20 years of service but 10 or more years of service are eligible for a reduced early retirement incentive based upon the percentage of their years of service divided by 20 and applied to the appropriate age category in the above matrix.

For example, if an employee is 57 with 10 years of service, the appropriate age category is 5 or more years from age 65. The employee's years of service (10) divided into 20 equals 50%. The employee is eligible for 50% of 100% of their annual base salary (or 6 months of salary continuance).

PAYMENT OF SALARY & MAINTENANCE OF BENEFITS

The early retirement incentive is paid by salary continuance and may be spread over more months than the entitlement (for example - 12 months could be spread

over 24 months) as long as the entire amount is paid by normal retirement. Benefit programs would continue for the extended time period with any benefits based on salary levels adjusted downward in recognition of the reduced salary.

The employee will terminate or retire following the salary continuance. Benefits are maintained while on salary continuance as follows:

1. MSP, Extended Health, Dental and Tuition Fee Benefit programs.

Coverage and premium sharing will be continued.

2. Group Life Insurance.

UBC premiums and employee coverage will be continued.

3. Pension Plan

UBC and employee contributions and pension credits will continue.

4. Long Term Disability, Sick Leave, Vacation and Paid Holidays

Premiums and coverage under these programs will not be available.

5. Canada Pension, UIC, WCB

These benefits will be available according to the applicable government regulations.

PROCEDURE

All early retirement incentives must be discussed and approved in writing by the Dean (Academic departments) or Department Head (Non-Academic Departments) and the Associate VP, Human Resources or designate who will be responsible for approving any incentive in writing.

Details of the final early retirement incentive arrangement will be confirmed in writing and signed by the employee.

Because of the technical and legal complexity involved in such arrangements, no arrangement will be considered complete until such a document has been prepared and signed.

Those offered the incentive will have until the close of business on December 31, 1993 to accept. The department and employee will mutually agree on a date when the employee would cease work and commence salary continuance; such date may be after December 31, 1993.



THE UNIVERSITY OF BRITISH COLUMBIA

Employee-paid Benefit Top-Up Incentive for Staff Members Not Eligible for Reduced Workload

POLICY:

Effective May 20, 1993 to December 31, 1993 staff who reduce their hours of work through mutual agreement with their department(s) to accommodate budget reductions, will be eligible to maintain certain benefit programs based on the employee's full-time equivalent salary by paying the additional employee and/or UBC cost of those benefits.

ELIGIBILITY:

Where it is to the advantage of the University and to the staff member (mutual and voluntary), staff members less than age 50 or with less than 10 years service may be eligible to maintain certain benefit programs based on their

full-time equivalent salary by paying the additional employee and/or UBC cost of those benefits.

1. MSP, Extended Health, Dental, Tuition Fee Benefits

If employees reduce their work hours to a level that continues to allow them to be eligible for these benefits, regular coverage and premium sharing will be continued. Otherwise, the employee will be responsible for full payment both employee and/or UBC costs of these benefits.

2. Group Life Insurance

UBC will pay its share of the premiums based on the reduced salary level of the employee; the employee will

have the option to pay the additional premiums to maintain life insurance coverage based on their full-time equivalent salary.

3. Pension Plan

The University and employee will continue to pay contributions based on the reduced salary level; the employee can maintain full coverage by paying the additional cost of UBC and employee contributions based on their full-time equivalent salary.

4. Long Term Disability, Sick Leave, Vacation and Paid Holidays, Canada Pension Plan, UIC, WCB

These programs will be based on the reduced salary level.

PROCEDURE

All benefit top-up incentives must be discussed and approved in writing by the Dean (Academic Departments) or Department Head (Non-Academic Departments) and the Associate VP, Human Resources or designate who will be responsible for approving any incentive in writing. Details of the benefits top-up incentive arrangement will be confirmed in writing and signed by the employee. Because of the technical and legal complexity involved in such arrangements, no arrangement will be considered complete until such a document has been prepared and signed.

In cases involving employees covered under collective agreements, permission must also be obtained from the union to reduce hours without the necessity of laying off and reposting the position.

UBC REPORTS

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Black & white copy only

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*other sizes: \$14 per column inch

36,000 copies of UBC Reports are published monthly during the summer months and distributed on the UBC campus and in The Courier on Vancouver's West Side.

Classified advertisement: (GST included)

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Forum

The Solid Core: A Personal View

by Warren Stevenson

Warren Stevenson is an associate professor in the Dept. of English.

