UBC

The University of British Columbia
Vancouver, British Columbia

Volume [illegible] Number 10
May [illegible]

Women's Studies Centre approved

By CONNIE FILLETTI

A Centre for Research in Women's Studies and Gender Relations has been approved by Senate.

The recommendation to establish the centre was made by the Provost's Inter-Faculty Advisory Committee on Women's Studies and Gender Relations.

The committee was formed simultaneously with UBC President David Strangway convening a series of focus groups with students and faculty as part of the university's commitment to promoting gender equality on campus.

"Both the focus groups and the Provost's committee agreed that research and education are essential academic avenues to gender equality," said vice-president, Academic and Provost Dan Birch.

"UBC has impressive strengths in feminist scholarship—from the study of women in literature and history to feminist legal studies and the transition from schooling to work," he added. "A number of scholars share a particular focus on violence against women. We wanted to provide a catalyst for strengthening and increasing the visibility of scholarship at UBC in these areas."

The main goals of the centre are research, graduate education and community liaison, said Tannis MacBeth Williams, director of Women's Studies in the Faculty of Arts and chair of the Provost's committee.

Specifically, scholars affiliated with the centre will initiate and conduct interdisciplinary research in Women's Studies and Gender Relations, facilitate the activities of UBC researchers in related areas and develop and promote links with international scholars, while developing links among UBC and the local, national and international communities.

Members of the centre also hope to develop a strong interdisciplinary program of graduate studies to complement the development of feminist research within various disciplines.

Proposed programs of the centre include a scholars in residence program, academic conferences, a seminar and lecture series and an annual community workshop.

"Once the centre is established, master's and doctoral programs will become a major goal."

"Once the centre is established, master's and doctoral programs will become a major goal," said Williams. "Currently, no university in Western Canada offers a doctorate in Women's Studies."

Williams added that the possibility of developing a joint doctoral program with Simon Fraser University will be explored.

In the meantime, an interdisciplinary graduate course in Women's Studies is planned and the existing individual interdisciplinary program of the Faculty of Graduate Studies can be used to accommodate master's and doctoral students with interests in this field, Williams explained.

Future plans of the centre also include an endowed Chair in Women's Studies and Gender Relations and summer institutes designed to enable faculty at regional and community colleges, who are teaching in Women's Studies, to enhance their qualifications.

The Centre for Research in Women's Studies and Gender Relations has been designated a $2 million project of UBC's A World of Opportunity Campaign.

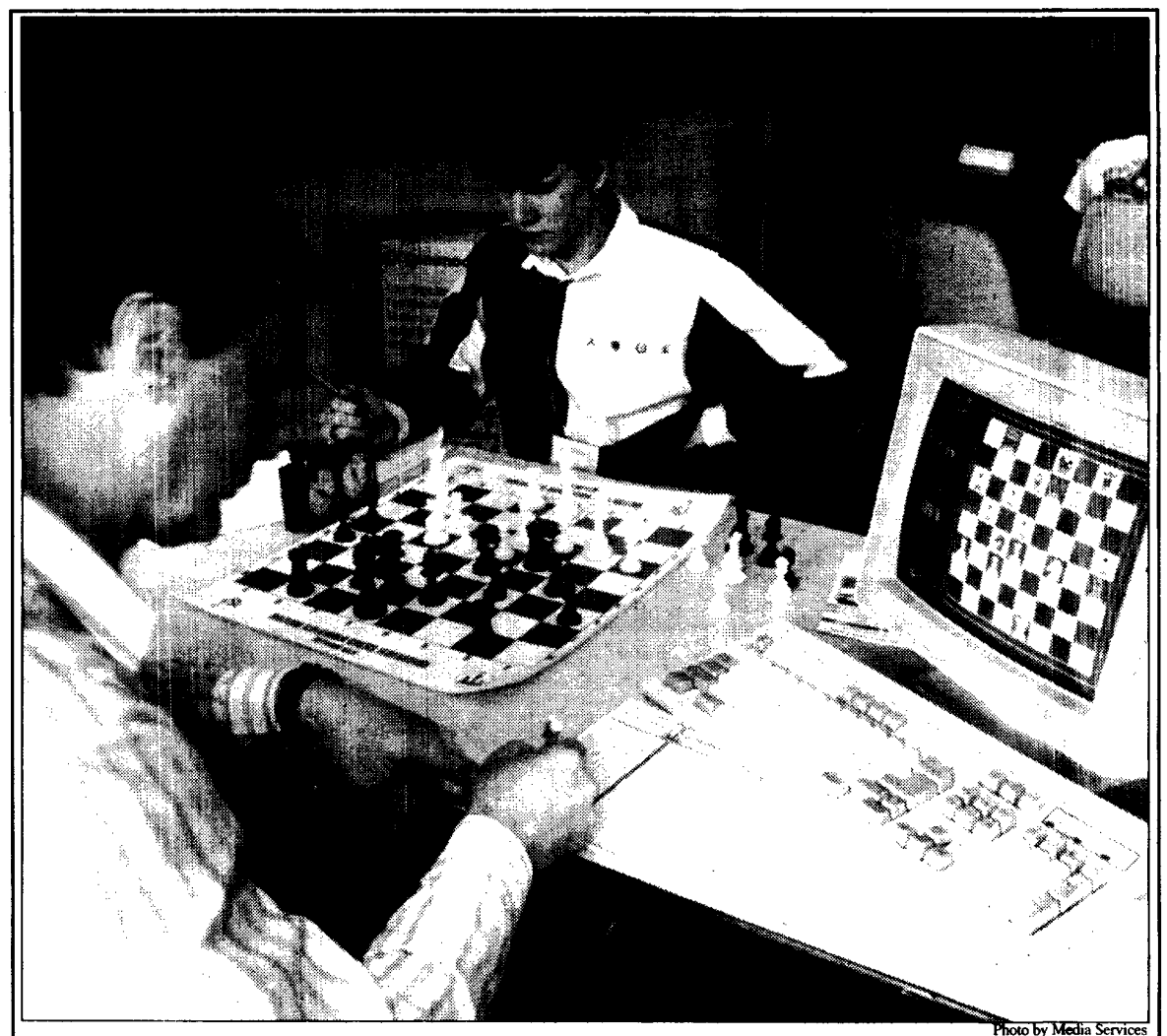


Photo by Media Services

Soviet Victor Vikhrev, left, and American Jeff Mallet pit their chess-playing computers against one another during the Micro-Computer World Chess Championship at UBC, May 1-9. The championship, which was won by a Dutch entry called Gideon, was sponsored by the Computer Science department.

Power plant for campus studied

By GAVIN WILSON

The university has joined forces with BC Hydro and BC Gas to fund an engineering and economic feasibility study for construction of a cogeneration power plant on campus.

A cogeneration plant would provide all of UBC's electrical needs and, as a by-product, create steam that would provide central heating for the entire campus, said Marian Lis, an engineer with Campus Planning and Development.

The feasibility study will look at several options for the actual construction and operation of the plant:

— UBC could fund construction and ongoing operation of the plant, with revenue accruing to the university

— funding of construction from a third party with UBC operating the plant

— a third party could build and operate the plant, with UBC buying power and steam at a lower rate

The study will also look into cost, possible locations, size of the plant, and which method would be used to generate power.

The expected capacity of the plant is in the range of 30 to 60 megawatts, with a potential to expand to 100 megawatts, he said. Surplus electricity would be purchased by BC Hydro, generating income for the university.

The plant could become operational by January 1994, although no date has been set for construction.

Inside

GOING BACK TO WORK: Nursing Professor Wendy Hall has found in a study that balancing motherhood and a full-time job requires re-evaluation of family roles. *Page 2*

PROFILE*: HELPING WOMEN REACH POTENTIAL: Pat Thom brought about a break-through in attitudes towards women and education. *Page 3

WORKING STUDENTS: Work Study Program offers part-time work for full-time students. *Page 10*

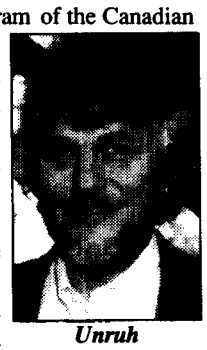
Pair of physicists win research prizes

By GAVIN WILSON

A pair of Physics professors are the 1990 recipients of UBC's top faculty research prizes. William Unruh is the winner of the Jacob Biely Research Prize and Gordon Semenoff is the winner of the Charles A. McDowell Award for Excellence in Research.

Unruh was recognized for his work in the field of theoretical cosmology, which has earned national and international attention. He is also recognized for his pioneering work on quantum field theory applied to black holes.

Unruh is the LAC Minerals fellow in and director of the cosmology program of the Canadian Institute for Advanced Research and has received virtually every major award available to Canadian physicists, including the Steacie Prize, Rutherford Medal and Herzberg Medal.



Unruh

The Biely prize is named for Jacob Biely, an internationally known poultry scientist, whose association with UBC spanned half a century. The prize was established in 1969 by his brother, George Biely, a well-known figure in the B.C. construction industry.

Semenoff, a theoretical physicist, is a leading expert in quantum field theory and has worked on fundamental problems in gauge theories and their applications to describing the interactions of elementary particles and phenomena in condensed matter physics.

His work has led to the identification of mathematical structures important in such diverse areas of study as the attempt to unify all fundamental forces using superstring theory, to theories of the quantum Hall effect and high temperature superconductors. Semenoff received the UBC Killam Research Prize in 1989.

The Charles A. McDowell Award is made to a young researcher who has demonstrated excellence in the pure or applied sciences. The award was established by University Professor Charles McDowell, who headed UBC's chemistry department from 1955 to 1981.

Semenoff

The awards were presented by President David Strangway at a ceremony held May 2.

Safety and effectiveness high priorities

Study recommends site for new library centre

By ABE HEFTER

A site analysis report prepared by the library planning committee has recommended that the area west of the Sedgewick Library be adopted as the site of the Phase One Library Centre development.

Early last winter, consensus about the functions and activities for phase one development emerged from a planning workshop involving senior representatives from the library organization. It was generally agreed that the new building would ideally be combined with the Sedgewick Undergraduate Library, and that the new integrated facility would result in a modern humanities and social sciences library.

"This analysis represents a rigorous examination and testing of the many planning and design criteria which must be considered in a study of this kind," said Linda Moore, development manager, Campus Planning and Development. "Not only are we addressing the historic heart of the university, but the Main Mall/Library Garden as well, which is one of the most beautiful and memorable places on campus."

The report analysed 10 possible sites for the proposed library expansion and concluded there may be no ideal site for phase one development. Site option four, west of the Sedgewick Library, rates better than all others in every category considered, according to the report.

Release of the site analysis report coincides with a motion put forward by the Senate Library Committee at a meeting of Senate, April 24. The motion, which was carried, resulted from an assessment report on the status of the Main Library building. The report, prepared by architect John Graham, was commissioned by the university administration in 1989-90 to report on the state of the Main Library.

At Senate, Political Science Professor Phillip Resnick, chair of the Senate Library Committee, summarized some of the report's main findings. Resnick pointed out the fire and seismic risks associated with the Main Library and the building's poor functional and environmental conditions. He also said the safety of the Main Library collection could be in jeopardy because of these factors.

The Senate motion called for the immediate tethering of book stacks in the Main Library as well as other short-term safety measures. It also called for Senate to recommend to the president and board of governors that completion of the planned phase one project be a matter of the highest priority.

"The purpose of the report was to formulate a statement of condition of the physical aspects of the Main Library building," said Graham. "It's an all-encompassing report which deals with the building systems and environmental aspects of the Main Library. This kind of inventory taking is the initial step of the planning phase."

Tim Miner, director of Campus Planning and Development, said the Main Library building is representative of similar problems UBC is facing with respect to changing the face of the campus.

"These changes are generated by functional, environmental and safety issues," said Miner.

With the Main Library being the intellectual heart of the university, there are strong emotions associated with the building, he said. But the university has to look at what is best for the people who use the facility, and what's best for the collections, Miner added.

"The environment of the Main Library is detrimental to the preservation of collections," said Miner. "And the building itself is not conducive to an effective library system. It has a very limited efficiency of operation. However, it could serve other uses which would not require the strict tolerances of a library."

We are looking at all of our buildings in a health and safety sense, he explained.

"The Main Library represents an approach that we will be taking as we work our way through all facilities on campus."

Working mothers face tough lifestyle changes

By CONNIE FILLETTI

As a registered nurse working with new mothers, Wendy Hall was often asked about the consequences of combining work outside the home with motherhood.

While searching for information to share with families, Hall found that although literature existed to help working mothers with school-age children, there was nothing comparable for mothers with newborns.

Hall, a professor in UBC's School of Nursing, recognized the value in studying first-time parents, particularly mothers who had rejoined the work force following the birth of their babies.

Eight women participated in a study of women returning to work and 10 working men, whose partners had returned to work, participated in a second study. The women ranged from 25 to 35 years of age, while the men were between 28 and 42 years old.

