

UBC



The University of British Columbia  
Vancouver, British Columbia  
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**B.C. universities top West**

**Maclean's survey ranks UBC fourth in country**



Photo by Gavin Wilson

**A BIT BUGGY**

Curator Karen Needham displays some of the 600,000 insect specimens on view at the Spencer Entomology Museum in the Department of Zoology. The collection, which is used for teaching and research purposes, specializes in the insects of B.C. but also has a good collection of exotic varieties, including the ones seen here. The museum has no regular hours, but viewing can be arranged by calling 822-3379.

UBC ranks fourth among Canada's 15 larger universities offering similar programs, says Maclean's magazine in its second annual survey.

The magazine's 1992 survey divides 45 Canadian universities into three categories. Among those with major doctoral programs and medical schools, UBC was listed after McGill University in top spot, the University of Toronto in second and Queen's University, third.

In the second category of 12 universities offering a broad program at the undergraduate and graduate level, Simon Fraser University and the University of Victoria placed second and fourth respectively behind the University of Waterloo in first and Guelph University in third.

"We are pleased that UBC is ranked in the top four in the senior category and equally pleased at the showings of other B.C. universities," said UBC President David Strangway.

Strangway added that the 1992 survey is "greatly improved" over that of last year.

This year's 54-page report rates universities on 22 criteria including percentage of faculty members holding PhDs, class size and average grade of incoming students.

**UBC is ranked first overall in the percentage of faculty with PhDs and second in terms of medical and science-related grants received.**

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The magazine's 1991 survey was criticized for comparing 46 universities, large and small, on the same terms. It also focused solely on undergraduate programs in the arts and sciences.

Among the 18 smaller universities offering primarily undergraduate programs, Mount Allison University of Sackville, N.B. is followed by Trent University in Peterborough, Ont., Nova Scotia's Acadia University, Wilfred Laurier in Kitchener-Waterloo and Bishop's University in Lennoxville, Quebec.

**Novelist, astronomer, engineer take honors at fall Congregation**

By CONNIE FILLETTI

More than 2,000 students will be eligible to receive degrees at UBC's fall Congregation Nov. 26.

Ceremonies begin at 9:30 a.m. and 2:30 p.m. in the War Memorial Gym.

In addition to academic degrees, three distinguished individuals, who have made significant contributions to society, will be presented with honorary degrees.

They are:

- Peter Buckland, president of

the Vancouver structural engineering company Buckland and Taylor Ltd. He is one of the world's foremost experts on the design and building of long span bridges.

- Louis Cha, an honorary professor of Chinese literature at the University of Hong Kong. He is the world's most widely-read Chinese novelist and founder of the Shin Min Daily News.

- Anne Underhill, is an honorary professor of astronomy at UBC. In 40 years of research, she has played a key role in laying the foundation for an understanding of the hot, blue stars in our galaxy.

Douglas Hayward, a UBC professor emeritus of chemistry, will receive the Faculty Citation Award at the afternoon ceremony.

Presented by the UBC Alumni Association, the award recognizes faculty members who have given outstanding service to the general community in areas other than teaching and research.

Hayward is well known throughout the province for promoting science to elementary school children.

Graduates and guests are invited to attend the third annual Lights of Learning reception immediately following the afternoon ceremony. The festivities will take place on the Sedgewick Library plaza.

**Good works earn accolades**

By GAVIN WILSON

Sonja Sigfredsen shakes her head and asks: "Why should I be getting an award?"

After all, she is only doing what she enjoys most, whether it's feeding the homeless, taking disadvantaged kids camping or raising money for cancer clinics.

It's like getting an award for going on vacation, she says.

Others see her actions in a different light.

"She has given us the measure by which we can judge our own commitment to our students, fellow co-workers, and to our fellow human beings," said the UBC faculty and staff members who nominated her for the President's Service Award for Excellence, which recognizes personal achievements and outstanding contributions to UBC.

Sigfredsen, who works in custodial services of Plant Operations, is one of five award winners being honored at a dinner given by President David Strangway this week.

The awards were initially presented at spring Congregation, and also went to Gay Huchelega of Agricultural Sciences, the Bookstore's Barry Scott, Geography Professor John Stager and the late Physics Professor Michael Crooks.

Trained as a nurse in her native Denmark, Sigfredsen has earned a reputation as a kind-hearted and ad-

venturous soul since coming to UBC in 1977.

She is the first to remember birthdays, send flowers, bake cakes, ex-

lems large and small, from failed exams to sexual harassment and bouts with cancer.

"I don't know why people come to me," she said. "If I feel that they want to get something off their chest, I don't ask, I just let them talk when they're ready."

Perhaps their willingness to share personal joys and sorrows has to do with her wide-open heart.

"I just love people," she said. "Some are good and some are bad, but even the bad people have something good in them. It's really incredible."

Off campus, Sigfredsen helps prepare the Salvation Army Christmas dinner and then takes food to homeless people living under bridges. Each summer she takes disadvantaged children for a weekend camping trip. What started as a small group has now swollen to 72 kids.

Her kindness extends to animals, as well. Dedicated to curbing the population of stray cats on campus, Sigfredsen takes them to a veterinarian whom she has convinced to neuter them free of charge. She finds homes for them if she can.

They don't come any kinder than this, but she's no push-over. She is willing to confront students and faculty alike if she feels people are not being treated with the proper respect.

See DYNAMIC on Page 2



Photo by Gavin Wilson

**Sonja Sigfredsen**

tend condolences, and, above all, lend an ear for faculty, staff and students at Graham House, home of the School of Social Work.

Over the years she has offered advice and counsel to people with prob-

**Inside**

**UNITED WAY:** At last count, UBC's United Way Campaign had received 1,018 pledges totalling \$188,700, or 67 per cent of the goal. United Way agencies need your support. **Page 2**

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Letters to the Editor

## Conference praiseworthy

Editor:

Over this past weekend (October 16-18th), I took part in the first of a series of annual conferences planned by the UBC Centre for Women's Studies and Gender Relations. Co-sponsored by the Women's Health Centre (University Hospital), this interdisciplinary conference addressed the theme of women's health across the life span. Specific sessions included eating disorders, girl's health and physical education, PMS, infertility and reproductive technology, pregnancy, living with illness, mothering, caregiving, menopause, seniors' health issues, violence against women and First Nations' health issues. Participants at the conference came from a variety of health care and social service professions, the academic world and community-based non-profit organizations.

If I had any hesitation about taking time out from studying for comprehensive exams and getting up at 6:30 a.m. to catch a bus to UBC in the pouring rain, this hesitation evaporated amidst the openness, warmth and enthusiasm which prevailed at the conference. Without exception, the sessions were lively, informative and stimulating. Presenters, who often pushed at the traditional boundaries of scholarly work, spoke movingly of things which were, in some cases, very close to the heart. I think in this respect, all who attended came away with a renewed appreciation of both the diversity of women's health needs and experiences and the commonality of women's commitment to working for concrete improvements to women's health and well-being.

While letters to the editor are often a place to sound off, it is equally important to use this space to acknowledge and enthuse about those things which are good and offer us reason for optimism. In closing then, I want to say thanks to all of the women who participated in the conference and, in particular, to Veronica Strong-Boag (Director, Centre for Research in Women's Studies and Gender Relations) and Jo Hinchliffe (Administrative Assistant, Centre for Research in Women's Studies and Gender Relations) who worked so hard to organize this conference. I look forward to next year!

Sue Cox  
Doctoral Student  
Sociology, UBC

## Faculty of Pharmaceutical Sciences grew under former dean Matthews

Arnold Whitney (Whit) Matthews, dean emeritus of the Faculty of Pharmaceutical Sciences, passed away Sept. 24 at the age of 90.

Matthews served as dean from 1952 until his retirement from UBC in 1967.

During his tenure, the faculty established the four-year Bachelor of Science in Pharmacy program and was approved for the Master of Science degree by the Faculty of Graduate Studies.

He was instrumental in establishing the Canadian

Conference of Pharmaceutical Faculties and was a founding director of the Canadian Foundation for the Advancement of Pharmacy.

Matthews was also involved in setting up the Association of Deans of Pharmacy and helped establish the Pharmacy Examining Board of Canada.

He is a former president of the Canadian Pharmaceutical Association and received honorary degrees from UBC, Dalhousie University and the University of Alberta.

## Dynamic Sigfredsen a high-flyer

Continued from Page 1

When graffiti appeared in the men's room, she issued a stern warning, and it wasn't repeated.

Sigfredsen is a remarkable woman in other ways. One day she decided there were three things she wanted to do: learn to fly, swim and read music.

The swimming has proven elusive, but she accomplished her other goals, and then some.

"Flying, that was easy," said the woman who earned her pilot's licence at age 53. She also gave

sky-diving a whirl. As well, she enjoys skiing, golf and ice hockey. And she bought herself a mountain bike with some of the \$5,000 she received for the service award.

Set to retire at the end of the month, Sigfredsen was asked by the staff in Mary Bollert Hall what she wanted done to mark the occasion. She told them to put together a box of canned goods for the homeless.

"That's the best present you can give me," she said.

## Lumber dryer uses same principle as microwaves

By ABE HEFTER

The same technology that revolutionized the cooking process is being used by UBC researchers to revolutionize the timber industry.

It's called radio-frequency/vacuum (RFV) drying. It employs technology similar to that found in microwave ovens, and it's being used as an alternative to conventional kilns to dry fresh-cut lumber.

Over the summer months, project leader Stavros Avramidis, an assistant Forestry professor in the Department of Wood Science, and Frank Liu, a post-doctoral fellow, developed a laboratory-size RFV dryer. Since September, it has been used to dry cross-sections of western red cedar, with very promising results, according to Avramidis.