I assume Professor Rowan's article "The Challenge of Undergraduate Education" (UBC Reports, Nov. 12/92) was intended to provoke discussion, and it is in this spirit that I offer the following observations.

I myself have never taught in the Arts One program, although I think sufficiently highly of its aims and methods to have guided one of my daughters to its nurturing bosom - a bit of parental finesse which she did not, as it turned out, regret. Thus my remarks are offered with a modicum of friendly objectivity.

The central thrust of Rowan's polemic is doubtless dead right: "undergraduate education in North America, most inexcusably in the first two years . . . is a failure." The problem he addresses — that "the lower division lacks centre and integrity altogether" — could be symbolized by an inverted pyramid or "widening gyre." I also agree that the situation is getting worse instead of better, the current buzz regarding "interdisciplinarity" notwithstanding. Most of Rowan's models are "American" (i.e., United States) ones. I happen to have degrees from two Canadian universities and one in the U.S., so perhaps I can claim a certain ambience in this regard.

At Bishop's University, where I took my first degree in the early 1950s, and which based itself "on the Oxford plan," there was such a core.

Bishop's — at that time the smallest university in Canada, with a total enrolment of 295 students — required that every freshman take a course in "Divinity" (which most of us regarded with benign amusement, because among other things, the professor who taught the course once discovered an unmarked exam paper on the bottom of his parrot's cage).

Arts students were also required to take a course in either Greek or Roman civilization: These were offered in alternate years, and were both memorably taught by a professor who probably wouldn't get tenure now because he read everything from large, hand-written lecture notes and, being three-quarters blind, albeit blessed with a razor-sharp wit, had us read our papers to him in his office before deigning to put his mark on them.

A compulsory course in "Divinity" (i.e., the Bible) would no longer be practicable at such an institution as UBC, even if it were agreed that it was desirable. But a course in Comparative Religion (such as Religion 100) just might be, now that we have sown the libertarian wind

and are reaping the whirlwind. Such a course would take a synoptic look at the world's great religions: Buddhism, Hinduism, Judaism, Christianity, Islam, the Bahai Faith, and so on. Certainly the hunger for this kind of information presented in a scholarly and objective manner is there, as is the prerequisite "giant ignorance" (to borrow a phrase from Keats, who died an agnostic).

Similarly, there should be a compulsory course for Arts students in Classical civilization ("Classics 100"), whether Greek (where most of our best philosophic ideas, as well as

the forms of drama and democracy, come from) or Roman, or both. Let's not leave our students thinking that George Washington invented democracy as well as having been Canada's first prime minister, or that Shakespeare was the world's first great dramatist. As the late

Northrop Frye remarked, "At the centre of a liberal education something should get liberated."

I can still recall my sense of liberation when studying the Greek myths of Hades, which introduced me to the concept of irony without my being told so, and also when learning about Buddhism, which at that time I was inclined to prefer on a purely intellectual basis to Christianity.

The following poem by one of my students, which she wrote quite independently, expresses better and more succinctly than my prose the current and continuing malaise among our students:

The Paper Chase

*Pressed induction of the mind
Transubstantiation of the soul
Amalgamation of a kind
Unrelated to any whole
We conduct our lives
In this sinister arrangement
Balancing on knives—
Warp field containment*
(Linda Stiles/February, 1993)

In her accompanying note, Linda wrote: "As to the themes or messages of the poem, I have only two statements to make. One, I believe the indigestion that caused the poem to occur was directly linked to a conversation I had with three fellow students (one in Religious Studies, another in Biopsychology, and the third in Mathematics) about the tension of examinations, the somewhat ludicrous quest for good grades we were all embarked upon, and what we were all doing here in the first place. And two, the poem's original title was 'University Life'."

Perhaps it is time we stopped chasing, or pushing paper and started looking for ways of providing our students with what Professor Rowan so aptly termed "a sense of the whole."



Stevenson



Barry Gnyp photo

Summer Players

UBC Theatre students Rachel Cronin and Michael Shanks perform a scene from the UBC Summer Players production of *Wait Until Dark*, which runs through June and closes July 2 at the Dorothy Somerset Studio. Summer Stock shows at the Frederic Wood Theatre include *You're A Good Man Charlie Brown* and *What I Did Last Summer*. Call 822-2678 for ticket information.

Student wins award for noise abatement device

by Gavin Wilson

Staff writer

UBC student David Longridge thought there had to be a better way of curbing commercial airliner noise pollution as he watched a pilot fiddle with the throttle to minimize the roar of jet engines during takeoff.