"Women felt overwhelmed and guilty after returning to work," Hall said. "They were more in tune with the needs around the house than their partners and that made them take more responsibility."

Hall found during the course of the first study that women commonly perceived circumstances as being out of control, while the men who were studied found the same situations difficult to manage.

"It was clear that women had to change their expectations of themselves and learn to delegate," Hall said. "It's important to share responsibility and know whose it is. The men didn't personalize things the same way. Their attitude was, if the house is a mess, it's not a big problem."

Hall discovered that the expectations of family and friends placed on the women were also high.

But working families were too busy to seek help. Many found themselves in the position of providing care to older parents. Others, because they lacked time to socialize, only shared their responsibilities with each other.

Photo by Media Services

Wendy Hall studied new mothers returning to the work force.

"This proved hard on their relationships," Hall said. "Time for each other and for themselves became a low priority when it should have been high on their list."

Hall's study indicated that couples whose roles are interchangeable appear to cope better than couples with a more traditional division of labor. A factor impeding this type of balance was the women's tendency to assume the added responsibilities and workload that accompany being a new parent, while on their maternity leave. Once they returned to their jobs, it was difficult for them to give up what they had taken on.

"They thought working all day then returning home to clean, cook and parent was the status quo they had to maintain," Hall said. "The women admitted they couldn't handle it but felt that they should be able to handle it. The men indicated that they felt excluded while their partners were on maternity leave, and wanted a more active role in the parenting of the child."

Rejoining the work force posed an additional strain on the women Hall interviewed. They reported that relatives, friends, co-workers and employers asked them how they could leave their babies. While at home with their infants, they were asked if that was all they did, leaving them with a double message about parenting. The women received virtually no recognition of how difficult it is to be a parent.

"It's a hard lifestyle on people and there is a perception out there among parents that there isn't a lot of support for it," Hall said. "People are returning to work to meet costs. They have mortgages to pay."

The women participating in Hall's study felt they didn't have a choice about returning to work, but the majority of them wouldn't go back full-time if it was financially possible. They would also reconsider full-time employment when expecting a second child.

Job sharing, on-site daycare, flexible work hours and paternity leave are just a few of the services Hall believes government and employers should consider to help ease the heavy burden new parents face. She feels men and women also must develop strategies to balance career demands and parenting.

Hall is currently recruiting couples with at least one child under 24 months to test a questionnaire designed to measure family and work roles for parents following the birth of a child.

For more information, call 822-7447.

Emergency plan undertaken

By ABE HEFTER

Would you know what to do if a disaster or emergency situation suddenly hit UBC?

The university's emergency planning committee wants to make sure the answer is "yes," and is taking steps to develop a comprehensive campus-wide emergency plan.

Pat Downey, an assistant fire chief at the University Endowment Lands Fire Department and a member of the committee, said the university began taking another look at emergency planning two years ago.

"At the time, President David Strangway wanted an update on emergency planning on campus and what it would take to plot an effective course of action," said Downey. "An emergency planning task force, chaired by Occupational Health and Safety Director Wayne Greene, determined that the format of the existing plan needed to be updated. A committee was then struck to come up with recommendations designed to revitalize the university's emergency plan."

Downey said the recommendations include the upgrading and updating of the current emergency operations centre located at the U.E.L. fire hall; the establishment of an emergency operations control group with representation from across the campus; and the creation of the position of emergency planning officer.

"The emergency operations control group would take responsibility and act as the nerve centre in the event of a disaster," said Downey. "The emergency planning officer would be in charge of maintaining the operations centre. The idea is to facilitate actions and enhance efficiency in case of a disaster."

Downey said the other recommendations centre on the need to stage several mock disasters to ensure swift response if and when the need arises, and the need to educate faculty, staff, students and guests about emergency procedures.

"Faculty and staff may have a specific role to fill in the event of a disaster, perhaps by aiding in evacuation. They have to know what's expected of them," said Downey.

"The recommendations brought forth by the emergency planning committee have been received favorably by deans and department heads," he added. "The proposals have been presented to Bruce Gellatly, vice president, Administration and Finance."

Gellatly said the program proposal is well done. However, funding levels will not support the addition of the new position of an emergency planning officer in 1991-92. Gallatly expects the plan will continue with direction from a steering committee.

One way the university is currently alerting the campus community to emergency planning is through a pamphlet entitled Are You Ready For An Earthquake? The pamphlet, produced by and available at the Occupational Health and Safety Office, offers advice on what to do if an earthquake strikes.

"The brochure is part of the education process," said Downey. "The emergency planning committee helped put the pamphlet forward and represents the need for the campus community to be alert and aware when disaster strikes."

Correction

In the **May 2, 1991 issue of UBC Reports**, an incorrect telephone number was accidentally printed. The story entitled "Human Resources acquires new info system," on page one, contained the error. The correct telephone number for information should have read **822-8964**.

We apologize for any inconvenience this error may have caused.

Photo by Media Services

Bio-Resource Engineering Professor Royann Petrell talks to some of the more than 200 Grade 10 and 11 female students who attended a one-day conference on careers in engineering earlier this month. The conference was held by the Faculty of Applied Science to attract more women into engineering programs.

Computer service agreements signed

UBC has entered into two new agreements with Sun Microsystems of Canada Inc. to provide better services for UNIX workstations on campus.

One of the agreements, a hardware servicing package with Network Services of Information and Computers Systems, was hailed as the first of its kind in Canada and a potential model for agreements with other post-secondary institutions.

"This exciting joint venture is a first in Canada and we are very proud to be part of it," said Bernard Sheehan, associate vice-president, Information and Computing Systems. "This fits into our overall plan of trying to expand the type of services we offer to our clients."

The agreement provides for parts and documentation so UBC can do its own maintenance work. The goal is to make the university entirely self-sufficient in maintaining Sun workstations. As part of the agreement, Sun will provide spare parts, support and documentation so that UBC can develop its own expertise.

The second agreement, for software maintenance, between Sun and University Computing Services will provide software maintenance for up to 400 Sun workstations (there are currently more than 300 on campus) at low cost to individual owners of Sun workstations, including OS operating system software upgrades and upgrades to some new products.

Collaborative projects planned

Forest research centre opened

A $30 million forest research centre at UBC was opened April 30 by federal and provincial government representatives and officials of Forintek Canada Corp. and the Forest Engineering Research Institute of Canada (FERIC).

The site, built entirely out of wood, includes a new office building for FERIC and a larger Forintek complex.

Both organizations are private, non-profit institutes, which provide research services to the forest industry. Forintek was established to lead the technological advancement of the Canadian wood products industry through innovative concepts, processes, products and education programs. FERIC specializes in harvesting and silvicultural operations research.

The opening was attended by Federal Forestry Minister Frank Oberle, provincial Forests Minister Claude Richmond, Forintek President Tony French and FERIC President Jean Berard.

"The new laboratories and offices, situated close to the Faculty of Forestry and the Pulp and Paper Research Institute of Canada, provide an excellent opportunity for staff of the four agencies to collaborate on many projects," said Oberle.

Richmond said the new complex will be the centre of excellence for forest products and harvesting equipment research. "It will strengthen the forest industry by improving its productivity and international competitiveness," said Richmond.

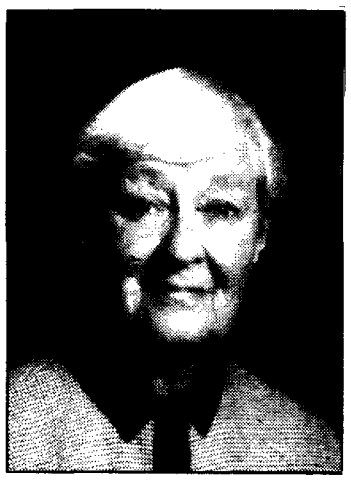
French said the all-wood building has already paved the way for a lot of architects, engineers and builders to follow suit.

"We've achieved a considerable saving from the wood construction of the Forintek facility compared to the cost of any other building material," said French. "And, we've met all seismic, fire and durability requirements."

UBC Forestry Dean Clark Binkley said the faculty is looking forward to expanded cooperative research projects with both Forintek and FERIC.

"We are currently developing a major research project to anticipate and manage the wood characteristics of second-growth timber in B.C. The project would involve, among others, UBC, Forintek and FERIC," said Binkley.

Thom pioneered programs for women



Thom

By CONNIE FILLETTI

Back in 1968, Pat Thom thought she was just doing her job when she created a daytime program of continuing education courses which eventually paved the way for new attitudes towards women and women's studies at UBC.

At 78, Thom's fervent interest in women's issues has not diminished. Although she retired from her position as director of the Centre for Continuing Education in 1978, she continues to work with various women's groups in Vancouver and Victoria, where she now resides. She also offers women's workshops on career planning.

"I wanted to let women in the community know that they could lead lives outside the home," Thom said. "The established domestic pattern was no longer enough. It became clear that we needed growth programs. Women lacked in confidence, they had little sense of themselves."

Thom was speaking from experience. Her role as a wife and the mother of three children didn't satisfy all the expectations she had of life. She decided to return to university and, at the age of 48, earned a master's degree in psychology from the University of Alberta.

After working for several years as a researcher, teacher and counsellor in her native Alberta, Thom and her family relocated to B.C. in 1965. Three years later, she was appointed program director of the newly created daytime program in the Centre for Continuing Education.

In those early days, Thom worked closely with community groups such as the Vancouver Women's University Club, developing programs for adult women.

Installing a program that was acceptable to the university administration, and which offered something of substance to women, sometimes posed a dilemma for Thom.

"I was on my own. There was no one else in 1969."

"Women didn't have society's permission to be other than mothers and wives," Thom explained. "When we offered a growth or self-development program, titles had to be acceptable to husbands, friends and relatives so that the woman was not seen to be becoming 'different'. We worked this way. Ninety-nine point nine per cent of our clientele were women paying for the courses themselves. They had less discretionary money back then and more concern about the acceptibility of developing themselves as independent persons."

Although Thom was solely responsible for developing and implementing the daytime program, she credits Gordon Selman and Jack Blaney, Continuing Education's director and associate director respectively in 1969, for recognizing the need to develop a daytime program which met the interests and needs of women. Selman was supportive of Thom's efforts at a time when, she said, the climate was generally unsympathetic to women.

Profile

"After Gordon decided to start a daytime program and hired me to put it together, I was on my own," Thom said. "There was no one else in 1969."

She saw the program as being liberal arts oriented, with a mandate to provide public access to the university.

It was a pioneering educational program. Her background as a psychologist and a former adult student suited her for developing personal programs to meet individual needs within the context of adult continuing education. Some of the first courses offered included Developing Personal Potential, Choosing and Finding Careers, Return to Education and Effective Study.

Thom feels that many women who enroled in the daytime program finally realized their potential. The experience broadened their horizons and gave them new ones. A large number of women progressed from the non-credit daytime courses to university studies.

When the report of the Royal Commission on the Status of Women was released in December 1970, Thom knew something was going to happen.

"We were all fired up and ready to go," Thom recalls.

She decided to organize a conference to help women learn about and understand the commission's 176 recommendations which were aimed at bringing major changes to the lives of Canadian women.

"It was an historic moment and a very dramatic time. The climate was incredible."

In cooperation with the University Women's Club, the first Canadian conference on the report of the Royal Commission on the Status of Women was held January 30, 1971, just one month after the report's release.

Three hundred women from B.C. attended the conference. They gathered in the basement of the University Women's Club to hear Florence Bird, chair of the commission, discuss her commission's findings. The first ever status of women group had been formed at the conference.

"Nothing like this had ever been done before," Thom reminisced. "It was an historic moment and a very dramatic time. The climate was incredible. Here we were, quiet respectable women. I thought we were going to march in the streets."

Although the report had been released, Thom found that there was little support available, financial or otherwise, to implement the commission's recommendations.

But more conferences followed. Constant work eventually supplied some funds, through the federal government, and in cooperation with groups of local women, Thom organized the Western Conference: Opportunities for Women in 1973. This conference led to the creation of the Canadian Congress of Women.

Two years later, the theme was Integration of Women in the Labor Force. And in 1978, Thom and her group spearheaded a national conference in Ottawa, Beyond the Status Report: The Next Step.

Over the years, Thom developed many offshoots of the daytime program which have emerged in support of women's interests, concerns and aspirations. The Women's Resources Centre, the Canadian Congress on Learning Opportunities for Women and the Vancouver Volunteer Centre are but a few.

When Thom retired, her daughters presented her with a card to mark the occasion. Their inscription read 'to our mentor.' Her legacy to all women is truly rich and varied.

UNIVERSITY OF BRITISH COLUMBIA

UBC EMPLOYMENT EQUITY

Analysis of the Employment Equity Census and Recommendations

UNIVERSITY OF BRITISH COLUMBIA

Dear Colleague,

The following report was prepared for me by Sharon E. Kahn, Director of Employment Equity, with the assistance of the President's Advisory Committee on Employment Equity and the Departments of Budget and Planning, Human Resources, and Information Systems Management. The purpose of the report is to analyse responses to the initial employment equity census, compare UBC's workforce with external pools, and recommend hiring goals for the University's employment equity program.