"The quality of the wood coming out of the RFV dryer is exceptional and of consistently high quality. Defects such as warping and discoloration are minimized," he said.

"We will investigate whether this method of drying lumber will pasteurize the wood and destroy all resident nematode insects, a recurrent problem which has threatened to cut into Canadian lumber sales to Europe."

Preliminary studies have shown a number of benefits, including an 80-to-90 per cent reduction in drying time, compared to the conventional kiln-drying process.

"A 105-mm cross section of western red cedar that can take three months to dry in a conventional kiln can be RFV dried in approximately one day," explained Avramidis.

In addition, the Canada Centre for Mineral and Energy Technology (CANMET) has estimated that if the RFV dryer is adapted in Canada, it will result in energy savings equivalent to 100,000 barrels of oil each year.

Because they use clean hydro-electricity, as opposed to conventional kilns that burn oil, wood, or

natural gas, CANMET estimates that RFV dryers will eliminate up to 50,000 tonnes of carbon dioxide currently released into the atmosphere.

"These are only some of the benefits we are seeing in laboratory testing," said Avramidis.

Once tests on western red cedar are concluded, the Wood Science researchers will move on to Douglas-fir and hemlock.

"Different species require different drying conditions," said Avramidis. "We hope to develop drying schedules that will be used as a basis for commercial RFV dryers."

As part of the \$300,000 project, UBC researchers are also participating in the design of a full-size commercial RFV dryer, which is scheduled to be completed in December. Participating wood products companies will use the large dryer to test-dry a variety of wood species and lumber sizes.

The RFV drying project at UBC, part of a larger \$2.8-million project managed by the Council of Forest Industries of B.C., is funded by Energy, Mines and Resources, Western Economic Diversification Fund, Canadian Electrical Association, B.C. Hydro, Salton Fabrication, MacMillan Bloedel Ltd., Canadian Pacific Forest Products Ltd., Fletcher Challenge Canada Ltd., Weldwood of Canada Ltd., CIPA Lumber Co. Ltd., Skeena Cellulose Inc., Delta Cedar Products Ltd., Canadian Forest Products Ltd., and International Forest Products Ltd.

"This is an excellent example of how UBC, industry, and the federal government have joined forces to address problems like energy efficiency, pollution reduction and better utilization of harvested timber," said Avramidis.

"While this project is designed to aid B.C. coast wood producers, provisions have been made so that the technology could be used in any part of the country."

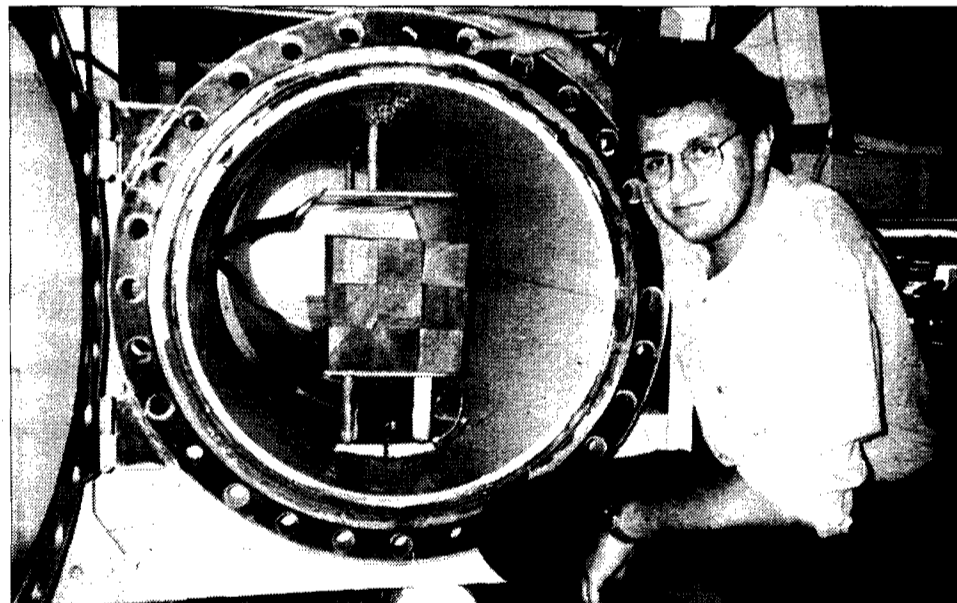


Photo by Abe Hefter

Project leader Stavros Avramidis, an assistant professor in the Faculty of Forestry, has developed a laboratory-size radio-frequency/vacuum dryer that has yielded promising results with western red cedar.

## UBC — United Because we Care...



United Way

"Our uniformed volunteer Brigade members in the City of Vancouver completed over 22,000 hours of public duties in 1991. Donations such as yours enable us to train many young people so they in turn can save lives and promote safety."

—Bridget Milsom, Vancouver Branch, St. John Ambulance

36,649 people with mental disabilities were helped to live independently last year

"Celebrating 40 years of service, the Vancouver-Richmond Association for Mentally Handicapped People (VRAMHP) was founded by parents of 12 children with a mental handicap. With your help the association is able to operate over 40 facilities including preschools, infant development centres, residential services and vocational training programs for 1,300 children and adults with a mental handicap."

—Glen Webb, Coordinator, Resource Development

14,921 nights of shelter were provided for abused women and children last year

"With your donations, programs such as hot breakfasts for hungry school children, counselling and support groups for individuals and families; multicultural programs and events and language classes for new Canadians can be provided."

Through eight Neighborhood Houses, a Camping Unit and Home Makers service, the Association of Neighborhood Houses provides programs and services to disadvantaged children, youth, seniors and families in our community."

—Doug Sabourin, executive director



United Way — The way to help the most



**OPEN WIDE!**

Photo by Harold Traeger

Count Dracula, a.k.a. Harpreet Kler, really likes to sink his teeth into his work. The third-year Dentistry student helped make a trip to the dentist a little less painful for children needing treatment at UBC's dental clinic on Hallowe'en Eve.

## UBC recognized for equity gains

By CONNIE FILLETTI

UBC is the first organization in the province to be honored with a Certificate of Merit for achievements in employment equity.

The award, sponsored annually by the Federal Contractors Program, recognizes organizations that have implemented special activities in support of maintaining a representative work force.

Sharon Kahn, UBC's director of employment equity, credits modifications to UBC policies and practices to accommodate women, native people, the disabled and visible minorities, the development of new programs and initiatives for these groups, and the increased participation of women in



faculty and academic administration positions for the success of the university's program.

She also stressed the involvement of the entire campus community in supporting the university's efforts to implement its employment equity plan.

"The credit for UBC's Certificate of Merit is shared by a great number of individuals who are actively working to create a campus free of discrimination," Kahn said.

She believes that participation in the Federal Contractors Program has enhanced UBC's ability to improve the working and learning environment for all faculty, staff and students.

Kahn cited increased funding for training and development, teaching improvement courses and English language training as evidence of UBC's commitment to improving the workplace for every member of the campus community.

UBC and Quebec's Laval University were the only universities in 1992 to be honored with the Certificate of Merit.

The presentation was made during an awards ceremony in Toronto on Oct. 27.

## New skills needed

# MBA shakeup gets down to business

By ABE HEFTER

The Faculty of Commerce and Business Administration is going back to the drawing board to come up with a new MBA program designed to meet the needs of business, labor and government into the 21st century.

Dean Michael Goldberg has established the MBA 2001 Design Committee to develop a completely new program. The committee, composed of professors Ken MacCrimmon, Ron Giammarino and Dave McPhillips, is under no constraints as it sets out on its task, according to Goldberg.

"This will not simply be a review of the MBA program at UBC. The committee will have all the tools necessary at its disposal to design a program that will be innovative, exciting, and state-of-the-art," he said.

One of the committee's objectives will be to formalize existing links with business, government and labor to meet the demands of the marketplace.

"What they're telling us now, is that they require MBA grads who have the social and communication skills needed to combine analytical and theoretical training with the opportunities to apply this training to the realities of the workplace," said Goldberg.

"We're not just talking about solving accounting or marketing problems. People need to know more about things that fall outside the narrow range of

business. They need the proper social skills to get their message across as we move away from the kind of compartmentalized thinking that characterized the MBA program for 20 years."

According to Goldberg, many of the leading business schools in the United States have made, or are making, radical changes to their MBA programs.

"Competitive pressure says we have to follow," he added.

The 2001 committee will bring in visitors who have successfully redesigned their MBA programs and committee members will visit schools that have undertaken new program designs.

The committee will also consult with members of the business, labor and government communities, faculty members, students and alumni. A special task force of the faculty's advisory council is being established as well,

chaired by William Garriock, president of Miles Canada Inc.

In addition, the committee will determine the appropriate roles that student services should play in supporting the new MBA program.

The committee will report to the dean's office jointly through associate deans Peter Frost and Donald Wehrung. The final report and design proposal are expected to be submitted in the spring of 1994, at which time formal approval by the faculty caucus will be sought, with a tentative 1995 implementation date.

**One of the committee's objectives will be to formalize existing links with business, government and labor to meet the demands of the marketplace.**

# Global village is a classroom for Education Abroad

By RON BURKE

Education can offer you a global perspective — particularly if you participate in UBC's Education Abroad Program (EAP).

Now entering its fifth year, this exchange program sends UBC students to study at any of 16 institutions around Canada and throughout the world, including California, Japan, and Denmark. Selected students from those institutions are, in turn, accepted for study at UBC.

Participants study abroad for one academic year; for UBC students, it's almost invariably the third year of their undergraduate program. The idea is that students gain knowledge and perspective from courses taken elsewhere and then bring the benefit of their experience back to share during their fourth year with other UBC students.