When he returned to campus from his summer job at Boeing aircraft in Seattle, the Engineering Physics student designed and built a noise abatement flight deck aid as a class project for industrial research supervisor Harold Davis.

The device, a throttle attachment that acts as a guide for pilots, is now being evaluated by Boeing. It also won Longridge first prize in the undergraduate category of the Make it Green contest for innovative approaches to environmental technology developed at B.C.'s universities.

The contest was co-sponsored by UBC's Library Patscan service, which assists university-industry technology transfer with U.S. and Canadian patent searches, and VanCity Credit Union.

Longridge, who graduated last month, is now working full-time at Boeing.

"The objective was to encourage inventions for environmental conservation and to honour researchers working to develop clean and green industrial practices," said Patscan Manager Ron Simmer. "We hope to educate students and the public at large so that we can make the tools to preserve the earth."

First prize in the faculty member category went to Prof. Robert Evans, Dept. of Mechanical Engineering, for his combustion chamber design for lean-burn engines, enabling vehicles to produce lower levels of emissions. Evans' combustion system is currently being tested for commercial use.

Second prize went to Assistant Prof. John Smit and research associate Wade Bingle, both of the Dept. of Microbiology, for their system of using bacteria to extract toxic heavy metals from wastewater streams. A patent application has been made through UBC's Industry Liaison Office.

Brent Bolleman of the Dept. of Mechanical Engineering won first prize in the graduate student category for his work on a new industrial sonochemistry reactor for waste paper de-inking. University of Victoria graduate student Peter Wild won second prize with a project called centrifugal membrane and density separation of



Gavin Wilson photo

Recent UBC graduate David Longridge, right, displays the invention that won first place in a UBC/VanCity environment contest: a noise abatement flight deck aid for commercial airliners. Looking on is Mechanical Engineering's Harold Davis, in whose class Longridge started the project.

industrial waste and process waters.

Second prize in the undergraduate category went to SFU students Duhane Lam, Andrea Varju and John Cavacuiti for their ergonomically designed bicycle that makes use of a cyclist's arm power as well as legs.

First prize winners each received \$700, while second prize winners were awarded \$300.

Honourable mentions went to other inventors including Plant Science Prof. Murray Isman for his environmentally friendly pest control made from tall oil, a byproduct of the pulping process, and Biochemistry Prof. Peter Candido and post-doctoral fellow Eve Stringham, who developed transgenic soil nematodes as biological monitors for toxins in the environment. The contest was judged by representatives of VanCity and UBC's Industry Liaison Office.

"We hope the recognition will enhance their chances of success and inspire other inventors to explore greener alternatives," said Jacquie Pearce, VanCity's environmental co-ordinator.

People

by staff writers

Fine Arts Prof. **Jeff Wall** has won the Ontario Arts Council's Jean A. Chalmers Award for Visual Arts.

The newly created award, which carries a cash prize of \$20,000, honours artists working anywhere in Canada "who have created a substantial body of work."

Their contribution can be measured by the artist's teaching, the standards set by his or her work, the recognition it has received or contributions made to the artistic life of the community.

A UBC art history graduate, Wall has been teaching studio arts at the university since 1987. His huge, backlit photographs have been exhibited in West Germany, France, England and Holland.

• • • • •

Shirley Sterling, a UBC graduate in the Faculty of Education, is the winner of the Sheila A. Egoff children's literature prize (text) for her book, *My Name is Seepetza*. The award was presented at the ninth annual B.C. book prizes ceremony.

Sterling's book traces her experiences as a 12-year-old when she was taken from her family and put in an Indian residential school.

A 1992 graduate of the Native Indian Teacher Education Program (NITEP) at the First Nations House of Learning, Sterling is pursuing a PhD in education in the Ts'kel Graduate Program.

Native author **Harry Robinson**, who died in 1990, won the Roderick Haig-Brown Prize for Nature Power: In the Spirit of an Okanagan Storyteller. The book was co-authored by **Wendy Wickwire**, a professor in the Dept. of Social and Educational Studies.



Sterling

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Assistant Fine Arts Prof. **Ken Lum** is one of three Canadian artists to be named a winner of the Art Gallery of Ontario's Functional Sculpture Competition.

The Canada-wide search attracted more than 300 entries from artists, architects and designers. Winners will be commissioned to create a functional sculpture in the gallery's new outdoor terrace.