Please discuss the report with your colleagues and send your comments to Dr. Kahn, c/o the President's Office.

Yours sincerely,

David W. Strangway

Equity UBC COUNTS

Employment Group	TOTAL NUMBER OF EMPLOYEES IN BASE			RESPONSE RATE (PERCENTAGES)		
	Female	Male	Total	Female	Male	Total
Clerical/Secretarial (Excluded)			19	88.9	100.0	89.5
CUPE 116	689	971	1662	58.3	50.5	53.7
CUPE 2278 (Non-Cred Sess Instruc)	36	7	43	66.7	42.9	62.8
CUPE 2950	1275	128	1405	75.2	61.0	73.8
Executive		5	5		100.0	100.0
Faculty	531	1781	2313	81.0	61.5	66.0
Farm Workers			13	66.7	50.0	53.9
IUOE 882		32	32		50.0	50.0
Management & Professional	489	442	932	82.3	70.0	76.3
Tech & Research Assts	317	232	550	61.9	61.3	61.5
TOTAL	3358	3609	6974	72.4	59.5	65.6

Table 1 - UBC Employment Groups by Women and Men (May 1990)

Response to the Employment Equity Census and Workforce Profile

Background of the Census

In February, 1990, the University of British Columbia sent the employment equity census, a self-identification questionnaire, to 6,974 employees, including part-time, casual, and temporary staff. (Census questionnaires were not sent to those whose terms of employment were specifically determined by their status as students or as postdoctoral research fellows. For example, graduate teaching and research assistants were not asked to participate.) In March, 1990, a follow-up mailing of the census went out to those employees who had not responded to the initial mailing.

The University now collects these data from all newly hired employees. This census—both the initial and ongoing—will enable the University to monitor the progress of its employment equity program and thereby achieve three significant goals. First, the census will allow UBC to sketch a broad employment picture of the four groups designated under the Federal Contractors Program (FCP): women, visible minorities, aboriginal people, and persons with disabilities. This broad picture is important because it will help identify areas where systemic discrimination may exist. Second, by comparing the results of the UBC census with figures derived from sources of data such as the 1986 Federal Census, the University will be able to compare itself with external pools. Third, the employment equity census provides a base for an on-going collection of data relevant to the assessment and monitoring of employment equity programs within the University. For example, the census data can be used to track patterns of hiring and promotion.

Databases

As the overall response rate to UBC's initial employment equity census was less than 100%, the Employee Database, which reports the number of women employed in various capacities, was used to examine the situation of women within the University. Since the University had no previously collected data on the other groups designated under the FCP (aboriginals, visible minorities, and persons with disabilities), the census data on these three groups is drawn solely from the employment equity census.

Confidentiality

To ensure the confidentiality of individual responses to the employment equity census, a blank space on the accompanying tables replaces the return rate for groups of employees fewer than five.

1. UBC Employment Group by Women and Men [Table 1]. Eight of the ten employment groups at UBC contain both women and men. Of these, the employment groups with the highest response rates are Clerical/Secretarial (Excluded) (89.5%, 19 persons) and Management & Professional (76.3%, 932 persons). The lowest response rate in these eight groups comes from CUPE 116 (53.7%, 1,662 persons). Men are represented in all ten employment groups, but in seven of these groups, the response rate of men is below 70 percent. The lowest response rate for men is found in Farm Workers and IUOE 882 (both 50%). The two highest response rates by men come from groups with either few men or all men: Clerical/Secretarial (Excluded) and Executive. In contrast, women are represented in eight employment groups, but in only four of these groups, is the women's response under 70 percent. Excluding the groups that have no women (Executive, IUOE 882), the lowest response rates for women are found in CUPE 116 (58.3%, 689 women), Technicians & Research Assistants (61.9%, 317 women) and CUPE 2278 and Farm Workers (both 66.7%). The highest response rates for women come from Clerical/Secretarial (Excluded) (88.9%), Management & Professional (82.3%, 489 women), and Faculty (81%, 531 women).

In addition to differences in response rates of women and men in different employment groups, there are differences in response rates between women and men within the same employment group. The greatest divergence between the response rates of women and men is in CUPE 2278: the women's response rate was higher than the men's rate by 23.8 percentage points. There is also a marked contrast in response rates of Faculty, where 81% of women responded, but only 61.5% of men.

Employment Group	Total Employees	Total Response	Aboriginal Person Count	%	Visible Minority Count	%	Person with Disability Count	%
Clerical/Secretarial (Excluded)	19	17						
CUPE 116	1662	891	15	1.7	241	27.1	49	5.5
CUPE 2278 (Non-Cred Sess Instruc)	43	27						
CUPE 2950	1405	1036	20	2.0	246	23.8	39	3.8
Executive	5	5						
Faculty	2313	1525	15	1.0	141	9.3	65	4.3
Farm Workers	13	7						
IUOE 882	32	16						
Management & Professional	932	711	10	1.5	88	12.4	24	3.4
Tech & Research Assts	550	338			102	30.2	14	4.2
TOTAL	6974	4573	65	1.5	831	18.2	194	4.3

Table 2 - UBC Employment Groups by Aboriginal People, Visible Minorities, and Persons with Disibilities (May 1990)

UBC EMPLOYMENT EQUITY

Analysis of the Employment Equity Census and Recommendations

Listed below are the Abella categories defined by the Federal Contractors Program and examples of UBC positions that fall within each category:

Abella	UBC
01 Upper Level Managers	President, Vice-President
02 Middle and other Managers Admin. Officer, Coordinator Manager	Associate Vice-President, Dean, Head, Director, Assist., Admin. Supervisor, Personnel Assist. Registrar, Food Service
03 Professionals	Accountant, Genetic Assist., Research Engineer, Programmer/Analyst, Social Science Researcher, General Librarian, Professor, Assoc. Professor, Assist. Professor, Instructor, Lecturer, Research Associate, Physician, Research Nurse, Counsellor
04 Semi-Professionals & Technicians	Research Assist., Research Assist. Technician, Engineering Technician, Lab. Asst., Dental Assist., Medical Artist, Editor, Information Officer, Coach
05 Supervisors	Secretary 5, Word Processing Coordinator, Administrative Clerk, Section Head, Residence Life Coordinator, Executive Chef, Head Hostess
06 Foremen/Women	Assist. Head Service Worker, Head & Sub-Head Gardener, Head & Sub-Head Electrician, Head & Sub-Head Carpenter, Area Supervisor, Custodial Supervisor
07 Clerical Workers	Secretary 1, 2, 3 & 4, Clinical Secretary 1 & 2, Clerk Typist, Data Entry Operator, Computer Operator, Library Assist. 1, 2, 3, 4 & 5, Communications Operator, Clerk 1, 2 & 3, Clinical Office Assist. 1, 2 & 3, General Clerk, Program Assist.
08 Sales Workers	Sales Clerk, Bookstore Assist.,Sr. Bookstore Assist., Computer Sales Assist.
09 Service Workers	Patrolperson, Cook, Assist. Cook, Kitchen Help, Bartender, Waiter/Waitress, General Worker (Heavy & Light), Sales Attendant, Residence Attendant, Kiosk Attendant
10 Skilled Crafts & Trades	Sheet Metal Worker, Electrician, Carpenter, Plumber, Steamfitter, Maintenance Engineer 1 & 2, Locksmith
11 Semi-Skilled Manual Workers	Truck Driver, Apprentice, Clerk Driver, Farm Worker 2 & 3, Milker
12 Other Manual Workers	Service Worker 1 & 2, Sr. Service Worker, Gardener, Service Worker-Ice Maker, Painter, Labourer

Table 5

Over 80 percent of all men employed by the University are concentrated in the following three areas: Faculty, CUPE 116, and Management & Professional staff. Women comprise 40 percent of CUPE 116 and over 50 percent of both the Management & Professional employees and Technicians & Research Assistants. The largest number of women is found in CUPE 2950, which contains more than one third of all women employed by the University.

2. UBC Employment Group by Aboriginal People, Visible Minorities, and Persons with Disabilities [Table 2]. The census results reveal several employment groups where no aboriginal person responded: Executive, Farm Workers, and IUOE 882. Sixty-five persons (1.5% of the census respondents) identified themselves as aboriginal persons. The largest number of aboriginal people are concentrated in CUPE 2950, twenty persons forming 2% of this group. CUPE 2950 contains a little under one third of all aboriginal persons responding to the census. There are fifteen aboriginals among Faculty (1%) and fifteen in CUPE 116 (1.7%). Thus, approximately three quarters of all aboriginal persons who responded to the census are concentrated in CUPE 2950, CUPE 116, and Faculty.

In contrast to women and aboriginal people, members of visible minorities appear in all employment groups. The 831 census respondents who identified themselves as belonging to a visible minority comprise 18.2% of UBC's faculty and staff. The greatest number of visible minorities is found in CUPE 2950, where 246 members of visible minorities work, and CUPE 116, where 241 members of visible minorities work. Taken together, these two employment groups contain more than half of the visible minority persons identified in the employment equity census. Another employment group with a high percentage of visible minorities is Technicians & Research Assistants with 30.2% (102 persons). Lower percentages of visible minorities are found in the Faculty group (9.3%, 141 persons) and among Management & Professional staff (12.45%, 88 persons).

The Employment Equity Act of 1986 defines persons with disabilities as those individuals who are limited in the kind or amount of work they can do. Of the census respondents, 4.3% (194 persons) identified themselves as having disabilities that they think, or believe someone else might think, limit their work opportunities. As with aboriginal persons, there are employment groups with no disabled persons; the Executive group and CUPE 2278. Persons with disabilities are concentrated in two groups: Faculty (4.3%, 65 persons) and CUPE 116 (5.5%, 49 persons). More than half of the disabled persons responding to the census are found in these two groups.

3. UBC Faculty/Administrative Unit by Women and Men [Table 3]. The lowest overall response rates come from departments reporting to the Vice-President, Administration and Finance, (56.6%, 1,578 persons), followed by departments reporting to the Deans of Science (63.7%, 694 persons), Medicine (64.6%, 1,340 persons), and Applied Science (64.8%, 363 persons). The low response rate for Administration and Finance is in part explained by the unit's high proportion of CUPE 116 members. The highest response rates come from the President's Office (89.4%, 75 persons) and from Health Sciences (82.3%, 45 persons). The two faculties with the greatest divergence in response rate between men and women are Applied Science and Health Sciences. Men in these units responded at rates of 57.1% (247 men) and 66.7% (15 men) respectively; whereas women in these units responded at rates of 81.1% (116 women) and 90% (30 women) respectively.

Large numbers of men are concentrated in Administration and Finance, Medicine, and Science. Taken together, these three Faculty/Administrative units contain more than half the population of men within the University. Women also are found in large numbers in two of the same groups, VP Administration and Finance, and Medicine, but the third largest numerical population of women is in VP Student and Academic Services. More than half of the women employed by the University are in these three groups.

Faculty/Administrative Unit	TOTAL NUMBER OF EMPLOYEES IN BASE			RESPONSE RATE (PERCENTAGES)		
	Female	Male	Total	Female	Male	Total
Agricultural Science	70	112	182	70.0	66.1	67.6
Applied Science	116	247	363	81.1	57.1	64.8
Arts	262	443	705	73.0	60.3	65.0
Commerce and Business Admin	94	94	188	69.2	64.9	67.1
Dentistry	58	50	108	75.9	64.0	70.4
Education	143	150	293	77.7	72.0	74.8
Forestry	31	67	98	83.9	68.7	73.5
Graduate Studies	34	28	62	79.5	67.9	74.2
Health Sciences	30	15	45	90.0	66.7	82.3
Law	28	45	73	78.6	60.0	67.2
Medicine	725	612	1340	71.5	56.7	64.6
Pharmaceutical Science	49	38	87	85.8	71.1	79.4
President's Office	60	15	75	90.0	86.7	89.4
Science	196	498	694	73.5	59.9	63.7
VP Academic and Provost	129	30	160	74.5	73.4	73.8
VP Administration and Finance	720	856	1578	62.1	52.2	56.6
VP Research	62	35	97	74.2	82.9	77.4
VP Student and Academic Services	551	274	826	77.4	64.6	73.1
TOTAL	3358	3609	6974	72.4	59.5	65.6

Table 3 - UBC Faculty/Administrative Unit by Women and Men (May 1990)

4. UBC Faculty/Administrative Unit by Aboriginal People, Visible Minorities, and Persons with Disabilities [Table 4]. In Commerce and Business Administration, Dentistry, and the President's Office, there are no aboriginal respondents. Education has a high percentage of aboriginals (5.5%) as well as a high number (12). Although Administration and Finance has a low percentage of aboriginal persons (1.7%), these persons represent a high number (15). Taken together, Education and Administration and Finance, comprise more than one third of aboriginal people at UBC.