"We're in a global village," says EAP co-ordinator Martha Kertesz. "If students can study in another country, it really broadens their perspective. They have more ways to consider situations, rather than just from a North American, ethnocentric view."

Kertesz knows whereof she speaks. A graduate of UBC's Master's in Business Administration program, she studied for one term at Erasmus University, a highly-ranked business school in Rotterdam, The Netherlands.

Now she works toward fulfilling UBC's stated goal of five per cent participation (about 250 third-year stu-

dents) in the EAP. She is essentially a one-person unit in the Registrar's Office, working with an advisory committee of faculty members.

"We look for well-rounded students who are strong academically, but who will also be good ambassadors for UBC and Canada," she says. "We're after people who will take with them and bring back a wealth of knowledge to share."

Interest in the program is high. There were 117 applicants for 1992-93 exchanges. Kertesz and her advisory committee interviewed all 117, ultimately selecting 65.

UBC Alumni Association branches are becoming important players in the

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program. The Hong Kong branch has been "exemplary," according to Kertesz, in terms of helping with the foreign candidate selection process, as well as hosting receptions and raising scholarships for program participants.

Reviews from students involved in the program are good. Kris Delmage, who is back at UBC to complete her English degree, describes her experiences at the University of California-Irvine last year as "generally a real thrill."

"Academically, it was a huge gain," she says. "The English department at Irvine is very highly rated in the States."

Attending a university with roughly half the enrolment of UBC gave Delmage a stronger sense of campus community. She became involved with the Women Students' Office there and was impressed at the office's ability to "draw people together and help them feel like part of a community."

Delmage contacted UBC's Women Students' Office upon her return and now volunteers there.

Trevor Morrison, currently on exchange at Sophia University in Tokyo, said prior to leaving that "I think the program's fantastic. I haven't talked to anyone going or returning who doesn't speak highly of it."

Morrison is an honors History student focusing on 20th-century international relations in East Asia. He expects that the experience of studying abroad will expand his viewpoints more than any textbook could and help him do better research upon his return.

"I think it's imperative that any world-class university offer an exchange program," he says, echoing

President David Strangway's comments in Second to None, UBC's strategic plan. Strangway writes that university graduates must be internationalists to compete effectively in the global market, and that UBC will strive to enhance international and intercultural competencies of faculty and students through research, study and development work abroad.

As for Kertesz, she just wishes she had more time to spread the word about the benefits of student exchanges, so as to encourage EAP interest during early academic planning.

"It's frustrating — I can't help 80 per cent of the people who inquire about the program, because they're already in third or fourth year," she says. "But when I walked into the orientation session for our 65 successful candidates this spring — knowing the benefits they'll gain from their exchanges — that made it all worthwhile."

Anyone interested in the Education Abroad Program should contact Martha Kertesz at 822-8947.



November 15 -  
November 28

**MONDAY, NOV. 16**

**Pharmacology/Therapeutics Seminar**

Characterization Of Cystic Fibrosis Brushed Human Nasal Epithelial (BHNE) Cell Cultures. Dr. Michael Bridges, Pharmacology/Therapeutics, Medicine. University Hospital G279 from 12-1pm. Call 822-6980.

**President's Lecture On Archaeology**

Jerusalem And The Garden Of Eden. Dr. Lawrence E. Stager, director, The Semitic Museum, Harvard U. Lasserre 104 at 12:30pm. Call 822-6322.

**Commerce Seminar**

When Buffer Inventories Can Be Good For Quality Control. T.D. Klastorin, Management Science, School of Business Administration, U. of Washington. Angus 421 from 3:30-5pm. Refreshments from 3:30-3:45pm. Call 822-8360.

**Astronomy Seminar**



The Lyman Alpha Forest. Satoru Ikeuchi, National Astronomical Observatory of Japan. Geophysics/Astronomy 260 at 4pm. Coffee at 3:30pm. Call 822-2696/2267.

**Mechanical Engineering Seminar**

An Investigation On The Suppression Of The Flow Induced Vibration Of Bluff Bodies. Mae Lenora Seto, PhD student. Civil/Mechanical Engineering 1202 from 3:30-4:30pm. Call 822-6200/4350.

**Biochemistry/Molecular Biology Seminar**

Specificity In RNA-Protein Interactions: The Identity Of Glutamine And RNA. Dr. Dieter Soll. IRC #4 from 3:30-5pm. Call Dr. M. Smith at 822-4838.

**Economics Seminar**

Decision Theory With Impossible Possible Worlds. Barton Lipman, Economics, Queen's U. Buchanan D225 from 4-5:30pm. Call 822-8216.

**TUESDAY, NOV. 17**

**UBC Library Hands-On Tutorial**

CPOL, Canadian Politics/Current Affairs. Iza Laponce, Library. Sedgewick Library Arts Terminal Room Lower Level from

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*Please recycle*

**CALENDAR DEADLINES**

For events in the period November 29 to December 12, notices must be submitted by UBC faculty or staff on proper Calendar forms no later than noon on Tuesday, November 17, to the Community Relations Office, Room 207, 6328 Memorial Rd., Old Administration Building. For more information call 822-3131. The next edition of UBC Reports will be published November 26. Notices exceeding 35 words may be edited. The number of items for each faculty or department will be limited to four per issue.

12:30-1:30pm. Call 822-3096.

**Centre For Chinese Research Seminar**

The Mid-T'ang Confucian Revival And The Origins Of Neo-Confucianism. Dr. Jo-Shui Chen, Asian Studies. Asian Centre 604 from 12:30-1:30pm. Call 822-2547.

**Botany Seminar**

Antiviral Activities Of Traditional Medicinal Plants From Yunnan, China. Lynn Yip, PhD candidate, Botany. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

**Lectures In Modern Chemistry**

Time-Resolved Cage Dynamics In Large Molecular-Cluster Ions. Dr. Carl Lineberger, E.U. Condon prof., Chemistry/Biochemistry, U. of Colorado, Boulder. Chemistry South Block 250 at 1pm. Refreshments at 12:50pm. Call 822-3266.

**Faculty Development Seminar**

Are There Any Questions? Asking Stimulating Questions In The Classroom. Clarissa Green, Nursing. Angus 417 from 3-5pm. Call 822-9149.

**Statistics Workshop**

The Distribution Of Sums Of Lognormal Variables. Dr. Gary Parker, Mathematics/Statistics, SFU. Angus 426 at 4pm. Refreshments. Call 822-3167/2234.

**Medical Genetics Seminar**

Transgenic Analysis Of Gene Function. Dr. Jamey Marth, assist. prof., Medical Genetics. IRC #3 from 4:30-5:30pm. Refreshments at 4:20pm. Call 822-5312.

**WEDNESDAY, NOV. 18**

**UBC Senate Meeting**

The Senate, UBC's academic Parliament, meets at 8pm in Room 102 of the Curtis(Law) Building, 1822 East Mall.

**Wednesday Noon Hour Concert Series**



Martha Brickman, harpsichord. Music Recital Hall at 12:30pm. Admission \$2. Call 822-5574.

**UBC Bookstore Readings**

Marine Life with Linda Svendsen; Sudden Proclamations with Jerry Newman. Bookstore from 12:30-1:30pm. Refreshments. Call 822-6699/5916.

**Microbiology Seminar**

Characterization Of The Cell Surface Of Caulobacter Crescentus. Stephen Walker, Microbiology. Wesbrook 201 from 12:30-1:30pm. Call 822-3308.

**Astronomy Seminar**

New Insights Into R Corona Borealis Stars. Geoff Clayton, U. of Colorado. Geophysics/Astronomy 260 at 2pm. Coffee at 1:30pm. Call 822-2696/2267.

**Ecology Seminar**

Population Dynamics Of Migratory Song Birds In A Severely Fragmented Landscape. Scott Robinson, Illinois National History Survey. Human Nutrition 60 at 4:30pm. Call 822-2387.

**Soil Science Evening Symposium**



Solid Waste Management: Compost, Manure And Sludge. R. Chase, Biowaste Management; R. McDougall, BC Hog Commission; C. Peddie, Greater Vancouver Regional District; C. Prescott, Forestry. McMillan 160 from 7-9:30pm. Call Barbara at 822-4458.

**THURSDAY, NOV. 19**

**Board of Governors Meeting**

UBC's Board of Governors meets in the Board Room, second floor of the Old Administration Building, 6328 Memorial Rd. The open session starts at 9am.

**Distinguished Artists Series - Chamber Music Of Today**

Douglas Finch, piano with other celebrated guest artists. Music Recital Hall at 8pm. Adults \$14, students/seniors \$7. Call 822-5574.

**University Computing Services Seminar**

Computer Security. Joan Dickson, security coordinator. Computer Sciences 200 at 12:30pm. Call 822-6205.

**President's Lecture In English**

Emily Dickinson And The Visible Language Of Modernism (Illustrated). Prof. Jerome McGann, English, U. of Virginia. Buchanan B216 at 12:30pm. Call 822-2942.

**Geological Science Seminar Series**

Jurassic Studies: Images, Mineral Deposits And Ammonite Migrations. Paleontology Research Group. GeoSciences 330A at 12:30pm. Refreshments follow in the Grad Lounge (308). Call 822-2449.

**Planning Lecture Series**

Tourism Planning/Development. Dr. Peter Williams, director, Centre for Tourism Policy/Research, SFU. Lasserre 205 at 12:30pm. Call 822-3276.

**UBC Library Hands-On Tutorial**

PsychInfo, Articles On Psychology. Dorothy Martin, Library. Sedgewick Arts Terminal Room Lower Level from 12:30-1:30pm. Call 822-3096.