Lum is one of Canada's best-known conceptual. He received a master's degree at UBC in 1985 and has been teaching at the university for three years.

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Dr. **Donald Calne**, a professor of Medicine and director of UBC's Neurodegenerative Disorders Centre, is this year's recipient of the Fred Springer Award.

Presented by the American Academy of Neurology, the award recognizes outstanding research contributions to the understanding and treatment of Parkinson's disease.

Calne was honoured at a presentation ceremony held in New York City in April.

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Mechanical Engineering Prof. **Clarence de Silva** has been chosen to chair the engineering and applied sciences subcommittee of the Science Council of B.C. He will also serve on the Science Council's human resources committee.



de Silva

The primary responsibility of these committees is to make selections from applicants within the province for the Science Council's various scholarships and fellowships.

De Silva, a Natural Sciences and Engineering Research Council Prof. of Industrial Automation, is a recent recipient of a \$210,000 fellowship from the Advanced Systems Institute of B.C. for a research project in intelligent control of industrial processes and a core research grant of \$80,200 from the Science Council for a project on sensor technology development for the herring processing industry.

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Dr. **Charles Slonecker** has been elected president of the American Association of Anatomists (AAA). His term of office began April 1.

A native of Washington State, Slonecker joined UBC in 1968 and was head of the Dept. of Anatomy between 1981 and 1992. His areas of research include cellular immunology, inflammation and muscular dystrophy.

He has been an active member of the AAA for 25 years, serving on the association's educational affairs committee as program secretary and vice-president.

Slonecker is currently director of UBC's Ceremonies and Community Relations Office.

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Dr. **Bruce McManus** has been appointed to a five-year term as head of the Dept. of Pathology effective July 1.

McManus received his BA and MD degrees from the University of Saskatchewan, an MS in Applied Physiology from Pennsylvania State University and a PhD in Exercise Physiology and Biochemistry from the University of Toledo.

A fellow of the College of American Pathologists, the American College of Cardiology and the American College of Chest Physicians, McManus is also past-president of the Society for Cardiovascular Pathology. He is currently a member of the education committee of the U.S.-Canadian Academy of Pathology.

McManus has been a faculty member at the University of Nebraska Medical Center for the past 11 years. His research areas include inflammatory heart and blood vessel disease.



Gavin Wilson photo

Winning team members display trophies and model aircraft that won UBC its second straight championship. From left, Kevin Wilder, Joeleff Fitzsimmons, Assistant Prof. Sheldon Green, Payam Farahbakhsh and Rob Prior. Missing are Rob Overgaard, Jesse Houle and Dean Leonard.

Testing key to Geers' flying success in U.S.

by Gavin Wilson

Staff writer

When a team of UBC engineering students soared over their competitors to take first place in the Heavy Lift Aircraft Competition in the U.S. last year, it wasn't just beginner's luck.

This year, entering for only the second time, they did it again.

The UBC students defeated teams from an international field of 95 universities and technical institutes by designing and building a model aircraft that carried aloft the heaviest load.

The UBC entry lifted 21.65 pounds, bettering the 18-pound lift of last year's winning entry and nearly a pound more than their closest competitor.

"They're really good students and I'm very impressed with them," said Sheldon Green, one of the team's faculty advisors and an assistant professor in the Dept. of Mechanical Engineering. "The team was unbelievably keen to study aerodynamics and anything to do with aircraft."

Team captain Joeleff Fitzsimmons said they spent an average of 10 to 15 hours a week above and beyond their normal class load preparing for the event.

One of the key advantages was the extensive flight testing of the aircraft, which started in mid-February.

"That really gave us an edge," Fitzsimmons said.

Team members also credited their showing to several design improvements, including a new airfoil section to improve lift, a light-weight construction (at a mere six and one-quarter pounds, UBC's balsa wood and fibreglass aircraft was the lightest in the event), a better propeller-engine match for increased thrust and a superior landing gear.

The competition is held under the auspices of the Society of Automotive Engineers in co-operation with Cessna Aviation and Wichita State University in Kansas, where the contest was held.

Contest rules required the radio-controlled aircraft to take off from a short 200-foot runway, circle around, and touch down on the same runway, carrying as much weight as their designers dared load on.

The other UBC team members were: pilot Kevin Wilder, Jesse Houle, Payam Farahbakhsh, Rob Prior and Rob Overgaard. Faculty advisors were Green and sessional lecturer Dean Leonard.