Unlike the high percentage of aboriginal people in Education compared with other units, Education has a relatively low percentage of members of visible minorities—7.4% (16 persons). The highest reported percentages of visible minorities are found in Administration and Finance, (25.5%, 227 persons), Student and Academic Services (25.1%, 151 persons), and Agricultural Science (22.0%, 27 persons). The highest numbers of visible minorities are in Administration and Finance (227) and Medicine (147). Taken together, these two units contain just under half of the reported visible minorities.

Looking at the figures of persons with disabilities by Faculty/Administrative unit, the highest percentage of persons with disabilities is found in Administration and Finance

Faculty/Administrative Unit	Total Employees	Total Response	Aboriginal Person Count	%	Visible Minority Count	%	Person with Disability Count	%
Agricultural Science	182	123			27	22.0	5	4.1
Applied Science	363	235			46	19.6	8	3.5
Arts	705	458			43	9.4	19	4.2
Commerce and Business Admin	188	126			17	13.5		
Dentistry	108	76			13	17.2		
Education	293	219	12	5.5	16	7.4	5	2.3
Forestry	98	72			9	12.5		
Graduate Studies	62	46			9	19.6		
Health Sciences	45	37						
Law	73	49						
Medicine	1340	865	6	0.7	147	17.0	28	3.3
Pharmaceutical Science	87	69			12	17.4		
President's Office	75	67			8	12.0		
Science	694	442			76	17.2	14	3.2
VP Academic and Provost	160	118			16	13.6		
VP Administration and Finance	1578	893	15	1.7	227	25.5	76	8.6
VP Research	97	75			9	12.0		
VP Student and Academic Services	826	603	6	1.0	151	25.1	23	3.9
TOTAL	6974	4573	65	1.5	831	18.2	194	4.3

Table 4 - UBC Faculty/Administration Unit by Aboriginal People, Visible Minorities, and Persons with Disabilities (May 1990)

UBC EMPLOYMENT EQUITY

Analysis of the Employment Equity Census and Recommendations

(8.6%, 76 persons). More than one third of all persons reporting work-related disabilities are employed in this unit; no other units have any numbers approaching that of Administration and Finance.

Comparison of UBC's Workforce with External Pools

Response Bias

Of the total number of 6,974 employees who received the census, 65.6% responded—a response rate comparable to that of other universities of similar size and composition. Significantly, there was a notable difference in the response rates between men and women. Although UBC's 3,358 women represent a little under half of UBC's total employee population, 72.4% of these women responded to the census; in contrast, only 59.5% of UBC's men responded.

Abella Groupings [Table 5]

In order to compare UBC's workforce profile with data on other employed populations, all faculty and staff positions at UBC were categorized into Abella groupings. Table 5 lists the twelve Abella Groups with examples of UBC positions that fall within each group. These Abella categories, derived from Employment and Immigration Canada's Standard Occupational Coding, classify jobs according to a variety of criteria, such as responsibilities, education, training, and experience.

1. Abella Group by Women and Men [Table 6]. When we look at the numbers of men and women in the various Abella categories, we find the following: the majority of men employed by the University are found among *Middle and Other Managers, Professionals,* and *Semi-Professionals and Technicians*, with more than half the men among *Professionals*. And although there are relatively high numbers of women in two of these categories (*Professionals*, and *Semi-professionals and Technicians*), more than one third of all women in the University are found among Clerical Workers.

2. Abella Group by Aboriginal People, Visible Minorities, and Persons with Disabilities [Table 7]. Leaving aside those Abella categories where no aboriginal persons responded (*Upper Level Managers, Foremen/women, Skilled Crafts and Trades,* and *Semi-skilled Manual Workers*), the census indicates that the highest percentage of aboriginal persons (4.3%, 9 persons) is found in 09 (*Service Workers*). One of the Abella groups reporting the lowest response rate for aboriginal people is *Professionals*. Nonetheless, this group reports a high numerical concentration of 17 aboriginal persons. An even larger number of aboriginals is reported among *Clerical Workers*—(2.3%) 23 persons, or just over one third of all the census respondents who identified themselves as aboriginal people.

Members of visible minorities appear in all groups. Based on responses to the employment equity census, the group with the highest percentage of visible minorities is *Service Workers* (36.2%, 77 persons), followed by *Other Manual Workers* (27.5%, 54 persons), and *Semi-Professionals and Technicians* (25.4%, 167 persons). In terms of numbers, more than one quarter of visible minorities are concentrated among *Clerical Workers* (248), closely followed by *Professionals* (205). Taken together, these Abella categories comprise more than half of the people who reported themselves as members of a visible minority.

The Abella category with the highest reported percentage of disabled persons is *Skilled Crafts and Trades* with 11.3% (7 persons), followed by *Other Manual Workers* with 8.7% (17 persons). Although the percentages are lower among *Professionals and Clerical Workers* (3.9%, 66 persons; 3.8%, 39 persons), more than half of all people who reported work-related disabilities (105 persons) are found in these two groups.

	Abella Category	Total Employees	Number of Women	% Women
01	Upper Level Managers	5	0	0.0
02	Middle and Other Managers	569	285	50.1
03	Professionals	2626	731	27.8
04	Semi-Professionals & Technicians	1049	507	48.3
05	Supervisors	137	110	80.3
06	Foremen/women	42	3	7.1
07	Clerical Workers	1388	1235	89.0
08	Sales Workers	89	47	52.8
09	Service Workers	508	289	56.9
10	Skilled Crafts and Trades	148	4	2.7
11	Semi-Skilled Manual Workers	40	5	12.5
12	Other Manual Workers	373	142	38.1
	TOTAL	6974	3358	48.2
	Faculty	2313	531	23.0

Table 6 - Women Employed at UBC (May 1990)

	Abella Category	Total Employees	Total Response	Number of Aboriginal People	% Aboriginal People	Number of Visible Minorities	% Visible Minorities	Number of Persons with Disabilities	% Persons with Disabilities
01	Upper Level Managers	5	5	0	0.0	1	20.0	0	0.0
02	Middle and Other Managers	569	473	9	2.0	22	4.7	21	4.5
03	Professionals	2626	1714	17	1.0	205	12.0	66	3.9
04	Semi-Professionals & Technicians	1049	659	3	0.5	167	25.4	22	3.4
05	Supervisors	137	103	1	1.0	22	21.4	5	4.9
06	Foremen/women	42	33	0	0.0	3	9.1	1	3.1
07	Clerical Workers	1388	1028	23	2.3	248	24.2	39	3.8
08	Sales Workers	89	70	0	0.0	23	32.9	1	1.5
09	Service Workers	508	213	9	4.3	77	36.2	14	6.6
10	Skilled Crafts and Trades	148	62	0	0.0	8	13.0	7	11.3
11	Semi-Skilled Manual Workers	40	16	0	0.0	1	6.3	1	6.3
12	Other Manual Workers	373	197	3	1.6	54	27.5	17	8.7
	TOTAL	6974	4573	65	1.5	831	18.2	194	4.3
	Faculty	2313	1525	15	1.0	141	9.3	65	4.3

Table 7 - Aboriginal People, Visible Minorities, and Persons with Disabilities Responding to the UBC Census (May 1990)

Limits of the Analysis

Presently, there are two obstacles that stand in the way of formulating a completely satisfactory workforce analysis. One of these obstacles is the unavailability of relevant information from outside the University. For example, we do not know how many aboriginal people, visible minorities, and persons with disabilities received advanced graduate degrees in recent years or how many of these persons earned doctoral degrees in the academic disciplines represented at UBC. This information is particularly relevant to an analysis of faculty.

A second obstacle is the present unavailability of certain kinds of data from within the University. An accurate workforce profile requires complete workforce data. Unfortunately, this workforce analysis is based on the May, 1990, overall response rate of 65.6%. Moreover, the UBC's Employee Database gives a precise count of women employees, but lacks information on the other three groups. The current employment equity census may give an incomplete picture of the UBC population of aboriginal people, visible minorities, and persons with disabilities. The University's workforce changes frequently, and this change results in another internal limit to the analysis. Each month, some 150 faculty and staff move into and out of positions and must be added to or removed from the census. The present analysis does not adequately capture the fluidity of UBC's workforce.

Furthermore, this analysis unavoidably aggregates all UBC employees, including part-time, casual, and temporary staff because we have not been able yet to develop a procedure for accurately disaggregating UBC data on employment status. Accordingly, it is not possible to determine whether designated-group members work fewer hours than other employees. Likewise, we have not completed yet an analysis of the salary ranges of women, aboriginal people, visible minorities, and persons with disabilities compared with other employees. And until a salary analysis is complete, we will be unable to determine if designated group members are segregated in lower-paid positions within Abella categories.

	Abella Category	% Women	% Aboriginal People	% Visible Minorities	% Persons with Disabilities
01	Upper Level Managers	50.6	3.0	6.3	7.3
02	Middle and Other Managers	50.6	3.0	6.3	7.3
03	Professionals	50.6	3.0	6.3	7.3
04	Semi-Professionals & Technicians	50.8	2.6	16.9	6.8
05	Supervisors	50.8	2.6	16.9	6.8
06	Foremen/women	50.8	2.6	16.9	6.8
07	Clerical Workers	50.8	2.6	16.9	6.8
08	Sales Workers	50.8	2.6	16.9	6.8
09	Service Workers	50.8	2.6	16.9	6.8
10	Skilled Crafts and Trades	50.8	2.6	16.9	6.8
11	Semi-Skilled Manual Workers	50.8	2.6	16.9	6.8
12	Other Manual Workers	50.8	2.6	16.9	6.8
	Faculty	50.8	3.0	6.3	7.3

Table 8 - All Designated Groups in 1986 Population (Canadian population used for Abella categories 01-03 and Faculty; Vancouver area population used for Abella categories 04-12)

Comparison of the UBC Workforce with External Pools [Tables 8 - 13]

The objectives of UBC's Policy on Employment Equity are to regard individual merit as the prime criterion for employment and to build a workforce representative of the pool of potential candidates with appropriate qualifications, including women aboriginal people, visible minorities, and persons with disabilities. Unfortunately, much of the data provided by Statistics Canada and Employment and Immigration Canada refer to how many designated-group members were employed rather than how many were qualified for particular positions. Therefore, the President's Advisory Committee on Employment Equity decided to compare the proportions of designated-group members employed by UBC with women, aboriginal people, visible minorities, and persons with disabilities in two external pools: 1. the population who were employed in 1986, as well as 2. the total

UBC EMPLOYMENT EQUITY

Analysis of the Employment Equity Census and Recommendations

Abella Category	Women	Aboriginal People	Visible Minorities	Persons with Disabilities
01 Upper Level Managers	15.2	1.1	4.3	1.6
02 Middle and Other Managers	35.2	1.5	3.7	3.4
03 Professionals	34.1	0.9	9.1	1.6
04 Semi-Professionals & Technicians	30.0	0.3	17.3	2.3
05 Supervisors	67.0	1.1	12.3	6.4
06 Foremen/women	13.1	0.6	13.4	4.4
07 Clerical Workers	89.7	1.8	12.0	3.3
08 Sales Workers	53.0	1.6	14.0	5.0
09 Service Workers	56.5	2.4	24.6	7.7
10 Skilled Crafts and Trades	5.0	1.6	10.2	9.1
11 Semi-Skilled Manual Workers	15.5	2.6	11.2	8.0
12 Other Manual Workers	30.9	2.6	21.7	7.8
Faculty +	28.4	0.8	9.0	1.6

* Canadian population used for Abella categories 01-03 and Faculty
Vancouver area population used for Abella categories 04-12
\+ Percent Canadian college and university teachers

Table 9 - All Designated Groups in 1986 Labour Force (Percentages Adjusted for Positions at UBC)

Canadian population.

The first comparison—UBC's workforce with the labour force—reflects both current employment patterns and discrimination in Canadian society. Also, a comparison of UBC's workforce with those employed in 1986 cannot reveal how many qualified women, aboriginal people, visible minorities, and persons with disabilities were unemployed at that time. Thus, comparing UBC's workforce with the external labour force may under-represent the numbers of qualified designated-group members available to work and reflect the very discrimination that the University's employment equity program seeks to remedy. The second comparison—UBC with the total Canadian population—goes beyond UBC's current Policy on Employment Equity. We provide both comparisons in order to suggest a range of possibility for UBC's on-going employment equity program.

Some Abella categories within the University's workforce are compared with national (Canadian) figures, and some are compared with local (Vancouver) figures. Three Abella groupings—*Upper level Management, Middle Management*, and *Professionals*—are compared with the national, rather than local figures because hiring for these groups is generally conducted on a national scale. The other nine Abella groups are compared with local figures.