**Counselling Psychology Colloquium**

Parents, Adolescents And Career Development: Narrative Perspectives. Dr. Richard Young. Counselling Psychology 102 from 12:45-1:45pm. Call 822-5259.

**Lectures In The Humanities**

Whose Required Reading? Thoughts On The Literary Canon From The Great Library Of Alexandria To The Crisis Of Post-Modernism. Mark Vessey, English. Arts 1 Blue Room at 1pm. Call 822-8619.

**Plant Science Seminar**

CYCADS: Living Fossils. Dr. Gerald Straley, research scientist, Botanical Garden. MacMillan 318D from 1:30-2:30pm. Call 822-3283.

**English Seminar**

Work In Progress: A Hypermedia Archive Of Dante Gabriel Rossetti. Prof. Jerome McGann, English, U. of Virginia. Buchanan Tower 597 at 4pm. Call 822-2942.

**Physics Colloquium**

Giant Spins And Quantum Computers. Philip Stamp, Physics. Hennings 201 at 4pm. Call 822-3853.

**FRIDAY, NOV. 20**

**Obstetrics/Gynaecology Grand Rounds**

Results Of The Canadian Early Amniotomy Study. Dr. France Galembeau. University Hospital Shaughnessy Site D308 at 8am. Call Cheri Buckler at 875-3266.

**Paediatrics Grand Rounds**

Cancelled. Call 875-2118.

**Health Care/Epidemiology Grand Rounds**

Gerontological Planning. John Phillips, private consultant in Health Care. James Mather 253 from 9-10am. Call 822-2772.

**Chemical Engineering Weekly Seminar**

Stochastic Simulation Of Spouted Bed Coating Process. Michael Choi, graduate student, Chemical Engineering. ChemEngineering 206 at 3:30pm. Call 822-3238.

**SATURDAY, NOV. 21**

**Vancouver Institute Saturday Night Lecture**



Giuseppe Verdi: Liberty, Catholicism And The Rise Of Italian Nationalism. Prof. Alan D. Aberbach, History, SFU. IRC #2 at 8:15pm. Call 822-3131.

**MONDAY, NOV. 23.**

**Pharmacology/Therapeutics Seminar**

Advances And New Avenues In Research On Rubella And Autoimmune Diseases. Dr. Aubrey Tingle, Paediatrics, Shaughnessy Hospital. University Hospital G279 from 12-1pm. Call 822-6980.

**Russian/Slavic Studies Seminar**

Professional Historians And Historical Consciousness In Contemporary Ukraine. Prof. Serhii Plokhly, chair of General History, Dnipropetrovsk U., Ukraine. Buchanan D114 at 12:30pm. Call 822-5137.

**Mechanical Engineering Seminar**

Bluff Body Aerodynamics Of Separated Flow In Presence Of Momentum Injection. Sandeep R. Mushi, PhD student. Civil/Mechanical Engineering from 3:30-4:30pm. Refreshments. Call 822-6200/4350.

**Faculty Development Seminar**

Gender Equity In The Classroom: Some Positive Ways To Address It. Marsha Trew, Office of Women Students. Angus 425 from 3:30-5pm. Call 822-9149.

**Management Science Seminar**

Modelling Gambling Probabilities. Dr. Victor S.Y. Lo, Commerce. Angus 421 from 3:30-5pm. Refreshments from 3:30-3:45pm. Call 822-8360.

**Astronomy Seminar**

The Pro-Galaxy, Globular Clusters And Quasars. Sidney van den Bergh, Dominion Astrophysical Observatory. Geophysics/Astronomy at 4pm. Coffee at 3:30pm. Call 822-2696/2267.

**TUESDAY, NOV. 24**

**Centre For Research In Women's Studies Lecture**

The Effect Of Stereotyping Of Women On Their Health. Dr. Penny Ballam, director, Women's Health Centre. Family/Nutritional Sciences 50 at 12:30pm. Call 822-9171.

**Pharmaceutical Sciences Seminar**

Medicinal Inorganic Chemistry. Dr. Chris Orvig, assoc. prof., Chemistry. IRC #4 at 12:30pm. Call 822-2051.

**UBC Library Hands-On Tutorial**

Canadian Institute For Historical Microreproductions/Canadian History. Sedgewick Arts Terminal Room Lower Level from 12:30-1:30pm. Call 822-3096.

**Botany Seminar**

The Bryophyte Flora Of Bridal Veil Falls Provincial Park: An Analysis Of Its Composition And Diversity. Nathalie Djan-Chekar, MSc candidate, Botany. BioSciences 2000 from 12:30-1:30pm. Call 822-2133.

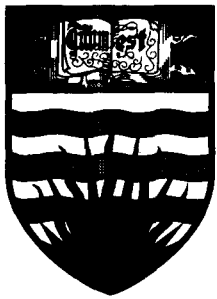
**Centre For Chinese Research Seminar**



China's Source Of Strength: Reform And Tolerance. Dr. Louis Liang Yong Cha, chairman/president of Ming Pao Daily News, Hong Kong. Asian Centre Auditorium from 12:30-1:30pm. Call 822-6788.

**Lectures In Modern Chemistry**

New Synthetic Aromatic Chemistry Based On Integrated Metalation-Cross Coupling Strategies. Dr. Victor A. Snieckus, Chemistry, Guelph Waterloo Centre for Graduate Work in Chemistry, Waterloo, Ontario. Chemistry South Block 250 at 1pm. Refreshments at 12:50pm. Call 822-3266.



# CAPITAL PLAN

## (1992/93 - 2001/02)

The following 4 pages provide a summary of: 1) The University of British Columbia's Capital Plan submission to the Ministry of Advanced Education 2) University Space Formula vs Inventory and 3) Proposed Construction and Demolitions. The Capital Plan submission is published in its entirety for your information with project descriptions, schedules and costs. The University Space Formula vs Inventory section provides data from the 1992/93 Facilities Inventory Report, also submitted to the Ministry of Advanced Education. Details from this report illustrate that: 1) new construction will only offset the shortfall for space marginally 2) demolishing all substandard space on campus would further add to this shortfall 3) that the University is not able to replace its inventory at a rate that would allow for the demolition of all substandard space. The final section shows how the capital plan allows the University to demolish some of the substandard buildings. For additional information please contact: Campus Planning & Development, Kathleen Laird-Burns, Information Officer, 822-8228.

### MAJOR CAPITAL PROJECTS

100% Provincial Government funding

#### 1 CENTRE FOR INTEGRATED COMPUTER SYSTEMS (CICSR/CS)

This facility will provide space for the primary academic computing units: the Departments of Computer Science and Electrical Engineering, and the Centre for Integrated Computer Systems Research. Increased external research funding will facilitate collaborative research among several University departments. The facility will enhance research efforts by providing space for projects involving the University and industrial partners.

Project Budget [\$]:\$17,475,000  
Operating [\$]: \$425,400  
Tender Call:1992/01/10\*  
Construction Start:1992/03/23  
Completion Date:1993/05/31  
Comments:\*Project tendered as noted. Construction progressing well.

#### 2 TRI-UNIVERSITY WASTE DISPOSAL FACILITY (Incinerators)

This facility will provide controlled disposal service to SFU, U/Vic and UBC for handling of liquid and pathological wastes. Outdated existing incinerators will be replaced by two "state of the art" units capable of safely and efficiently burning the noted wastes. Effective stack scrubbers are included in the project so that all contaminants will be removed from stack effluent.

Project Budget [\$]:\$6,750,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1990/04/01  
Tender Call: Hold  
Construction Start:Hold  
Completion Date:Hold  
Comments:\*Original estimate of \$5.0 million (September 1989 dollars) reassessed by quantity survey to Nov. 1991. Project cost inclusive of all major equipment. Project on hold while public consultation in progress.

#### 3 ADVANCED MATERIALS & PROCESS ENGINEERING LABORATORIES (AMPLE)

This important facility will provide critical space in which to carry design projects through the process development stages to the industrial prototype level. It will also meet the urgent needs of continuing faculty, technical support staff and graduate students for shared office and laboratory space. The required expensive pieces of capital equipment cannot be justified on the basis of individual research programs or single discipline efforts. In response to the need for interdisciplinary efforts and shared resources, this project would create an adequately equipped multi-disciplinary centre for materials science at UBC. It would include faculty and students from six departments in the Faculties of Science and Applied Science, as well as from TRIUMF.

Project Budget[\$]:\$20,990,000\*  
Operating [\$] 1992/93:\$331,750  
Design Start:1991/09/01  
Tender Call: 1993/03/31  
Construction Start:1993/05/01  
Completion Date:1994/12/31  
Comments:\*Original estimate of \$17.1 million (September 1988 dollars) inflated @ 0.8% per month to September 1990. Further inflation of 3.0% included for 1991/92.

#### 4 SCARFE BLDG EXPANSION/RENOVATION (Phase I)

An addition to the Scarfe Building is urgently required to replace substandard temporary buildings presently occupied by the Faculty and to consolidate activities presently housed in 19 locations. This new construction must take place ahead of, and concurrently with, renovations and deferred maintenance upgrading to the Scarfe Building in order to allow for functional and cost effective development. Deferred maintenance and renovation costs associated with this project are included in Phase II.

Project Budget [\$]:\$12,360,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1991/09/01  
Tender Call: 1993/01/31  
Construction Start:1993/05/01  
Completion Date:1994/12/31  
Comments:\*12,000,000 (Sept. 1991 dollars) adjusted by 3% for inflation to Sept. 1992.

#### 5 PACIFIC RESEARCH CENTRE FOR FOREST SCIENCES

Expanded facilities for Forestry and related Sciences at UBC will accommodate new areas of research and education such as timber engineering, harvesting robotics and remote sensing by satellite. Programs housed in this facility will develop interests in forestry research among faculties and with industry and government agencies. The Pacific Centre will place UBC in a world class position in Forestry and related sciences.