Shad Valley goes green

by Abe Heffer

Staff writer

UBC's Shad Valley program is going green.

The program, which offers selected grade 11 and 12 students hands-on exposure to new research in science and technology and business financing and marketing, will emphasize environmental awareness this year, said Alice Cassidy, the program's new director and a PhD candidate in the Dept. of Zoology.

"We're making a real effort to have absolutely no disposable items anywhere in the program," said Cassidy.

For starters, the 52 students who converge on UBC June 27 for this unique four-week Canadian summer program, will be expected to show up with their own reusable cloth napkins.

"That's just one way we can cut down on waste at meal time," said Cassidy.

The student projects that will be presented to participating sponsors at the program's conclusion will be expected to emphasize environmentally friendly, responsible resource use.

Shad Valley was created in 1981 by the Canadian Centre for Creative Technology at the University of Waterloo. The program, which won a national award for excellence in business/education

partnerships from the Conference Board of Canada, is run simultaneously at eight Canadian universities.

The environment will also be a part of the program's big picture as the students participate in highly intensive laboratory work, seminars and projects, while attending lectures in mathematics, computing, entrepreneurship, science and technology.

The program will also include a field trip to Science World, July 22, which will see students take public transit to Granville Island, from where they will kayak to Science World.

"Both of those modes of transportation are environmentally friendly. The only energy you use in kayaking is your own," said Cassidy.

UBC's contribution to the program includes access to virtually all facilities including scientific labs, meeting space, computing facilities and volunteered faculty and staff time.

Shad Valley is financed entirely by tuition fees and sponsoring organizations involved at all levels of the program, some of whom provide employment as part of the sponsorship.

Most Shad Valley graduates conclude the program with a five-week work session at various government and private-sector job postings.

Classified

The classified advertising rate is \$15 for 35 words or less. Each additional word is 50 cents. Rate includes GST. Ads must be submitted in writing 10 days before publication date to the UBC Community Relations Office, 207-6328 Memorial Road, Vancouver, B.C., V6T 1Z2, accompanied by payment in cash, cheque (made out to UBC Reports) or internal requisition. Advertising enquiries: 822-3131.



The deadline for the July 15, 1993 issue of UBC Reports is noon, July 6.

Miscellaneous

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For Sale

MIXOGRAPH Beautiful mixograph by renowned contemporary Mexican artist Rufino Tamayo. 90 cm x 60 cm. "One Man With Courage Makes The Majority." Appraised value \$25,000 US, but open to offers. 263-2145, 4:30-9:00 pm.

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& 6 pm - 11 pm
Sat - Sun.....6 pm - 11 pm

IRC SNACK BAR
Mon - Fri8:15 am - 3:30 pm

SUB CAFETERIA
JUNE Mon - Fri7 am - 7 pm
Sat - Sun7 am - 3 pm
JULY - AUGUST Daily7 am - 7 pm

THE EXPRESS
Mon - Fri7 am - 3:30 pm

TREKKERS RESTAURANT
Mon - Fri11 am - 2 pm



Mini-March

Close to 180 children and 40 staff from UBC Child Care Services took part in a parade along Osoyoos Crescent in May to celebrate Child Care Month. The colourful contingent finished their walk with a picnic in Acadia Park.

Charles Ker photo

3,300-year-old Mexican home yields clues to past societies

by Charles Ker

Staff writer

Michael Blake strides purposefully down the narrow corridor outside his office, spins around and gestures back to the exit sign 22 paces away.

"That's the length of dwelling we're talking about," he says. "It's enormous."

Situated on a swampy coastal plain about 30 kilometres up the Mexican coast from Guatemala, the open-concept bungalow features 220 square metres of living space, a solid clay floor, two fireplaces and an impressive view of the local volcano.

Definitely the ritziest residence in Paso de la Amada, the 3,300-year-old home is one of at least six similar structures buried one on top of the other. Blake thinks the lot belonged to a succession of village chiefs who shared the houses with several wives, children and younger siblings.

"Each house has the same oval shape, the same orientation and probably the same family lineage spanning generations," said Blake, a UBC associate professor of anthropology who has been excavating the site for close to a decade.

The dig started in a two-metre-high mound of earth in the middle of a corn field. In 1985, Blake dug a small test pit in the centre of the mound and discovered remnants of six, superimposed clay floors. The top three floors were excavated immediately, but it wasn't until five years later that the most exciting discovery was unearthed.