Table 8 shows the percentage of employees in each of the four designated groups we would expect to observe among UBC's faculty and staff using the appropriate national or local figures if the distribution of UBC employees reflected the distribution of women, aboriginal people, visible minorities, and persons with disabilities in the Canadian population. (We adjusted upward the percentage of aboriginal people in the Canadian and Vancouver population to reflect the approximately 45,000 aboriginal people living on reserves who were not included in the 1986 census.)

Next, to increase the accuracy of a comparison between UBC data and Statistics Canada data, an adjustment had to be made to accommodate the fact that the distribution of jobs at UBC is not the same as that found in Canada overall. For example, the proportion of women in Canada employed as schoolteachers and nurses far exceeds the proportion of women employed by UBC as schoolteachers and nurses. Therefore, a figure was calculated to indicate the percentage of employees in each of the four designated groups we would expect to observe in the external labour pools if the distribution of occupations across Canada was the same as the distribution of jobs in UBC's workforce (Table 9).

Two Abella categories—*Middle and Other Managers and Professionals*—contain members of faculty and staff in one grouping. (The *Upper Level Managers* group also contains members of faculty and staff, but this Abella group is equivalent to the UBC employment group Executive. *Middle and Other Managers and Professionals* overlap two UBC employment groups—Faculty and Management and Professional.) The Abella group of *Middle and Other Managers* is composed of both faculty, such as deans and heads of academic departments and staff, such as directors and coordinators of non-academic units. Similarly, the Abella group of Professionals is composed of both faculty and other professionals, such as analysts, programmers, and engineers. UBC recruits the majority of its faculty, especially tenure-track faculty, from a pool of individuals who have earned doctorates. Because the recruitment pool for UBC faculty differs from that of non-faculty managers and professionals, in the accompanying tables, we include the UBC employment group Faculty when comparing UBC's workforce with external pools. We use Faculty to refer to all faculty members, including instructors, sessionals, research associates, and librarians. We compare this group with Canadian college and university teachers.

Abella Category	Women		Aboriginal People		Visible Minorities		Persons with Disabilities	
	Population	Labour Force	Population	Labour Force	Population	Labour Force	Population	Labour Force
01 Upper Level Managers	2.5	0.8	0.2	0.1	0.3	0.2	0.4	0.1
02 Middle and Other Managers	287.9	200.3	17.1	8.5	35.8	21.1	41.5	19.3
03 Professionals	1328.8	895.5	78.8	23.6	165.4	239.0	191.7	42.0
04 Semi-Professionals & Tech	532.9	314.7	27.3	3.1	177.3	181.5	71.3	24.1
05 Supervisors	69.6	91.8	3.6	1.5	23.2	16.9	9.3	8.8
06 Foremen/women	21.3	5.5	1.1	0.3	7.1	5.6	2.9	1.8
07 Clerical Workers	705.1	1245.0	36.1	25.0	234.6	166.6	94.4	45.8
08 Sales Workers	45.2	47.2	2.3	1.4	15.0	12.5	6.1	4.5
09 Service Workers	258.1	287.0	13.2	12.2	85.9	125.0	34.5	39.1
10 Skilled Crafts and Trades	75.2	7.4	3.8	2.4	25.0	15.1	10.1	13.5
11 Semi-Skilled Manual Workers	20.3	6.2	1.0	1.0	6.8	4.5	2.7	3.2
12 Other Manual Workers	189.5	115.3	9.7	9.7	63.0	80.9	25.4	29.1
Faculty	1175.0	656.9	69.4	18.5	145.7	208.2	168.8	37.0

Table 10 - Expected Numbers for All Designated Groups - UBC Compared with Population and Adjusted Labour Force

Table #10 shows the numbers of designated-group employees UBC would expect to employ in each Abella group using the appropriate national or local figures in two ways:

1. compared to the Canadian population, and
2. compared to the labour force after adjusting for the distribution of jobs at UBC.

When we examine Tables 6-10, we see that in some Abella groups, the percentage of UBC women, aboriginal people, visible minorities, and persons with disabilities falls short of percentages in the population as well as in the adjusted external labour force.

For example, Table 6 shows that in Abella Group 10—*Skilled Crafts and Trades*—UBC employed four women in May, 1990, whereas the comparable figure for the adjusted labour force in Table 10 is seven women. Accordingly, if occupations in *Skilled Crafts and Trades* in the labour force matched the distribution of these jobs at UBC, the University would employ three additional women in *Skilled Crafts and Trades* positions. On the other hand, in some Abella groups, UBC appears to exceed the number of designated-group members compared with their expected numbers in the adjusted external labour force. For example, Table 7 shows that in Abella Group 03—*Professionals*—UBC employed sixty-six disabled persons who reported they were limited in the kind or amount of work they did. This compares with the expected number of professional persons with disabilities—42—shown in Table 10.

Table 11 summarizes the under- and over-representation of the four designated employment-equity groups in all Abella categories using Canadian population and labour force data. This analysis is based on raw data; that is, we assume all designated-group

Abella Category	Women		Aboriginal People		Visible Minorities		Persons with Disabilities	
	Population	Labour Force	Population	Labour Force	Population	Labour Force	Population	Labour Force
01 Upper Level Managers	2.5	0.8	0.2	0.1	-0.7	-0.8	0.4	0.1
02 Middle and Other Managers	2.9	-84.7	6.6	-1.9	10.3	-4.5	17.1	-5.1
03 Professionals	597.8	164.5	57.2	2.0	-95.4	-21.8	107.7	-42.0
04 Semi-Professionals & Tech	25.9	-192.3	22.7	-1.5	-80.0	-75.8	37.4	-9.8
05 Supervisors	-40.4	-18.2	2.3	0.2	-5.0	-11.3	2.9	2.4
06 Foremen/women	18.3	2.5	1.1	0.3	4.1	2.6	1.9	0.8
07 Clerical Workers	-529.9	10.0	5.7	-5.4	-92.6	-160.6	42.9	-5.6
08 Sales Workers	-1.8	0.2	2.3	1.4	-12.0	-14.5	4.9	3.3
09 Service Workers	-30.9	-2.0	-6.6	-7.6	-83.8	-44.6	3.7	8.3
10 Skilled Crafts and Trades	71.2	3.4	3.8	2.4	9.0	-0.9	-3.9	-0.5
11 Semi-Skilled Manual Workers	15.3	1.2	1.0	1.0	4.3	2.0	0.2	0.7
12 Other Manual Workers	47.5	-26.7	4.5	4.5	-30.4	-12.5	-4.0	-0.3
Faculty	644.0	125.9	50.9	0.0	28.4	34.1	88.6	-43.2

Table 11 - Under and Over-representation for All Designated Groups - UBC Compared with Population and Adjusted Labour Force (A negative number indicates an over-representation with the external pool)

Explanatory Note 1 (Table 11)

Calculation of inferred shortfall for total UBC population

$$\text{Inferred shortfall} = \text{Expected number} - \frac{\text{Actual number}}{\text{Response rate}}$$

where **Expected number** =

Total number of UBC census respondents for Abella category **X** Participation rate of designated group in labour force for Abella category (adjusted for UBC positions)

Actual number =

Number of UBC census respondents in designated group for Abella category

Response rate =

$$\frac{\text{Total number of women respondents for Abella category}}{\text{Total number of women in Abella category}}$$

UBC EMPLOYMENT EQUITY

Analysis of the Employment Equity Census and Recommendations

members responded to the census. In some Abella categories, for example, *Semi-Skilled Manual Workers*, UBC, compared with either population or labour force data, shows a shortfall in all four groups. In other categories, for example, *Middle and Other Managers*, and *Semi-Professionals and Technicians*, UBC appears to fall short of the proportion of women in the Canadian population and exceed the proportion of women in the current employment pools.

Because we have complete data on the numbers of women faculty and staff at UBC, we know the actual response rate for women. But we cannot know how many of the census non-respondents are aboriginal people, visible minorities, and persons with disabilities. Assuming the response rates for the three minority groups to be similar to that for women, we accordingly adjusted the numbers for aboriginal people, visible minorities, and persons with disabilities (See Explanatory Note 1.) Table 12 reveals where the number of women, and the estimated numbers of aboriginal people, members of visible minorities, and persons with disabilities employed by UBC fall short of population and adjusted national and local labour pools.

The shortfall of 165 women in the *Professional* group reflects the large number of faculty in this Abella category. When we compare UBC faculty—full-time and part-time—with Canadian university and college teachers, there is a shortfall of 126 women.

Table 13 compares the number of UBC's tenured and tenure-track women faculty to recent hiring of women faculty and doctoral degrees granted to women. Two points stand out:

1. There is a large range between fields where no women earned doctorates in 1988 (Architecture and Dentistry, 0) and that in which 231 women earned doctorates that year (Education, 51%). In Arts and in Science, 756 and 624 women received doctoral degrees, yet these high figures represent 41.3 and 19.4 percent respectively of the total doctorates awarded in 1988.

2. Except in the case of Pharmaceutical Sciences, the percentage of women hired into tenure-track positions in recent years at UBC is higher than the percentage of women in the faculty. In the three largest faculties (Arts, Medicine, and Science), the percentage of women hired in recent years far exceeds the current proportion of women to men in tenured and tenure-track positions, 22-35%, 18-35%, and 8-16%, respectively.

The shortfall between the current representation of women in the professoriate varies by discipline, but the number of women in the qualified applicant pools is bound to increase as more and more women pursue the graduate degrees that qualify them for academic careers.

	Abella Category	Women		Aboriginal People*		Visible Minorities*		Persons with Disabilities*	
		Population	Labour Force	Population	Labour Force	Population	Labour Force	Population	Labour Force
01	Upper Level Managers	2.5	0.8	0.2	0.1			0.4	0.1
02	Middle and Other Managers	2.9		6.6		10.3		17.1	
03	Professionals	597.8	164.5	57.2	2.0			107.7	
04	Semi-Professionals & Tech	25.9		22.7				37.4	
05	Supervisors			2.3	0.2			2.9	2.4
06	Foremen/women	18.3	2.5	1.1	0.3	4.1	2.6	1.9	0.8
07	Clerical Workers		10.0	5.7				42.9	
08	Sales Workers		0.2	2.3	1.4			4.9	3.3
09	Service Workers							3.7	8.3
10	Skilled Crafts and Trades	71.2	3.4	3.8	2.4	9.0			
11	Semi-Skilled Manual Workers	15.3	1.2	1.0	1.0	4.3	2.0	0.2	0.7
12	Other Manual Workers	47.5		4.5	4.5				
	TOTAL	781.4	182.6	107.4	11.8	27.6	4.6	219.2	15.5
	Faculty	644.0	125.9	50.9		28.4	34.1	88.6	

*Estimate based on census response rate of women.

Table 12 - UBC Shortfall Calculation for Designated Groups - UBC Compared with Population and Adjusted Labour Force

In summary, the University shows shortfalls from the Canadian population in many Abella categories. In addition, UBC shows shortfalls from current national and local employment pools in every Abella category with two exceptions: *Middle and Other Managers*, and *Semi-Professionals and Technicians*. (The shortfall of ten women among *Clerical Workers* reflects, no doubt, the large number of men (151) UBC employs in this traditionally female-dominated group.) There is one category in which shortfalls from local labour pools appear for all four designated groups: *Semi-Skilled Manual Workers*. For tenured and tenure-track faculty, the University shows a shortfall from the current number of women earning doctoral degrees.

FACULTY	F/T FACULTY 1989/90		FACULTY HIRING 1984-90		DOCTORAL DEGREES GRANTED	
	Total	% Women	Total	% Women	Total	% Women
AGRICULTURAL SCIENCE	55	9.1	11	18.2	84	32.1
APPLIED SCIENCE						
Architecture	13	0.0	0	0.0	2	0.0
Engineering	117	2.6	32	3.1	338	8.3
Nursing	39	97.5	6	100.0	-	-
ARTS	496	21.8	98	34.7	756	41.3
COMMERCE & BUSINESS	95	11.6	29	24.1	37	27.0
DENTISTRY	35	17.1	13	30.8	4	0.0
EDUCATION	181	30.9	24	45.8	231	51.1
FORESTRY	41	2.4	20	10.0	12	16.7
GRADUATE STUDIES	19	5.3	1	100.0	-	-
LAW	41	14.6	16	31.3	N/A	N/A
MEDICINE	385	18.4	116	34.5	243	36.6
PHARMACEUTICAL SCIENCE	33	27.3	9	11.1	15	13.3
SCIENCE	307	8.1	49	16.3	624	19.4
ALL FACULTIES	1859	18.3	424	26.4	2353	30.2

*Tenured/tenure-track faculty include assistant, associate, and full professors; and instructors
Source: UBC Office of Budget and Planning

Table 13 - UBC Tenured/tenure-track Women Faculty Compared with Doctoral Degrees Granted Nationally to Women (Tenured/tenure-track faculty include assistant, asociate, and full professors; and instructors - Source: UBC Office of Budget and Planning)

Recommendations

Consistent with UBC's Policy on Employment Equity, which states that individual achievement and merit are the fundamental criteria for employment decisions, the President's Advisory Committee on Employment Equity recommends the following:

A. To ensure that UBC reflects the percentage of women in the applicant pool of doctoral degree recipients in Canada, UBC should hire women to fill at least 35% of vacant tenure-track faculty positions. (This is an overall figure and must be adjusted for individual faculties and departments according to their respective applicant pools.) As universities across Canada seek to increase the number of women in their faculties, competition for the women in this pool will increase. Therefore, UBC should devise means to attract and retain the best-qualified women.