Project Budget [\$]:\$45,155,000\*<sup>^</sup>  
Operating [\$] 1992/93:\$752,900  
Design Start: 1992/08/01  
Tender Call:1993/11/01  
Construction Start: 1994/02/01  
Completion Date:1995/12/01  
Comments:\*Original allowance of \$40 million (September 1989 dollars) inflated @ 0.8% per month to September 1990. Further inflation of 3.0% included for 1991/92.  
<sup>^</sup>Figure revised 92/09/24.

#### 6 JACK BELL RESEARCH LABORATORIES (Interior Finishing)

(Previously included under general heading of Health Sciences Facilities.) Unfinished space has been provided at Vancouver General Hospital for medical research by UBC departments and staff. The space is currently being constructed and finished. The funds to furnish and equip the space are urgently required. Current policy suggests that funds to complete this space should flow through the university side of the partnerships and hence from the Ministry of Advanced Education. The cost of maintaining the space will be carried by VGH. This will be the only space provided by UBC at the VGH site.

Project Budget [\$]:\$6,565,000\*  
Operating [\$] 1992/93:NA  
Design Start: 1992/04/01  
1993/04/01  
Tender Call: 1992/11/01  
1993/06/01  
Construction Start: 1993/01/01  
1993/08/01  
Completion Date: 1993/11/01  
1994/08/01

Comments:\*Project cost inclusive of all major equipment. Estimate of \$6,375,000 (Sept. 1991 dollars) is adjusted by 3.0% for 1991/92. Some work is proceeding.

#### 7 SCARFE BLDG. EXPANSION/RENOVATION (Phase II)

This is a continuation of the project that began in 1991.

Project Budget [\$]:\$8,240,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1993/04/01  
Tender Call: 1994/10/01  
Construction Start:1995/01/01  
Completion Date:1996/05/31  
Comments: \*Original allowance of \$8,000,000 (Sept. 1991 dollars) adjusted by 3% for 1991/92.

#### 8 BIOTECHNOLOGY LABORATORY (Phase II)

This facility is required in order to accommodate activities presently located in substandard space and requiring expansion. Proposed area of project is 5800 m2 of construction adjacent to and over an existing building.

Project Budget [\$]:\$19,055,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1993/04/01  
Tender Call:1994/04/01  
Construction Start:1994/06/01  
Completion Date:1995/12/31  
Comments: Original allowance of \$18.5 million (September 1991 dollars) is adjusted by 3% inflation for 1991/92.

# UNIVERSITY OF BRITISH COLUMBIA

## Capital Plan (1992/93 - 2001/02)



### 9 CHEMICAL ENGINEERING

This facility is required to address space deficiencies and laboratory requirements for departmental research and teaching activity. Area of the project is estimated to be 3250 m2 net (1.6 net to gross = 5200 m2 gross)

Project Budget [\$]:\$16,068,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1994/04  
Tender Call: 1995/06  
Construction Start: 1995/08  
Completion Date:1996/12  
Comments:\*Original allowance of \$15,600,000 (September 1991 dollars) adjusted by 3% inflation for 1991/92.

### 10 EARTH SCIENCES BUILDING (Phase I)

This facility will be required to replace an existing, seismically deficient building which houses Geophysics and Astronomy, and to accommodate Oceanography and Geography. Through providing physical links to the Geology Building, it is anticipated that requirements for teaching, research and support space will lead to the development of an integrated Earth Sciences Centre, including a fully functional observatory. At this time the final area requirements are not known.

Project Budget [\$]:\$29,750,000\*  
Operating [\$],1992/93:TBD  
Design Start:1994/04  
Tender Call:1995/09  
Construction Start:1996/11  
Completion Date:1998/08  
Comments:\*Original allowance of \$25,000,000 (September 1991 dollars) adjusted by 3% inflation for 1991/92 plus \$4,000,000 is added for program adjustment.

### 11 STUDENT SERVICES CENTRE II (Brock Hall)

The facility will be the second phase of the Student Services Centre Project (funded in 1990), and will result in consolidation of all administrative services for students in one location. Phase II is required in order to reconstruct the existing structure (Brock Hall) which cannot be functionally modified in a manner which is economically feasible.

Project Budget [\$]:\$9,528,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1995/04

Tender Call: 1996/08  
Construction Start: 1996/10  
Completion Date:1998/04  
Comments: \*Original allowance of \$8.3 million (September 1989 dollars) reassessed to \$9.25 million (September 1991) dollars and adjusted by 3.0% inflation for 1991/92.

### 12 HEALTH SCIENCES FACILITIES

This project will consist of several portions of new construction including space for laboratories, allied Health Sciences and health promotion in several locations, at an assumed cost of \$43 million including finishing of the Jack Bell Research laboratories. Following development of the new space, there will be significant renovations required through existing Health Sciences space totalling 7500 m2 (approx. 11250 m2 gross). At this time, estimates are not available for this work.

Project Budget [\$]:\$37,724,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1996/04  
Tender Call: 1997/11  
Construction Start:1998/01  
Completion Date:1999/10  
Comments: \*Original allowance of \$36,625,000 (September 1991 dollars) adjusted by 3.0% inflation for 1991/92.

### 13 FACULTY OF LAW EXPANSION

An addition to the Faculty of Law will be required in order to house faculty offices, research and support space, as well as provide additional teaching facilities. Project based on: 1. Replacement of existing and provision of some new facilities (4600 m2) 2. Renovate existing facilities (7000 m2 ) at approximately 25% cost of new facilities.

Project Budget [\$]:\$13,080,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1997/04  
Tender Call: 1998/06  
Construction Start:1998/08  
Completion Date:1999/12  
Comments: \*Original allowance of \$12.7 million (September 1991 dollars) adjusted by 3.0% inflation for 1991/92.

### 14 EARTH SCIENCES BUILDING (Phase II)

This is a continuation of the project that began in 1994.

Project Budget [\$]:\$11,500,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1997/04  
Tender Call:1998/09  
Construction Start:1998/11  
Completion Date:2000/08  
Comments:\*Allowance only (September 1992 dollars).\$3.0 million removed from 'Instructional Space' (#15) and \$8.5 million removed from 'Research Space'(#16).

### 15 INSTRUCTIONAL SPACE

This project will consist of one or more facilities required in order to address the requirement for adequate instructional space appropriately distributed on campus.

Project Budget [\$]:\$2,665,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1997/04  
Tender Call: 1998/07  
Construction Start:1998/09  
Completion Date:1999/11  
Comments:\*Current allowance adjusted by 3.0% inflation for 1991/92 based on an original allowance of \$5,500,000 in 1991 dollars. \$3.0 million reallocated to #14.

### 16 RESEARCH SPACE

This project will consist of one or more facilities, as yet undefined, which will be required in order to provide additional research space required on the campus.

Project Budget [\$]:\$36,820,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1998/04  
Tender Call: 1999/10  
Construction Start:1999/12  
Completion Date: 2001/12  
Comments: \*Current allowance adjusted by 3.0% inflation for 1991/92 based on original allowance of \$44,000,000 in 1991 dollars. \$8.5 million reallocated to #14.

### 17 LIBRARY CENTRE (Phase II)

In preparing for Phase I Library Centre development, additional needs were discovered largely due to inadequacies of the Main UBC Library building (itself a collection of four separate structures). It is now urgent that the UBC Library, a provincial and national resource, be re-housed in more environmentally friendly and functionally effective space. At this time, the problem is known to be large but quantification has only just begun.

Project Budget [\$]:\$41,200,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1999/04  
Tender Call: 2000/11  
Construction Start:2001/01  
Completion Date:2003/01  
Comments:\*Original allowance of \$40,000,000 (Sept.1991 dollars) adjusted by 3.0% inflation for 1991/92.

### 18 BUCHANAN BUILDINGS RENOVATION/UPGRADE (Phase I)

Renovation/upgrading of the five wings and tower of the Buchanan complex is, in part, overdue at this time, and will be an urgent problem by the turn of the century. It is likely that a phased program over eight to 10 years will be required to service these facilities for the future. A major first phase should begin as soon as possible.

Project Budget [\$]:\$25,750,000\*  
Operating [\$] 1992/93:TBD  
Design Start:2000/04  
Tender Call:2001/08  
Construction Start:2001/10  
Completion Date: 2003/06  
Comments:\*Original allowance of \$25,000,000 (Sept. 1991 dollars) adjusted by 3.0% inflation for 1991/92.

### 19 CHEMISTRY BUILDING RENOVATIONS

Restoration and upgrading of the historic Chemistry Building, located at the heart of the University, is long overdue. Completion of this project will enable the preservation of a principle campus facility, the functional reorganization of its space, and the modernization of its services.

Project Budget [\$]:\$25,750,000\*  
Operating [\$] 1992/93:TBD  
Design Start:2000/04  
Tender Call: 2001/09  
Construction Start:2001/11  
Completion Date: 2003/08  
Comments: \*Original allowance of \$25,000,000 (Sept. 1991 dollars) adjusted by 3.0% inflation for 1991/92.

### CAMPAIGN PROJECTS

50% Provincial Government funding on a matching basis

### 1 FIRST NATIONS HOUSE OF LEARNING

This facility is intended to consolidate services and programs addressing the needs of native



# Capital Plan (1992/93 - 2001/02)



students on the campus.

Project Budget [\$]:\$4,800,000\*  
Operating [\$] 1992/93:\$83,100  
Construction Start:1991/12/04  
Completion Date:1992/12/31  
Comments: \*Original allowance of \$4.0 million (September 1988 dollars) upgraded to \$4.4 million in late 1990 and to \$4.8 million at time of tender. UBC campaign contribution is \$2.4 million. provincial government contribution is \$2.4 million.