It was while uncovering the fourth floor in 1990 that Blake's research team came across a perfectly preserved clay-walled building believed to be the most elaborate residence yet found in Mesoamerica.

Together with graduate students Vicki Feddema and



Located in one of Mexico's oldest known permanent villages, this elaborate residence is one of six houses buried one on top of the other. The man at the top left of the photo puts the size of this ancient house in perspective.

Warren Hill, Blake returned this past winter to expose the fifth and sixth houses in the sequence. It took 25 workers two weeks to remove 80 centimetres of dirt below the floor of the fourth house. As with the previous clay layers, which resembled modern-day brick patios, the fifth floor had an almost identical ring of holes around its perimeter where posts would have supported a huge thatched roof.

Once fully exposed, the entire floor was painstakingly excavated in centimetre-thick layers and the scrapings passed through a fine mesh screen. Among the "micro artifacts" trampled into the floor were carbonized beans, corn and avocado seeds, pottery fragments, volcanic glass used for making knives, and fish and other animal bones discarded from meals.

"It's the same kind of debris we generate in our own households," said Blake. "What we collected on the house floor can still be found in the area today so we know they were

practising horticulture in addition to harvesting the swamp environment."

The presence of jade, volcanic glass and fancy pottery, some of which match fragments found as far down the coast as El Salvador, supports the theory that residents of the house were the village's key players in local trade and politics.

The findings indicate villagers were developing complex social and political systems two or three centuries earlier than previously expected. Until Blake's work, the oldest known permanent residences in Mexico which come close in size to those at Paso de la Amada were built around 1,000 BC.

"These large houses have forced us to reconsider how and when social and political inequality emerged and how much of a role agriculture played in economic development," he said.

Blake plans to return to the site in 1995 when he will excavate some smaller mounds for more clues about the social hierarchy of the times.

Scientist fights ancient foe

by Abe Heffer

Staff writer

In his efforts to help eradicate one of the most serious tree diseases in the British Columbia Interior, Forest Sciences Associate Prof. Bart van der Kamp is up against a foe that has a definite head start.

Armillaria ostoyae — a type of root disease — has attacked conifers of all ages, worldwide, for an estimated 5,000 years.

The disease, which is costing B.C. 20 per cent of the productive capacity of forested land in the southern Interior, is easily overlooked.

It thrives underground and spreads from tree to tree mainly through root contact.

"The first visual evidence of

Armillaria ostoyae at work would be dying trees," said van der Kamp "But by then, it's too late.

"The disease has probably already been around in the area for a generation and growing peripherally at a rate of 25 centimetres a year."

There are several ways the disease can be dealt with, and van der Kamp is researching their effectiveness at the Alex Fraser Research Forest at Williams Lake.

"There is an area covering 25 hectares at the forest which harbours the organism. It has become the ideal laboratory setting for students and professional foresters to study the disease," he explained.

Van der Kamp is working on several approaches to halt the spread of the fungus.

One involves pulling stumps from the ground after the trees have been harvested, although small roots are left behind.

In another section of the forest, van der Kamp and his research team will plant pure hardwoods in an infected area. Hardwoods don't appear to be susceptible to the root disease. However, van der Kamp stressed prudence is necessary with this approach.

"Birds and other animals need dead trees for nesting areas and other needs. These patches of land may be infected, but they still play an important role in the biodiversity of the region," he said.

Van der Kamp says it may take as long as 25 years to determine which treatment is most effective.



Abe Heffer photo

Grounds for Murder

American actor John Ritter performs in a scene from the made-for-television movie *Grounds For Murder*, part of which was filmed earlier this month outside Sedgewick Library. The film co-stars Henry Winkler.

News Digest

UBC's Telecommunication Services is offering access to American toll-free 800 numbers, which may not be available in Canada, on a trial basis until July 31.

Harley Rea, UBC's Telephone Systems manager, said that advertised 800 numbers in the United States often do not indicate whether the number can be used north of the border.

"The only way to find out is to dial the number and you will either make a successful connection or get a recording advising that the number dialed cannot be reached from Canada," Rea explained.

During the trial period, anyone needing help reaching specific 800 numbers that produce the recording may contact UBC information switchboard operators for assistance at 822-2211 between 8 a.m. and 4:30 p.m., Monday through Friday.

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The legal, regulatory, ethical and economic issues concerning therapeutic applications of biotechnology will be explored at a conference on Pharmaceutical Biotechnology July 31 to August 4 at the Pan Pacific Hotel.