B. In order to reflect the numbers of women, aboriginal people, members of visible minorities, and persons with disabilities currently employed in external labour pools, UBC should add the following qualified individuals to its staff with all reasonable dispatch:

Abella Category (Current # of employees)	Hiring Goal to Eliminate Current Shortfall
Upper Level Managers (5)	1 woman
Professionals (2626)	39 women 2 aboriginal people 2 persons with disabilities
Supervisors (137)	3 women
Foremen/women (42)	3 members of visible minorities 1 person with disability
Sales Workers (89)	1 aboriginal person 3 persons with disabilities
Service Workers (508)	8 persons with disabilities
Skilled Crafts & Trades (148)	3 women 2 aboriginal people
Semi-Skilled Manual Workers (40)	1 woman 1 aboriginal person 2 members of visible minorities 1 person with disability
Other Manual Workers (373)	5 aboriginal people

C. UBC should review its goals for hiring members of designated employment-equity groups annually keeping in view the long-term objective of a workforce that reflects the distribution of potential candidates with appropriate qualifications, including women, aboriginal people, visible minorities, and persons with disabilities.

Appendix A
President's Advisory Committee on Employment Equity

Alannah Anderson	CUPE 2950
Caroline Bruce	Manager/Supervisory Technician, Pharmacology & Therapeutics
M. Wayne Greene	Acting Director, Human Resources
Samuel P.S. Ho	Professor, Economics
George Hoberg	Assistant Professor, Political Science
Bill Kadey	International Representative, IUOE
Sharon E. Kahn	Director, Employment Equity
Verna Kirkness	Director, First Nations House
A.J. McClean (Chair)	Associate Vice-President, Academic
Jessica McFarlane	CUPE 2278
George McLaughlin	President, CUPE 116
Axel Meisen	Dean, Faculty of Applied Science
Wendy Merlo	Assistant Treasurer, Financial Services
Judith H. Myers	Associate Dean for the Promotion of Women in Science
Mary Russell	Faculty Association
Judith C. Thiele	Reference and Collection Librarian, Charles Crane Memorial Library
William A. Webber	Associate Vice-President, Academic

May 19 – June 1

SUNDAY, MAY 19

Botanical Gardens Sale
First Annual Perennial Plant Sale. Free admission with plant purchase. Reception/Education Centre from 10am-4pm. Call Judy Newton 822-4372.

TUESDAY, MAY 21

Medical Genetics Seminar
Hemopoietic Stem Cells In Mouse. Mr. Chris Fraser, Ph.D. student, Terry Fox Lab. IRC #1 at 8:30am. Call 822-5311.

Neuroscience Discussion Group
Extracellular Monamines In Response To Psychostimulants. Dr. R. Kuczenski, Psychiatry, U. of California. University Hospital, UBC Site G279, at 4pm. Call 822-2330.

International Relations Institute Lecture
Relations After The Cold War. Brian Fall, C.M.G., British High Commissioner to Canada. Buchanan Penthouse at 4pm. Call 822-5480.

AAPS Forum
Michael Guillemette, AAPS Pension Consultant, will be speaking about the staff pension plan. Grad Centre Banquet Rm. from 12:30-1:15pm. Call 822-4310.

WEDNESDAY, MAY 22

Microbiology Seminar Series
Biodegradation Of Halogentated Aliphatic Compounds By Pure And Mixed Cultures Of Bacteria. Dr. Christine Egli, Microbiology, UBC. 201 Wesbrook from 12:30-1:30pm. Call 822-6648.

THURSDAY, MAY 23

Geophysics/Astronomy Seminar
Some Posers To The Big Bang Cosmology. Prof J.V. Narlikar, Inter-University Centre for Astronomy/Astrophysics, Pune, India. Geophysics/Astronomy 260 at 4pm. Coffee available from 3:30pm. Call 822-4134.

UBC Reports is the faculty and staff newspaper of the University of British Columbia. It is published every second Thursday by the UBC Community Relations Office, 6328 Memorial Rd., Vancouver, B.C., V6T 1Z2.
Telephone 822-3131.
Advertising inquiries: 822-6149.
Managing Editor: Steve Crombie
Ass't Editor: Paula Martin
Contributors: Ron Burke, Connie Filletti, Abe Hefter, Charles Ker, and Gavin Wilson.

Please recycle

CALENDAR DEADLINES

For events in the period June 2 to June 15, notices must be submitted by UBC faculty or staff on proper Calendar forms no later than noon on Thursday, May 16 to the Community Relations Office, 6328 Memorial Rd., Room 207, Old Administration Building. For more information call 822-3131. The next edition of UBC Reports wil be published May 28. Notices exceeding 35 words may be edited.

FRIDAY, MAY 24

Obstetrics/Gynecology Grand Rounds
Intra-uterine Insemination. Dr. Patrick Taylor, UBC. University Hospital, Shaughnessy Site D308 at 8am. Call 875-2171.

Paediatrics Grand Rounds
Low Level Lead Toxicity-Implications For The Paediatrician, The Patient And The Taxpayer. Dr. G. Lockitch, Pathology, UBC Children's Hospital. G.F. Strong Rehab Centre Auditorium at 9am. Call 875-2118.

MONDAY, MAY 27

Biochemistry Discussion Group
Protein Processing And Secretion In Yeast. Dr. Howard Bussey, Biology, McGill U. IRC #3 at 3:45pm. Call 822-5925.

Paediatrics Research Seminar
Recurrent Chickenpox In Immune Competent Children. Dr. Anne Junker, Immunology Div., Paediatrics, Children's Hospital. University Hospital, Shaughnessy Site D308 at 12pm. Refreshments from 11:45am. Call 875-2492.

Pulp/Paper Centre Dow Lecture
Directions In New Zealand Mechanical Pulping Research. Dr. Stuart Corson, Dow Distinguished Lecturer, PAPRO, Forest Research Inst., Rotorua, New Zealand. Pulp/Paper Centre 101 at 11am. Call 822-8560.

TUESDAY, MAY 28

Medical Genetics Seminar
Retrovirus-Like Promoters In The Human Genome. Ms. Anita Feuchter, Ph.D. candidate, Terry Fox Lab. IRC #1 at 8:30am. Coffee at 8:15am. Call 822-5311.

WEDNESDAY, MAY 29

Microbiology Seminar Series
Replication And Transcription Of Parvoviruses. Dr. Caroline Astell, Biochemistry, UBC. Wesbrook 201 from 12:30-1:30pm. Call 822-6648.

THURSDAY, MAY 30

Biochemistry Seminar
Structure And Function Of A Catalytic RNA. Dr. Sidney Altman, Biology, Yale U. IRC #4 at 12:30pm. Call 822-5925.

FRIDAY, MAY 31

Paediatrics Grand Rounds
Paediatric Endocrinology Relevant To Mainstream Paediatrics? No One Can Ignore Growth Factors Any Longer. Dr. Judson Van Wyk, U. North Carolina at Chapel Hill, . G.F. Strong Rehab Centre Auditorium at 9am. Call 875-2118.

Obstetrics/Gynecology Grand Rounds
Methodology And Logistics Of A Multi-Centre Canadian Randomized Clinical Trial. Dr. Jean-Marie Moutquin. University Hospital, Shaughnessy Site D308 at 8am. Call 875-2171.

NOTICES

Campus Tours
Enjoy a free walking tour of UBC's gardens, galleries, recreational facilities and more. Drop-in tours leave the Tours and Information desk in the Student Union Building at 10am and 1pm weekdays. To book specialized tours including those for seniors, children, ESL groups and the physically challenged, call 822-3777.

Census Day June 4
Next Statistics Canada Census. Complete your questionnaire and mail it back according to the instructions on the package. For information, call 666-2041 or 666-7299.

English Language Institute Homestay
English-speaking families needed to host international students participating in UBC programs, for periods of two to six weeks. Remuneration is $19/night. Call 222-5208.

International House Reach Out Program
Local students correspond with international students accepted to UBC. Act as contact and provide useful information to incoming students while making global friends. All students (Canadian or Internationals) welcome. Call 822-5021.

Museum of Anthropology
Exhibition extended to June 29: Portraits of BC Native leaders, chiefs, chief counsellors and elders by Kwaguitl photographer David Neel. Now open in the new West Wing: The Koerner Ceramics Gallery. Closed Monday. Call 822-5087.

Executive Programs
One/two-day business seminars. May 21-22, Financial Management For Non-Financial Managers, $550. May 27-31, Marketing Challenge For Senior Managers, $1,950. May 28-29, Leading Creative And Professional Staff, $750. E.D. McPhee Executive Conference Centre, Henry Angus Bldg. For more information call 822-8400.

Infant Hearing Study
Infants aged 1-3 mos. needed for hearing study. Remuneration for participation. Interested parents please contact Catherine (for Ellen Levi) at the School of Audiology, 822-2288.

Psychology Step-Families Study
Married couples who have at least one child from a previous union living with them, are invited to participate in a study of stress and coping in step-families. Call Jennifer Campbell at 822-3805.

Counselling Psychology Retirement Study
Women concerned about planning their retirement needed for an 8-week retirement preparation seminar. Call Sara Comish at 822-5345.

Adult Child Separation/Divorce Study
Volunteers needed for study exploring how mothers cope with their adult child's separation/divorce. Participants will be required to anonymously complete a mailed questionnaire. Call Allison Krause, Counselling Psychology, at 946-7803.

Psychiatry Depression Study
Participants needed for research study using new antidepressant medication. Depression sufferers, 18-65 years. Call Doug Keller at 822-7318.

Diabetic Clinical Study
Diabetics who have painful neuropathy affecting the legs needed to volunteer for 14-week trial of an investigational /new drug. Call Dr. Donald Studney, University Hospital, UBC Site at 822-7142.

Daily Rhythms Study
Volunteers needed to keep a daily journal (average 5 min. daily) for 4 months, noting patterns in physical/social experiences. Call Jessica McFarlane at 822-5121.

Psychiatry PMS Study
University Hospital, Shaughnessy site. Volunteers needed for a study of an investigational medication to treat Pre Menstrual Syndrome. Call Doug Keller at 822-7318.

Study on Exercise and the Menstrual Cycle
Volunteers needed age 18-35 having normal menstrual cycles-not currently on oral contraceptives. Dr. Connie Lebrun, Family Practice, Sports Medicine. Will get V02max and other physiological testing done. 822-4045.

Hypertension in Pregnancy Study
Pregnant women concerned about their blood pressure, are invited to participate. The study compares relaxation training with standard medical treatment (own physician). Call Dr. Wolfgang Linden, 822-4145.

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

Memory For Places
Study on memory for places (shopping mall) requires volunteers age 65 years and older for 1.5 hours. Please call Bob Uttl, Psychology, UBC at 822-2140.

Herpes Research Study
Participants needed for treatment studies of shingles (herpes zoster) and first herpes simplex infections with new antiviral agents. Also ongoing study for males 18-45 years with recurrent herpes simplex. Dr. Stephen Sacks, sponsoring physician. Call the Herpes clinic at 822-7565 or leave your name/number at 687-7711, pager 2887.

Gastrointestinal Study
Volunteers required for pre-clinical trials of a new gastrointestinal ultrasound contrast agent. Volunteers (18-30 years) in good health with no history of ulcers or other gastrointestinal ailments. Call Dr. Colin Tilcock, Radiology, University Hospital, UBC Site at 822-3717.

Female Hair Loss Study
Females age 19-49. Moderate hair loss, crown area only. Must be able to attend 1-2 times weekly for 9 months. Honorarium paid for participation. Call Sherry at 874-8138.

Statistical Consulting and Research Laboratory
SCARL is operated by the Department of Statistics to provide statistical advice to faculty and graduate students working on research problems. Forms for appointments available in 210. Ponderosa Annex C-210. Call 822-4037.

Surplus Equipment Recycling Facility
All surplus items. Every Wednesday, 12-3pm. Task Force Bldg., 2352 Health Sciences Mall. Call 822-2813.

Sexual Harassment Office
Two advisors are available to discuss questions and concerns on the subject. They are prepared to help any member of the UBC community who is being sexually harassed to find a satisfactory resolution. Call Margaretha Hoek or Jon Shapiro at 822-6353.

Volunteering
To find an interesting and challenging volunteer job, get in touch with Volunteer Connections, Student Counselling and Resources Centre, Brock 200. Call 822-3811.