## 2 GREEN COLLEGE

This facility will provide residential and resource space for approximately 100 graduate and post doctoral fellows. This complex will play a key role in the development of the University in advanced research and academic initiatives.

Project Budget [\$]:\$14,000,000\*  
Operating [\$] 1992/93:\$232,800  
Design Start: 1990/09/01  
Tender Call:1992/08/01  
Construction Start:1992/10/01  
Completion Date:1994/08/01  
Comments:\*Project allowance of \$14.0 million is expressed in March 1990 dollars. UBC campaign contribution is \$7.0 million. Provincial government contribution is \$7.0 million.

## 3 MORRIS AND HELEN BELKIN ART GALLERY

The present UBC Fine Arts Gallery is located in the basement of the Main Library. It consists of approximately 3,000 sq. ft. of low-ceiling display space, with inadequate office, preparation and storage areas. Despite these conditions the Gallery has, over the years, provided a valued program of exhibitions for scholars, tourists and the public. With new facilities the Gallery will establish a more visible presence and enlarge its contribution to the cultural life of the University and Vancouver by providing professionally mounted exhibitions. The proposal for new space meets international standards for display, security, care, handling, conservation and storage of materials and artwork.

Project Budget [\$]:\$3,000,000\*  
Operating [\$] 1992/93:\$57,450  
Design Start: 1991/02/01  
Tender Call: 1993/01/01  
Construction Start: 1993/03/01

Completion Date:1994/09/01  
Comments:\*Original allowance of \$3.0 million is expressed in 1989 dollars. UBC campaign contribution is \$1.5 million. Provincial government contribution is \$1.5 million.

## 4 CHAN SHUN CENTRE

Currently, the largest facility for performances at UBC is the Old Auditorium, constructed as a temporary building in the 1920s. The new Concert and Assembly Hall, along with Movie and Black Box theatres, will meet the University's needs for ceremonial functions, music and theatre programs. With a capacity of 1,400 seats in the larger house and movie and theatre opportunities in smaller houses, these facilities will meet specific needs in Greater Vancouver for a mid-size performance hall, with potential operating cost recovery for the University.

Project Budget [\$]:\$23,000,000\*  
Operating [\$] 1992/93:TBD  
Design Start: 1992/08/01  
Tender Call:1993/09/31  
Construction Start:1993/11/31  
Completion Date:1995/04/31  
Comments:\*Original allowance of \$15.0 million has been revised through program adjustment to \$23.0 million expressed in September 1989 dollars. UBC campaign contribution is \$11.5 million. Provincial government contribution is \$11.5 million.

## 5 CREATIVE ARTS CENTRE

Already noted for its creative achievements in writing, theatre, music and fine arts, UBC needs to expand its ability to contribute to the community in both its established fields and in the areas of increasing economic importance to the province, such as film production. Studio space for the Fine Arts, Music and Theatre departments is inadequate. These departments do not have access to appropriate space to meet their specialized needs. A new Creative Arts Centre will provide efficient, centralized space for workshops, practice, and instruction.

Project Budget [\$]:\$13,000,000\*  
Operating [\$] 1992/93:TBD  
Comments:\*Original allowance of \$10.4 million has been revised through program adjustment to \$13 million expressed in September 1989 dollars. This project will

be undertaken through the UBC Campaign.

## 6 LIBRARY CENTRE (Phase I)

The UBC Library is a provincial and national resource. As B.C.'s primary research library, it is used extensively by professionals from Simon Fraser University, University of Victoria, teaching hospitals, colleges and schools across the province. The information explosion and the development of collections and new technologies has created an urgent need for additional service and storage space.

Project Budget [\$]:\$24,000,000\*  
Operating [\$] 1992/93:\$83,100  
Design Start: 1992/02/01  
Tender Call:1993/12/31  
Construction Start:1994/02/30  
Completion Date:1995/09/30  
Comments:\*Original allowance of \$24 million is expressed in 1989 dollars. UBC campaign contribution is \$12 million. Provincial government contribution is \$12 million.

## 7 STUDENT RECREATION CENTRE

This facility is urgently required to accommodate the extensive intramural activities of the UBC Student Community. It is not intended that this replace existing facilities for high performance athletics.

Project Budget [\$]:\$9,000,000\*  
Operating [\$] 1992/93:TBD  
Design Start:1992/10  
Tender Call: 1993/10  
Construction Start:1994/01  
Completion Date:1995/04  
Comments:\*Project allowance is \$9.0 million expressed in September 1990 dollars. UBC Alma Mater Society contribution is \$4.5 million and provincial government contribution is \$4.5 million.

## 8 INSTITUTE OF ASIAN RESEARCH

This project will include resource and research space required to support programs involving Asian Studies as well as an expansion of the Asian Library.

Project Budget [\$]:\$5,000,000\*  
Operating [\$] 1992/93:\$86,000  
Design Start:1993/02/01  
Tender Call: 1994/04  
Construction Start:1994/06

Completion Date:1995/10  
Comments:\*Project estimate is \$5.0 million expressed in June 1990 dollars. UBC campaign contribution is \$2.5 million. Provincial government contribution is \$2.5 million.

### SMALLER CAPITAL PROJECTS

100% Provincial Government.

## 1 BOTANICAL FACILITIES

There is a chronic need for new and upgraded greenhouses and environmental chambers in several areas of the campus. A program of providing a distributed system of new facilities can be implemented over time at a rate of \$1 million per year.

Project Budget [\$]:1,000,000\*  
Design Start: 1993/04  
Comments:\*Project allowance per year ongoing for 10 plus years (September 1991 dollars). Tender dates and Construction starts progressive. Total expected to be approximately \$10 million.

## 2 ANIMAL SERVICES FACILITIES

There is a chronic need for new and upgraded Animal Care Facilities in several areas of the campus. A program of providing a distributed system of new facilities can be implemented over time at a rate of \$1 million per year.

Project Budget [\$]:1,000,000\*  
Design Start:1993/04  
Comments:\*Project allowance per year ongoing for ten plus years (September 1991 dollars). Tender dates and construction starts progressive. Total expected to be approximately \$10 million.

### UBC PROJECTS

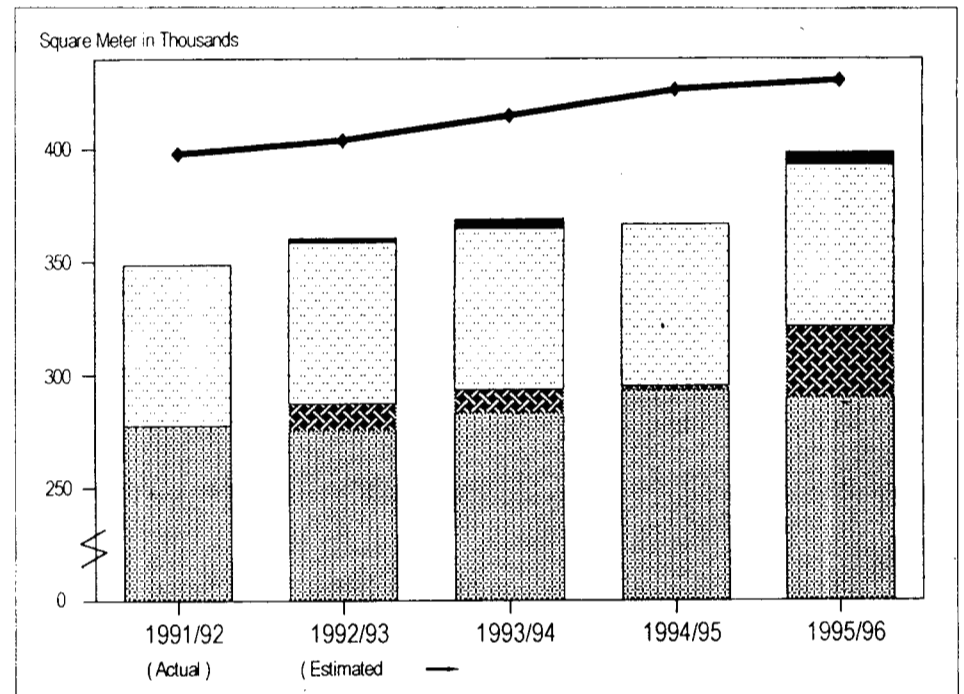
Additional Capital Projects which are being undertaken by UBC.

- 1 West Parkade
- 2 School of Social Work
- 3 Dentistry renovations
- 4 Faculty Housing
- 5 Thunderbird Housing
- 6 Marine Drive Parkade
- 7 McInnes Parkade
- 8 Health Sciences Parkade
- 9 Discovery Park Multi-Tenant Facility

# UNIVERSITY SPACE FORMULA vs. SPACE INVENTORY

In 1991, the Ministry of Advanced Education requested the University undertake a building audit to determine the quality and condition of all space on campus. The audit indicated that a large portion of the campus inventory is substandard and does not meet the needs of a progressive research institution. The accompanying bar chart compares the space formula calculation over a five-year period to the University's current inventory and breaks down in the following manner:

- The Space Formula Standard** calculation provides an indication of the amount of space required to support the University's academic and administrative programs.
- Demolition** identifies the amount of space that will be demolished as a consequence of building new facilities over the next five years.
- Proposed Demolition Beyond the Five Year Plan** identifies the amount of space that needs to be demolished, based on the audit.
- New Space** includes new construction added to the space inventory as a result of the Capital Plan.
- The Inventory** includes all space on campus excluding demolition.