The four-day conference will include sessions on gene manipulation, protein engineering and the future of pharmaceutical biotechnology, as well as exhibits and poster presentations in the Vancouver Trade and Convention Centre.

The conference will be held in conjunction with the annual general meeting of the Association of Faculties of Pharmacy of Canada, which is celebrating its 50th anniversary.

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The Sausalito String Quartet from UBC's School of Music won the Chamber Music Society Award for Strings at the recent 22nd Annual Carmel Chamber Music Competition.

Run by the Chamber Music Society of the Monterey Peninsula, the competition included the adjudication of tapes from 35 entrants. Ten were selected to appear before a jury in April with the finals held in Carmel, California.

As winners, the Sausalito quartet performed in the Winners Concert Circle broadcast on Monterey's classical radio station. The quartet consists of violinists Nicholas Lozovsky and Paul Nahhas, violist Henry Lee and cellist Jeehoon Kim, all students of UBC's chamber music program.

•••••

UBC will play host to the ninth World Transplant Games this summer. From July 5 to 10, more than 1,000 transplant athletes from 30 countries will converge on Vancouver, the first Canadian city to host the games.

UBC will be the venue for the opening ceremonies and four sporting events: table tennis, swimming, tennis, and cycling. The remaining events will take place around the Lower Mainland.

Some of the athletes will be housed at the UBC Conference Centre. The Canadian team will include more than 35 heart, heart/lung, liver, pancreas and kidney transplant athletes from British Columbia.

The first World Transplant Games were held in Portsmouth, England, in 1978.

PENTICTON & DISTRICT RETIREMENT SERVICE

DIRECTOR

SENIORS' RECREATION CENTRE

The Penticton & District Retirement Service invites applications for the position of DIRECTOR, SENIORS RECREATION CENTRE. The non-profit society provides a continuum of services for adults encompassing Recreation, Housing, Adult Day Care and Intermediate Care.

Working closely with members, volunteers and the community, the Director is responsible for the overall programming and coordination of activities within the Sr. Recreation Centre. The philosophy promotes opportunities for older adults to organize and participate in a wide variety of activities encompassing physical, cultural, arts & crafts, educational, social and volunteering. A Seniors Information Bureau to serve the community is being planned. Priorities of the position will be to develop a secure financial base and to raise the profile of the Centre within a community.

QUALIFICATIONS: Degree in Recreation, or recognized college programme. Demonstrated successful experience in working with older adults essential. Must have high energy level and excel in areas of interpersonal skills, communication skills and public speaking. Course in Gerontology an asset.

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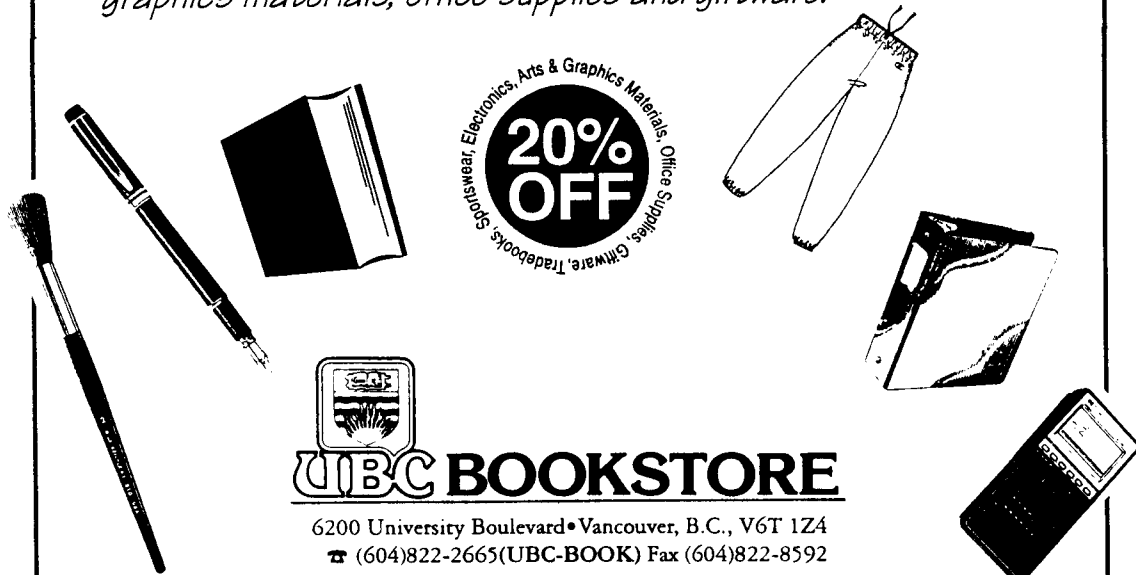
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Profile



Abe Heffer photo

"What we teach here is a state of mind. We help students think the process through."