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

Duplicate Bridge
Informal game. All welcome. Admission $2, includes coffee/snacks. Faculty Club every Wednesday at 7pm. Call 822-4865.

Fitness Appraisal
Physical Education and Recreation through the John M. Buchanan Fitness and Research Centre, administers a physical fitness assessment program. Students $25, others $30. Call 822-4356.

Adult Hockey Camps
Cool off on the ice this summer. Whether you're just starting out or an experienced player, these camps offer quality skill development instruction for both men and women. For further information call Community Sport Services at 822-3688.

Adult Golf Lessons
Perfect your golf game this year in a basic or intermediate programs. Learn quality fundamentals of grip, posture, stance, alignment and accuracy. Class size limited to 6. Call Community Sport Services at 822-3688.

Neville Scarfe Children's Garden
Located west of the Education Building. Free admission. Open year round. Families interested in planting, weeding or watering the garden, call Gary Pennington at 822-6386 or Jo-Anne Naslund at 434-1081.

Botanical Garden
10am-6pm daily. Free admission on Wednesdays. Call 822-4208.

Work Study Program helps students pay their way

By GAVIN WILSON

They move pianos, sharpen skates, program computers, shelve library books, test seismic equipment and assist researchers.

From agriculture to zoology, students needing financial assistance are employed across campus in UBC's Work Study Program.

"I wouldn't have been able to stretch my finances to the end of the school year without it," said Michele Hebein, a second-year Arts student who performed clerical duties in the psychology department office from September to May.

Photo by Media Services

Arts student Michele Hebeinis one of 770 UBC students employed on campus in the Work Study Program.

A recent survey shows that the UBC program — the biggest in the province — is meeting the expectations of both students and their campus employers, said program administrator Evelyn Buriak.

"We were pleasantly surprised," she said of the study results, gathered in February and March of this year. "We pointedly asked for comments on what participants saw as the biggest problems."

The program offers part-time jobs for full-time students with demonstrated financial need. Funded by the provincial government and the university, it is administered by Awards and Financial Aid, with support from other university departments.

This past year, 770 students were employed in 450 to 500 campus projects. The program received $790,000 in funding for B.C. students from the provincial government and $50,000 from the university for students from other provinces.

Despite its success, Buriak said many people do not know about the program, or that it could work well for them.

For students, the principal criteria is demonstrated financial need, as assessed by B.C. Student Assistance Program policy. The work study program also tries to give them some career or study-related experience. A full 50 per cent of the jobs created under the program are research-related.

"We found that it is usually a pretty good match in that respect," Buriak said. "It's doing what we had hoped it would."

Even when the perfect match is not found, the program can open up opportunities. Buriak has heard of students getting so involved in their work study projects that they revise their career plans.

If there is a complaint about the program from the students' point of view, she said, it is that they wanted more of it: more hours, more money and greater flexibility of hours.

Currently, students can earn a maximum amount of $2,500 annually (hourly pay ranges from $8.25 to $14) and are restricted to a maximum of 10 hours a week. In many cases hours are restricted because of campus union contracts, but it is also government philosophy that jobs should not detract from study, said Buriak.

Project proposals for the creation of work study jobs can be submitted by full-time faculty, administrative and professional staff members. Deadline for project proposals is August 1.

Two UBC professors named to TRIUMF advisory board

Education Minister Stan Hagen has named two UBC professors to the newly created advisory board for the TRIUMF-KAON Ventures Office.

The office was established last June to actively pursue opportunities to commercialize new technologies created by TRIUMF and the proposed kaon factory project.

The board will oversee the transfer of technology from the TRIUMF laboratory to the private sector.

Named to the board are Microbiology professor Julia Levy, who is vice-president of Quadra Logic Technologies, and Dr. David Hardwick, associate dean of research and planning in the Faculty of Medicine and director of laboratories, Children's Hospital.

The advisory board will be chaired by Haig Farris, chairman and president of the Fractal Capital Corp. Other board members include Robin Armstrong, president of the University of New Brunswick, Normand Morin, vice-president of Lavalin, and Marian Vaisey-Genser, associate vice-president, University of Manitoba.

The new board will provide the leadership to propel TRIUMF's scientific innovations into the national and international marketplace, Hagen said.

In the past year, the office has identified more than 50 new commercial technologies at the TRIUMF facility, ranging from medical technologies through microelectronics and computer software.

The office played an active role in assisting the first foreign sale of a compact, commercial cyclotron by Ebco Industries of Richmond.

UBC hosts Canada-wide Science Fair

By GAVIN WILSON

More than 450 students from across Canada and several Pacific Rim countries were expected to arrive at UBC to take part in the week-long 1991 Canada-Wide Science Fair, May 12-19.

The university is a co-sponsor of the event.

The students, aged 11 to 18 years, are winners of nearly 100 regional fairs held earlier across the country. Their projects, in four categories (engineering, life science, physical science and computer science), were to be displayed in the War Memorial Gym.

More than 200 judges were invited to award $100,000 in trips, scholarships, cash awards and summer jobs, as well as medals and numerous special awards.

In all, more than 1,000 people, from as far away as Japan, Thailand, the Philippines, Sweden and Australia, came to participate as guests, delegates or competitors.

The annual Science Fair is held to encourage scientific interest among young men and women, help students develop experimental skills and assist them in pursuing careers in science.

The theme of this year's fair is the Pacific Rim.

As well as science, students will be treated to a week of social and cultural activities, workshops and seminars. They will also tour campus, Vancouver and Victoria.

The Science Fair movement has grown quickly in B.C., from just one regional event a few year ago, to 11 regional fairs right across the province. B.C. students have earned top awards each year at the Canada-Wide Science Fair.

During the science fair, UBC Registrar Richard Spencer was director of judging and Reg Wild, math and science education, was director of exhibition facilities. Other organizing committee members from UBC were Bob Carlisle, math and science education, David Dolphin, chemistry, and Michael Crooks, physics.

U of Texas gets $2.4-million facility

Cecil Green's philanthropy goes on

Philanthropist and long-time benefactor of UBC Cecil Green has endowed the University of Texas at Dallas with a centre designed to explore the relationships between science and issues of social policy.

The Cecil and Ida Green Centre for the Study of Science and Social Policy is the latest project to receive a part of an estimated $150 million Green has donated to educational and research institutions worldwide.

Construction of the $2.4-million centre will be funded by Green's donation, University of Texas endowment funds and other donors.

Green attended a ceremony in Dallas to dedicate the centre on May 2. Completion of the 16,500-square-foot facility is expected by September, 1992.

In 1990, Green donated more than $7 million to UBC's fundraising campaign, A World of Opportunity, for construction of a residential graduate college to be named in his honor.

Green

British-born Green, 91, was raised in Vancouver and studied at UBC before transferring to the Massachusetts Institute of Technology. After earning degrees in electrical engineering, he went on to become a pioneer in the field of exploration geophysics and a co-founder of Texas Instruments, the Dallas-based electronics firm.

Green will be knighted by Her Royal Highness, Queen Elizabeth II, at a ceremony to be held this spring, in Dallas, which has been Green's home since 1930.

It is the latest in a long list of honors bestowed on Green whose philanthropy has earned him, as well as his late wife Ida, much esteem over the years. Their names grace dozens of fellowships, parks, colleges, professorships, lecture series and research facilities throughout North America.

Light therapy may help bulimia patients

By CONNIE FILLETTI

Light therapy, successfully used in the treatment of winter depression or Seasonal Affective Disorder (SAD), may offer new hope for bulimia patients.

"Our preliminary studies indicate that 46 per cent of the bulimic patients we examined exhibited seasonal mood symptoms as severe as persons afflicted with winter depression," said clinical psychiatrist Dr. Raymond Lam, director of UBC's Seasonal Mood Disorders Clinic at the University Hospital, UBC site.

Bulimia is a common eating disorder affecting up to 30,000 women in B.C. Bulimic patients binge on large quantities of food over short periods of time, often several times a day. Binging is followed by purging, usually by self-induced vomiting through laxative and diuretic abuse.

Physical complications of bulimia range from dental problems and chemical imbalances, leading to dizziness and fainting, to cardiac rhythm problems and even death. The psychological consequences include distorted body image, guilt, poor self-esteem, lack of concentration and suicidal thoughts.

Lam observed that many bulimic patients worsened during the winter and improved in the summer, the same pattern noted in patients suffering from winter depression. Symptoms of both syndromes improved when treated with light therapy.

"We don't know why people become bulimic or suffer from severe winter depression, but a common biological problem may be responsible for both syndromes," Lam said. "For example, we know that abnormalities in brain chemicals such as serotonin are found in both bulimia and SAD. However, there also may be alternate explanations which need further investigation."

Currently, bulimia is treated with a combination of psychotherapy, focusing on distorted thinking patterns, self-esteem issues and assertiveness and anti-depressant medications.

"These are time-intensive, expensive treatments," said Lam. "The effects are variable and don't work for everyone. We hope that light therapy will be an addition to currently available methods of treatment, or help patients to improve their response to these existing protocols."

Lam and colleagues Dr. Elliot Goldner, director of the Eating Disorders Clinic at St. Paul's Hospital, and UBC psychiatrist, Dr. Leslie Solyom, are now involved in a larger study to assess the value of light therapy in the treatment of bulimia, and to determine what type of light is the most effective.

Persons enrolled in the out-patient study are required to spend approximately two hours each morning (over a two week period for each type of light being tested) in front of a light box emitting high intensity light.

The study is being funded by the B.C. Health Research Foundation. For more information, call 822-7325.

Whole Language: learning that's familiar and fun

By CHARLES KER

The principal of Sunnybank School was clearly flustered.

"You say children were making noise in class," the defence lawyer repeated. "What kind of noise, exactly?"

After an awkward pause, Basil Ford sheepishly admitted that the "disruptive" clamor coming from a Grade 1 classroom had, in fact, been children talking about their studies.

"Yes... well... they were talking about their work," Ford stuttered. "But they should have been doing it."

Ford's admission was a turning point in Whole Language on Trial, a skit written by a group of nine UBC language education professors.

Presented three years ago at a national conference of English teachers, the informal production highlighted the pros and cons of whole language, a non-traditional approach to language instruction. But while it may be deemed non-traditional, whole language supporters stress that it is very much a research-based methodology.

"The process has evolved over many years," said Victor Froese, head of UBC's Department of Language Education. "It is not something that just landed on us."

Froese and his colleagues have since rewritten ideas presented in the original skit and published them in book form in 1990. Whole Language, Practice and Theory is currently being used as a textbook by universities across Canada. The first 4,000 copies of the book quickly sold out and an American edition was released earlier this year.

Froese credits the book's popularity to its teacher-based approach. Each chapter offers practical suggestions on how a teacher might implement a whole language program in a classroom.

Rather than have children sitting in rows taking notes from standardized texts (Ford's notion of "doing it"), whole language promotes active communication among students. In a whole language system, students might be asked to observe an activity outside, perform a skit or watch a news program. They would then be asked to talk and write about what they witnessed.

Whereas the traditional method of teaching language depended on a series of books isolating different skills, whole language brings these skills together in a real-life context making language more familiar. Froese emphasizes that it is a literature-based approach which encourages students to read as much as possible.

> "They get hooked on learning and they don't even know it."

"With whole language, kids are reading, writing, speaking and listening all the time," said Froese. "They get hooked on learning and they don't even know it."

UBC has recently been the site for Canada's largest study of pre-school language development. Based at UBC's Child Study Centre, university researchers followed the oral language development of 60 three and four-year-olds for three years. Forty-three of the children were then followed for another two years into Grades 1, 2 or 3. The study's findings clearly linked children's early language development to success in their learning to read and write.

In Froese's 1988 skit, a Grade 1 teacher at Sunnybank school is charged with hampering childrens' reading achievement, skill development and spelling ability by using a whole language approach.

However, in his role as an expert witness, Froese told the judge that results have shown children in whole language programs read more, show more initiative and have a wider vocabulary. He added that traditional readers, spellers and composition books are often a hindrance to learning because their skill lessons are separated and discourage children from reading ahead.

Whole language enthusiasts also point to the positive spin-offs for teachers. Rather than simply administering a set of pre-approved materials, which many students already know, whole language forces teachers to be more creative.

Froese argues that it is wrong for standardized texts to decide beforehand on a prescribed sequence for teaching language. He said research can't give any clear answer on a "correct method" of language instruction.

"Traditional textbooks have goals built into them which put form before function," said Froese. "Whole language has the teacher deciding the goals based on what the kids are able to do in the classroom."

In Canada, virtually every province has adopted an integrated curriculum where reading, writing, speaking and listening are taught together. But Froese and his colleagues are working hard to see that whole language is adopted further by gradually shifting the responsibility for learning to the children themselves.

"If you believe that language is a social process, then you have to arrange for the process to happen in class," said Froese. "That may require a different view of school."