Source: 1992/93 Facilities Inventory Report

Assuming that the University was in a position to demolish all substandard space there would be an absolute shortfall as outlined in the following chart.

An interpretation of this graph suggests that:

- The five-year Capital Plan will offset the space shortfall only marginally.
- Reducing the inventory (through the proposed demolition beyond the 5yr plan) will further add to our space shortfall.
- At present the university is not able to replace its inventory at a rate that would allow it to demolish all the substandard space as identified by the audit.
- The Capital Plan replaces some of the inventory and allows for the demolition of a significant number of huts and temporary facilities.

Using the Council of Ontario Space Formula (COU) calculation, the University has a space shortfall in each of the five years as outlined by the chart below. The formula takes into account projected faculty, student and staff figures for five years.

Formula Space	1991/92	1992/93	1993/94	1994/95	1995/96
Shortfall	-12%	-11%	-12%	-14%	-9%
In Assignable Square Meters	-49,200	-45,300	-50,200	-60,000	-38,000

Formula Space	1991/92	1992/93	1993/94	1994/95	1995/96
Shortfall	-30%	-29%	-29%	-31%	-25%
In Assignable Square Meters	-120,400	-116,400	-121,300	-131,000	-109,000

## PROPOSED CONSTRUCTION AND DEMOLITION FOR 1991/2 - 1995/6

The following information provides an overview of demolitions associated with specific projects in the five-year Capital Plan. The University can anticipate a decrease of space in the order of 17,700 gross square metres by 1996 if construction is completed according to the current schedule.

Proposed Construction	Estimated Completion	Proposed Demolition	Estimated Demolition
UNIVERSITY SERVICES BLDG	Feb-92	Hut M-33, PP Garage	Jan-92 (completed)
		Hut M-37, M-38, PP	Jan-92 (completed)
		Hut M-39, PP Mech	Jan-92 (completed)
		PP Vehicle Garage	Jan-92 (completed)
		Hut M-35, M-36	Jan-93
		Hut O-20, Key Control Centre	Jan-93
		CPD Inspectors Trailer	Jan-93
FIRST NATIONS LONG HSE	Jan-93	Hut O-17, Education	Jan-93
CICSR/CS	Jun-93	Vivarium Hut South	Nov-91 (completed)
		Vivarium Hut North	Nov-91 (completed)
		Trailer-Rec Fisheries	Nov-91 (completed)
GREEN COLLEGE	Aug-94	Graham House Garage	Jan-93
		Graham House (partial)	Jan-93
SCARFE EXPANSION	Jan-95	Hut O-1, Education	Mar-93
		Hut O-2, Botany	Mar-93
		Hut O-3, Education	Mar-93
		Hut O-21, Soil Sciences	Mar-93
		Counselling Psychology	Jun-95
		Hut O-26, NITEP	Jun-95
		Hut O-4, Planning Hut	Jun-95
		Scarfe Annex	Jun-95
		South Staff Office Block	Jun-95
		Scarfe - classrm block (greenhouses)	Jun-95
		Adult Education Research Centre	Jun-95
		Poultry Products Bldg	Mar-93
ADVANCED MTRLS BLDG	Jan-95		
CHAN SHUN CENTRE	May-95	The Old Auditorium	Dec-95
FOREST SCIENCE CENTRE	Dec-95	Forestry Annex '6'	Jun-96
		Forestry Header House	Jun-96
		Forest. & Ag Huts 3 - Forestry	Jun-96
		Forest. & Ag Huts 4 - Forestry	Jun-96
		Forestry Annex	Jun-96
		Forestry - Field House	Jun-96
		Forest Harv & Wood Sc Trailer	Jun-96
		Bio Resource Eng Annex	Sep-96
		For & Ag Huts - Soil Sc. An. #2	Sep-96
		Forest. & Ag Huts - An Sc	Sep-96
		Plant Science Annex	Sep-96
		Apiary/Shed - Plant Science	Sep-96
		Soil Science Annex '3'	Sep-96
		Bio-Resource Trailers (2)	Sep-96
		The Armouries	Jan-93
CREATIVE ARTS CENTRE			
OTHER		Hut M17, old Mech Eng. Annex	Jan-93
		Communications Trailers (2)	Dec-93



# November 15 - November 28

## Biochemistry/Molecular Biology Seminar

Probing The Mechanism Of Transmembrane Signalling In A Bacterial Chemoreceptor. Dr. Gerald L. Hazelbauer, Biochemistry/Biophysics, Washington State U., Pullman, WA. Wesbrook 201 at 4pm. Call Dr. Julian Davies at 822-2501.

## Economics Seminar

Wages, Employment And Dispute Resolution In The Canadian Federal Public Service. Denise Doiron/Craig Riddell, both in Economics. Buchanan D225 from 4-5:30pm. Call 822-8216.

## Graduate/Faculty Christian Forum Lecture

What's Rights With Feminism? Dr. Judy Toronchuk, Psychology, Trinity Western U. Buchanan Penthouse at 4:15pm. Coffee at 4pm. Call 224-0974.

## Medical Genetics Seminar

Molecular Biology Of Gauchers. Dr. Francis Choy, assist. prof., Biology, UVic. IRC #3 from 4:30-5:30pm. Refreshments at 4:20pm. Call 822-5312.

## Hillel/Jewish Students Association Film Night

Cup Final. Internationally acclaimed Israeli film. SUB Theatre at 7:30pm. Entrance fee \$5. Call 224-4748.

## WEDNESDAY, NOV. 25

## Wednesday Noon Hour Concert Series

Gwen Hoebig, violin; David Moroz, piano. Music Recital Hall at 12:30pm. Admission \$2. Call 822-5574.

## UBC Bookstore Customer Appreciation Day/Art Demonstration



Demonstration Of Print Making Processes, Oragami And Lino Cut. Rosa Tseng/Christine Wee. Bookstore from 11:30am-3pm. Refreshments, free gift wrapping, 10% off selected merchandise. Call 822-6699/5916.

## Anatomy Seminar

Factor Affecting The Morphogenetic Cell Transformations Of Avian Gastrulation. Dr. Esmond J. Sanders, Physiology, U. of Alberta, Edmonton. Friedman 37 from 12:30-1:30pm. Call 822-2059.

## Microbiology Seminar

Protein/DNA Interactions In Chromosome Structure And Function. Dr. Michel Roberge, Biochemistry. Wesbrook 201 from 12:30-1:30pm. Call 822-3308.

## Astronomy Seminar

Starbursts And The AGN Connection. Prof. John Dyson, Astronomy, U. of Manchester. Geophysics/Astronomy 260 at 2pm. Coffee at 1:30pm. Call 822-2696/2267.

## Ecology Seminar

Coevolution Of Cuckoos And Their Hosts. Arnon Lotem, UBC/Tel-Aviv. Human Nutrition 60 at 4:30pm. Call 822-2387.

## Interdisciplinary Victorian Studies Colloquium Series

The Fallen Woman: Issues And Images. Joy Dixon, History; Pamela Dalziel, English. Faculty Club Music Room at 7:30pm. Call 822-4225/5122.

## THURSDAY, NOV. 26

## Geological Science Seminar Series

Evolution Of Geoscience: Exploration Of The Cordillera. Hugh Gabrielse, Geological Survey Of Canada. GeoSciences 330A at 12:30pm. Refreshments follow in the Grad Lounge (308). Call 822-2449.

## Immunology Seminar Series

Pathways In Human T And NK Cell Development. Dr. Hergen Spits, DNAX, San Francisco. Biomed Research Centre Seminar Room at 4pm. Call 822-3308.

## Physics Colloquium

Advances In Imaging Techniques For Early Cancer Detection. Branko Palic, Physics. Hennings 201 at 4pm. Call 822-3853.

## Economics Seminar



Growth, Sectorial Reallocation And Waiting Time Unemployment. Ian King, Economics, UVic. Buchanan D225 from 4-5:30pm. Call 822-8216.

## Dental Resident Teaching Rounds

Burning Tongue. Dr. Trudy Corbett, Resident I; Dr. R. Priddy, Oral Pathology. BC Cancer Agency, Jambor Education Centre at 5:30pm. Refreshments at 5pm. Call 822-7543.

## FRIDAY, NOV. 27

## UBC Opera Workshop

An Evening Of Opera. French Tickner, director. Old Auditorium at 8pm. Admission free. Call 822-3113.

## Obstetrics/Gynaecology Grand Rounds

Perinatal Mortality Rounds And Case Presentations. Dr. Douglas Wilson/Dr. Virginia Baldwin. University Hospital Shaughnessy Site D308 at 8am. Call Cherri Buckler at 875-3266.

## Paediatrics Resident Case Management

CPC. Dr. Gail Annich, presenter; Dr. Gail Schauer, Fellow. G.F. Strong Auditorium at 9am. Call A.C. Ferguson at 875-2118.

## Health Care/Epidemiology Grand Rounds

Participatory Methodology In Research About Older People: A Case Study. Dr. Veronica Doyle, adjunct prof., Gerontology Research Centre/Program, SFU, Harbour Centre. James Mather 253 from 9-10am. Call 822-2772.

## UBC Library Hands-On Tutorial

UBC Library's Online Catalogue, In COMMAND MODE. Sedgewick Arts Terminal Room Lower Level from 12:30-1:30pm. Call 822-3096.

## Chemical Engineering Weekly Seminar

Hollow Fibre Bioreactor Protein Trans-

port. Jurgen Koska, graduate student, Chemical Engineering. ChemEngineering 206 at 3:30pm. Call 822-3238.

## Economics Seminar

Technological Heroes And Little People: A Comparison Of Great Inventions And Ordinary Patentees In Early Industrial America, 1790-1865. Kenneth Sokoloff, Economics, UCLA. Buchanan Tower 910 at 4pm. Call 822-5938/8216.