- Jim Forbes, chair of the Marketing Division, Faculty of Commerce and Business Administration.

Marketing Genius

by Abe Heffer

Staff writer

For 26 years, Prof. Jim Forbes has helped UBC marketing students deal with the fundamental issue that entrepreneurs and business people face every day of the week: how to get people to buy their products.

However, marketing is more than keying some figures into a computer and tinkering with spread sheets.

"What we teach here is a state of mind," Forbes explains with a distinctive baritone voice that would surely make any student sit up and listen.

"We help students think the process through."

Forbes has been helping UBC students "think the process through" in the areas of retailing and distribution systems and consumer and agricultural policy since 1967, when he joined the Faculty of Commerce and Business Administration after obtaining his PhD from the University of California in Los Angeles. A Washington State University graduate, he obtained his BSc in 1950 and an MBA from Harvard University in 1959.

Forbes, division chair since 1990, has spent his entire academic life in marketing's loud environment.

"Marketing is a noisy environment because there are so

many factors out there to deal with," Forbes explains.

"For example, we are being bombarded by up to 2,000 different commercial stimuli per day, from all kinds of sources: radio, television and print among them.

"The question is: how can you make your message stand out?"

To help students deal with key marketing issues, such as distribution, pricing, quality, promotion and execution, Forbes says they are equipped with a set of tools that they will use throughout their professional lives.

Their "tool box" consists of courses in accounting, finance, marketing, organizational behaviour, general management and decision making. They are at the core of the marketing program, says Forbes, and, along with the faculty members who teach them, help make UBC's undergraduate business program among the best in the world.

"Today, students coming out of high school have a good grasp of the computer technology that has surged to the marketing forefront over the last 20 years," he says.

"In that respect, they are better trained for what awaits them at university. That leaves them free to tackle marketing analysis in greater depth."

Despite the improved technological skills students now bring into the classroom, Forbes says they generally lack confidence in their problem-solving abilities.

"These students are very unsure of themselves, initially. They spend years soaking in all this knowledge and information in their primary and secondary school years and now they're expected to contribute to the decision-making process.

"That's where the faculty members come in, by helping students develop their critical thinking. However, it's not long before the students move on confidently on their own."

For almost 10 years, Forbes himself has had first-hand experience in the marketing process as a wholesaler of some of the finest Spanish wines in the world.

Along with his partner, Commerce sessional lecturer Scott Fraser, and Fraser's wife, Sonia, Forbes promotes these wines to consumers and restaurants through the British Columbia Liquor Board.

"My wife and I spent several weeks in Spanish wine country in 1985 and we thought how wonderful it would be if we could buy these wines in B.C. So, 10 of us imported 25 cases of the wines we had discovered, through the liquor distribution branch. In trying to help a friendly Spanish producer, I ended up being a wholesaler a year later."

Three years ago, Forbes expanded this "labour of love" by importing Chilean and French wines as well, while expanding distribution to include Manitoba, Saskatchewan and Alberta.

The bottom line in this operation is the marketing of high-quality products to high-quality restaurants. In sharing his experiences in the marketplace in the

classroom, his students seem to appreciate the immediacy and first-hand knowledge that's available to them.

"It's a case of teaching and doing going hand-in-hand," says Forbes. "However, it's also a matter of balance."

The overall balance in the marketplace has shifted in recent years, according to Forbes. Not only is marketing data-driven, but it has also become increasingly people-driven, which is reflected in the classroom.

"There is more emphasis on the importance of setting up and managing sales teams and how to integrate people into sales organizations.

"Getting the most from your sales force by managing it more effectively will enable you to market your product more successfully."

Despite his heavy workload in the faculty and the evenings and weekends he spends on his business interests, Forbes, a gregarious native of Central America, finds the time to lace up his skates once a week as a member of the Thunderbird alumni "Old Birds" hockey team.

"What does a guy from Panama City know about ice skating? Not much, believe me. But I love it and would like to be able to play a little more often."

For Jim Forbes - educator, division chair, wine wholesaler and hockey player - there just aren't enough hours in the day.