Berkowitz & Associates
Statistics and Mathematics Consulting
• research design • data analysis
• sampling • forecasting
Jonathan Berkowitz, Ph.D.
4160 Staulo Crescent, Vancouver, B.C., V6N 3S2
Office: (604) 263-1508 Home: (604) 263-5394

Stepfamilies subject of study

By CHARLES KER

A UBC study is now underway examining ways in which stepfamilies cope with problems particular to them.

According to Statistics Canada, close to six per cent of all British Columbians have raised stepchildren, almost double the national average.

The province also leads the country in terms of both its percentage of married people who have been divorced and those who have remarried.

Anita DeLongis, a UBC psychology professor, plans to interview 200 stepfamilies in the Vancouver area and follow their progress over a two-year period.

"We want to find out what makes some families able to function and others not," said DeLongis.

Delongis said that while previous studies have looked at stepfamilies from a dysfunctional point of view, her study will compare well-adjusted stepfamilies with families that are coping poorly. The study is also the first of its kind to be conducted over a period of time.

The main problems isolated so far in the study involve parents' dealings with ex-spouses, conflicting parenting styles which mothers and fathers bring to new marriages and children's treatment of step-parents.

For instance, a wife may feel her husband's son doesn't treat her with respect which the husband may not consider to be an issue. Tensions also arise when the natural parent feels the step-parent isn't treating his or her child right.

For the last decade, DeLongis's research has focused on how people cope with stress. She hopes this study will isolate the sources of stress among stepfamilies and find out what effect this stress has both in terms of family adjustment and physical health.

"Too often clinicians and social workers make assumptions that aren't necessarily based on evidence," said DeLongis. "Hopefully, this will provide some proof of what coping methods work and what don't."

The study will involve interviewing the wife and husband in stepfamilies that have at least one child from a previous marriage living at home.

Interviews will be done separately over the phone with different interviewers for each partner. Participants will then be sent questionnaires and a structured diary. The diary is to be filled out three times a day for two weeks detailing moods shifts and levels of tension. At the end of each day, each parent is also asked to document the most significant family problem that came up each day and how it was handled.

Participants will be contacted six months later for a followup inquiry. For more information call 822-3805.

Classified

Classified advertising can be purchased from Community Relations. Phone 822-6149. Ads placed by faculty, staff and students cost $12.84 for 7 lines/issue ($.81 for each additional word). Off-campus advertisers are charged $14.98 for 7 lines/issue ($.86 for each additional word). (All prices include G.S.T.) Tuesday, May 16 at noon is the deadline for the next issue of UBC Reports which appears on Thursday, May 28. Deadline for the following edition on June 13 is 4 p.m Tuesday, June 4. All ads must be paid in advance in cash, by cheque or internal requisition.

House Rentals

WANTED TO RENT: by two doctors while interning. 2 bdrms in house or apartment, bright, clean, quiet. Kits/Kerr/Shaugh. perfered. Commencing June 1st. Approx. $750. Please phone Sandy at 264-1499.

WATERFRONT RETREAT: near Chemaimus, Vancouver Island. Very quiet and picturesque location. Fully furnished home with decks, 2 bdrm, 2 bthrm, dining rm, lofts, etc. For rent weekly or longer. Phone 224-0143.

SERVICES

HOUSESITTING: Are you looking for a family to take good care of your home while you are away on sabbatical/leave? We are coming to UBC from out of province/faculty and student/require 3 bdrms. Excellent references. Phone 689-2597 a.m. only.

HOUSE-SITTING: Mature n/s, n/d, male respiratory therapy student in clinical year, looking to house-sit from June '91-May'92. Previous experience, excellent references, experienced landscaper. Call collect 828-9571, or message (403)455-0126. Ask for John.

DOG WALKING/HOUSE & PET SITTING: Kitsilano and Point Grey area. Recent university graduate (and animal lover!) in need of extra income. Good rates. Excellent references. Call 224-4722 evenings and weekends.

Miscellaneous

LAWN BOWLING: West Point Grey Lawn Bowling Club (West 6th & Trimble) welcomes new and experienced lawn bowlers. Call Jean Elder 224-4407 or John Flint 689-8125.

EMPLOYMENT WANTED: What can I do for you? Former UBC Program Assistant available for part-time, on- call relief office duties. 822-8254.

BLACK & WHITE ENLARGEMENTS: from your negatives, individually hand exposed, cropped, dodged and shaded to your exact specifications. High quality papers in matte or high gloss finish. We can get the best from your sub-standard negative. Great prices, an 8x10 custom enlargement just $5.70! Call Media Services Photography at 822-4775. (3rd floor LPC, 2206 East Mall).

Fisheries Centre Planned

By ABE HEFTER

Plans are under way for UBC to establish a Fisheries Centre within the Faculty of Graduate Studies.

The centre would provide the academic focus for studies in the scientific and social aspects of living aquatic resources in marine and freshwater environments.

"Aquatic resource systems play a major role in the B.C. economy," said Paul Leblond, head of the Oceanography Department. "Fishes and other living aquatic resources, in the sea as well as in rivers and lakes, contribute several billion dollars annually to the B.C. economy through commercial and recreational fisheries, water-based recreation, tourism and aquaculture."

The proposal to establish a Fisheries Centre at UBC was written by Leblond and Geoffrey Scudder, head of the Zoology Department.

Scudder said aquatic ecosystems are vulnerable to disruption through environmental abuse, urban and industrial expansion, exploitation and global climatic change.

"Understanding and managing the problems associated with living aquatic resources can't be approached within a single disciplinary framework," Scudder added. "What is clearly needed is a multidisciplinary academic center which will bring together natural, social and applied scientists who are specialized in the various levels and aspects of the problem."

The centre, which would be the first fully integrated unit of its kind in Canada, will maintain a research team devoted to the study of living aquatic resources and to issues related to fisheries. Leblond said the centre will focus on concerns ranging from fish and their habitat to fish processing and food preparation.

The centre will encourage the participation of faculty with expertise in other areas of science and applied science as well as from areas representing social, commercial, industrial, international and regulatory concerns of fisheries.

IS YOUR BABY BETWEEN 2 & 24 MONTHS?

Join our research on language development at U.B.C.! Just one visit to our infant play-room. Please contact Dr. Baldwin for more information:
228-6908

VIDEO cube
Your New International Newspaper & Magazine Store with a 24 hours Automated Video Rental Outlet IS NOW OPEN at
4453 W.10th Ave. Vancouver 222-8333
CHECK IT OUT!
VIDEO CUBE OFFERS:
• over 3000 Videos (VHS & Beta)
• over 800 titles of International Newspapers & Magazines

Health of seniors studied

By CONNIE FILLETTI

UBC's Faculty of Medicine is participating in a nationwide study, the first of its kind in Canada, aimed at exploring the health of seniors.

The multidisciplinary team of researchers, representing the Department of Medicine, Division of Geriatric Medicine and the Departments of Health Care and Epidemiology, Psychiatry and Medical Genetics at UBC, will examine a wide variety of topics, from seniors' present health status and ability to manage daily tasks, to work history and family history of disease.

"The study is funded by the National Health and Research Development Program and underscores a real need to understand how the senior population is aging," said Dr. Jo Ann Miller, mainland coordinator of the study.

She added that researchers will be investigating both the physical and psychological health of seniors, as well as what support services they need to receive or maintain quality health care.

The fastest growing segment of the population at the present time is people 80 and over. According to Statistics Canada, more than three million Canadians, or 11.5 per cent of the country's population, were 65 years of age or older in 1990.

"By looking at randomly selected people over the age of 65, we will be better able to understand the current health status of individuals who are likely to access health care services," said Dr. Lynn Beattie, head of the Division of Geriatric Medicine and chair of the B.C. portion of the study.

"The study will provide a valuable database; we survey how individuals are doing now, with the potential to delineate changes as time goes on," she said.

The project, known as The Canadian Study of Health and Aging, is part of a World Health Organization study being conducted simultaneously in several countries.

More than 10,000 seniors will be surveyed for the Canadian component of the study, which involves 18 research institutes and universities. The British Columbia steering committee comprises representatives from UBC, as well as the University of Victoria, Simon Fraser University and the B.C. Ministry of Health.

In B.C., about 2,000 individuals, 65 years of age or over, will be invited to participate in the study.

Photo (left) by Media Services

Big Bang

History Professor Peter Moogk, left, and retired officers Major Vic Stevenson and Captain Keith Brown, helped unveil a plaque last month, inset, commemorating the military history of Point Grey. Located to the northeast of the Museum of Anthropology, the plaque sits atop the former site of a six-inch calibre gun, above, used to defend Point Grey Fort in the early 1940's.

Fraser River Basin examined in new book

By GAVIN WILSON

Sustainable development in the Fraser River Basin is the topic of a new book published by UBC's Westwater Research Centre.

Perspectives on Sustainable Development in Water Management: Towards Agreement in the Fraser River Basin, is the first of a two-volume set on the environment of B.C.'s largest river and its watershed, which encompasses one quarter of the province's entire land area.

The book was edited by Anthony Dorcey, assistant director of the centre, which conducts interdisciplinary research on the management of water and associated resources.

"The book does not aim to provide any final answers, but it does offer preliminary analyses designed to stimulate discussion," he said. "This is the first phase of a larger, more ambitious, research project that addresses immensely complex, wide-ranging and challenging issues."

Photo by David Gray

Anthony Dorcey hopes new book will stimulate discussion on the complex issues involving future development of the Fraser watershed.

The book brings together natural and social scientists, and academics and professionals from outside the university. Among the 24 authors are lawyers, economists, zoologists, foresters, engineers and graduate students.

Some of the topics they cover include fisheries, forestry, water pollution, habitat degradation, flooding, erosion and resource use by Native Indians. As well, the book examines the framework of policies and institutional agreements that guide management of resources in the region.

Dorcey draws on the different views expressed in the book to provide an analysis and propose strategies that could help build consensus in contentious resource management issues.

The recently announced Fraser River Basin Action Plan, part of the federal government's Green Plan, provides "an unexpected and excellent opportunity" to take further steps in the process, he said.

The second Westwater book on the Fraser will focus on the environmental state of the Fraser River watershed and how innovations in resource management can be implemented. Publication is expected in July.

Model looks at shrinking timber supply

By ABE HEFTER

Two UBC forestry professors have developed a prototype timber supply analysis model which will enable the province to take a more comprehensive approach to the planning of resource management on forest lands.

When the province decided it needed to develop an advanced strategic analysis system for timber supply planning, it turned to Andrew Howard and John Nelson. The two Forest Harvesting professors presented a prototype which will simulate forest growth over the next 250 years to determine what is considered a sustainable allowable cut.

"In the last three or four years, the province has been looking at ways to change our present system to make it more responsive to the issues that affect resource management," said Dave Waddell, a systems forester with the Integrated Resources Branch of the Ministry of Forests. "At the time, Howard and Nelson were already doing related work and demonstrated they could help us address our needs."

Those needs, according to Howard, centre on spatial constraints used to limit the size of clearcuts and the length of time before stands of trees adjacent to openings can be harvested. These constraints ensure not only a long-term timber supply, but also the protection of non-timber resources.

"The ministry has the task of determining how much timber can be cut annually at a sustainable level," said Howard. "In the past, there was plenty of timber to go around. But things have changed radically and, with the prototype we've developed, the government will be able to incorporate these constraints, which have an emormous impact on the annual cut. The scientific input is our contribution."

The UBC prototype includes computer graphics which look something like a chess board. Each square represents an area of land which is eligible for treatment such as cutting, planting or spacing. The timing of treatments for each land unit depends on biological, environmental and economic goals.

Nelson said wildlife habitat concerns and landscape esthetics are just two of the areas that have been included in the methodology encoded in the prototype model. The economics of timber supply have also been added — the tracking of value of different stands, where they are grown, and whether or not it's economically feasible to harvest them.

"The methodology on which the model is based provides, for the first time, the opportunity to incorporate non-timber resources into the planning process," said Howard. "Although the current version is principally timber driven, the next step will be for wildlife and other non-timber resources to become equal partners with timber in the planning of forest management. Our ongoing research is directed towards this objective."

Waddell said the province will review the implications of the prototype over the next three to six months. Future development of a working timber supply model may be open to the forestry consulting community, he added.

"It's nice to know we can go to UBC to get the job done," said Waddell. "This project has proven to be good value for the government. When there are academic research questions that must be answered — that's where UBC comes in."

Advertise in UBC Reports

Deadline for paid advertisements for the May 28 issue is 4 p.m. May 16.

For information, phone 822-3131

To place an ad, phone 822-6149

DON'T GIVE UP YOUR DAY JOB.

Now is the time to find out about UBC Winter Session '91-'92

Evening Credit Courses

Deadline for new applicants is June 30.

for information, contact:
Extra-Sessional Studies
6323 Cecil Green Park Road
Vancouver, B.C. V6T 1Z1
Telephone 822-2657