## SATURDAY, NOV. 28

## Vancouver Institute Saturday Night Lecture



The Background Of The Native Land Question In BC. Prof. R. Cole Harris, Geography. IRC #2 at 8:15pm. Call 822-3131.

## Law Library Symposium

Eastern Europe And Russian: A Perspective. Curtis 101 from 9am-4pm. Refreshments. Call 822-4238/3443.

## NOTICES

## Women and Law Forum

Forum On Gender And Justice. Lynn Smith, dean of Law; Susan Boyd, visiting incumbent of UBC's chair in Women and Law. Waterfront Centre Hotel MacKenzie Room Tues. Dec. 1 from 5:30-8:30pm. Light buffet supper; tickets available now for \$50. Call 822-9490.

## Campus Tours

School and College Liaison Office Friday morning tours for prospective UBC students. Reserve one week in advance. Call 822-4319.

## Frederic Wood Theatre Performances

Loot by Joe Orton. Nov. 18-21 at 8pm. All tickets \$6; preview on Nov. 10 is 2 for 1. Call 822-2678.

Woyzeck by George Buchner. Nov. 18-28 at 8pm. Adults \$10, students/seniors \$7; preview on Nov. 18 is 2 for \$10. Reservations strongly recommended. Call 822-2678.

## UBC Speakers Bureau

Would your group like to know more about topics ranging from genetic modelling: the new science to computers-of-the-future? Choose from more than 400 topics. Call 822-6167 (24 hr. ans. machine).

## Executive Programmes

Business seminars. Nov. 16-17: Managing the Sales Process, \$550. Nov. 26-27: Designing an Effective Performance Appraisal System, \$750. Call 822-8400.

## Professional Development For Language Teachers

Four-part Saturday morning series on Managing the Language Classroom and evening workshops including Teaching in the Pacific Rim, continuing through Nov. 24; Improvisation in the Language Class, Nov. 17/24. Call 222-5208.

## Humanities/Film Studies Workshop

The Business Of Filmmaking: How To Play The Game. Mark Litwak, writer/producer/attorney. IRC #3 from 10am-

5pm. Fee \$195. Call 222-5261.

## Fine Arts Gallery



Tues.-Fri. from 10am-5pm. Saturdays 12-5pm. Free admission. Main Library. Call 822-2759.

## Volunteer Opportunity University Hospital

UBC Site invites friendly help to join the Volunteer Services group to staff the gift shop, visit patients and participate in other programs. Call Dianne at 822-7384.

## Sexual Harassment Office

Advisors are available to discuss questions or concerns and are prepared to help any member of the UBC community who is being sexually harassed find a satisfactory resolution. Call Margaretha Hoek at 822-6353.

## Statistical Consulting/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 Ponderosa Annex C-210. Call 822-4037.

## Surplus Equipment Recycling Facility (SERF)

Disposal of all surplus items. Currently offering misc. fall specials. Every Wednesday, 12-5pm. Task Force Bldg., 2352 Health Sciences Mall. Call Rich at 822-2813/2582.

## Friends of Bill W.

The Village Group meets every Thursday from 12:30-1:30pm in the Lutheran Centre. Call 822-4872.

## Clinical Research Support Group

Faculty of Medicine data analysts supporting clinical research. To arrange a consultation, call Laura Stanley 822-4530.

## Professional Fitness Appraisal

Administered by Physical Education and Recreation through the John M. Buchanan Fitness and Research Centre. Students \$40, others \$50. Call 822-4356.

## Child Studies Research

Is your baby between 2 and 22 months? Join UBC's Child Studies Research Team for lots of fun. Call Dr. Baldwin at 822-8231.

## Psychiatry Research Studies

Medication Treatment For People With Depression. Call Annie Kuan/Dr. R. A. Remick at 822-7321.

Medication Treatment For People With Winter Depression. Call Arvinder Grewal/Dr. R. Lam at 822-7321.

## Heart/Lung Response Study

At rest and during exercise. Volunteers aged 35 years and more and of all fitness levels required. No maximal testing; scheduled at your convenience. Call Marijke Dallimore, School of Rehab. Medicine, 822-7708.

## Memory Study

Interested participants ages 18-75 invited

to test as part of a study on self-rated and objective memory testing. Call Dina, Psychology, University Hospital, UBC Site at 822-7883.

## Faculty/Staff Non-Contact Hockey

Faculty/staff members over 50 years of age and interested in playing recreational, non-contact hockey are invited to come to the UBC arena on Monday evenings from 5:15-6:30pm. Call Lew Robinson at 224-4785.

## Faculty/Staff Badminton Club



Fridays from 6:30-8:30pm in Gym A of the Robert Osborne Centre. Cost is \$15 plus library card. Call John at 822-6933.

## Late Afternoon Curling

Space available at Thunderbird Winter Sports Centre from 5-7:15pm. Beginners and experienced curlers welcome. Phone Alex at 738-7698 or Paul (evenings) at 224-0835.

## Pacific Spirit Regional Park Programs

Autumn program brochures are now available for all-ages as well as children's recreational/nature-study outings. Pick up from the Park Centre at 16th, west of Blanca or the GVRD main office in Burnaby. Call 432-6350.

## Nitobe Memorial Gardens Restoration

The long awaited opportunity to restore the Nitobe gardens to its original character through Mar. 31/93. During this period, the Gardens will be closed to the public. Call 822-8228.

## Multimedia Symposium '92

November 17, 1992 To show faculty, staff and researchers some solutions for using this technology in an instructional setting. There will be an opportunity to meet vendors and attend informative seminars throughout the day. Registration required. Call 822-6611. At David Lam Management Centre, UBC. 9:00 - 5:00 p.m. Free for UBC faculty, staff and researchers. Undergrads & non-UBC \$5.00

## Advertise in UBC Reports

Deadline for paid advertisements for the November 26 issue is noon, November 17.

For information, phone 822-3131

To place an ad, phone 822-3131

**Screening to improve productivity****Genetics charts path to better trees**

By ABE HEFTER

John Carlson has developed a genetic screening process which he says will result in more efficient reforestation and genetically improved trees.

Carlson, an assistant professor in UBC's Forest Sciences Dept. and the Biotechnology Laboratory, says genetic linkage maps being constructed in his project will enable Douglas fir breeders to select genetically elite parent trees for breeding, and rapidly clone tree genes carrying important traits.

"Efficient reforestation with genetically improved material plays a central part in the effort to increase our forest productivity, improve Canada's economic competitiveness internationally, and protect our environment," said Carlson.

He explained that traditional genetic mapping has enabled scientists to pinpoint specific, agriculturally desirable traits in crop plants. However, he added, traditional mapping methods are labor-intensive and re-

quire the removal of large samples from plants, which is potentially destructive.

Carlson's research group uses a method which is entirely automatable through robotics and requires only small samples.

"By combining the process with

dustry and because of the relatively advanced standings of Douglas fir tree improvement and genetics programs.

His research into Douglas fir and the genetic properties associated with wood strength and density has just begun, using samples from trees on Vancouver Island.

Carlson is currently into the third year of testing spruce seedlings from the Prince George area for genetic traits linked to insect-resistance. His work on spruce seedlings is being supported by a research and technology grant from the B.C. Science Council.

"My long-term interest is to learn how conifers, such as spruce and Douglas fir, are genetically structured and how they have evolved over the years," said Carlson.

"Conifers are unique in that their genetic composition must remain stable over lifespans of hundreds of years. This research may provide some answers as to how trees survive as long as they do."

**"Efficient reforestation with genetically improved material plays a central part in the effort to increase our forest productivity."**

robotics, up to 15,000 samples a day can be screened," said Carlson.

"All that's needed are a few needles from a seedling to determine specific genetic traits," he added. "Visual inspection for such traits can take up to 25 years before they are manifested."

Carlson said Douglas fir was chosen for this project, funded by a Natural Sciences and Engineering Research Council strategic research grant, because it is a species of great economic importance to the Canadian forest in-

**Eldridge elected AAPS president**

Sue Eldridge, administrator in the Dept. of Psychology, has been elected president of the Association of Administration and Professional Staff for 1992/93.

An AAPS member since 1980, Eldridge has held several executive positions with the association and with other campus bodies. She has worked at UBC since 1968.

Other new executive members are: 1st Vice-president, Jon Nightingale, University Computing Services; 2nd Vice-president, Rae Ryan, Medical Genetics; Treasurer, Justin Marples, Physical Education; Secretary, Claudette Elder, Pharmaceutical Sciences.

New executive members-at-large are: Marc Broudo, Co-ordinator of Health Sciences Office; Allan De John,

Housing and Conference Centre; Cheryl Dumaresq, School and College Liaison; Susan Mair, University Computing Services; Angela Runnals, Registrar's Office.

AAPS is an employee association whose objectives are to represent UBC's management and professional staff in collective bargaining and promote the welfare of its members and the university.

**Nazi docudrama first UBC feature**

Where is Memory, a docudrama that explores the changing memories of Nazi Germany, had its world premiere last month at the Festival de Nouveau Cinema in Montreal. It also marked the launch of the first feature-length film made by members of UBC's Dept. of Theatre and Film.

Shot three years ago in Germany and France, the 97-minute movie was directed by Assistant Professor Chris Gallagher and features UBC theatre Professor Peter Loeffler in the lead role.

Earlier this month the film won the Judges Award at the Northwest Film and Video Festival in Portland. Gallagher intends to also present his work at European film festivals including those in Rotterdam, Berlin and Cannes.

A mixture of fiction and documentary, Where is Memory traces the dreamlike journey of a man, dubbed The Sleepwalker, through Germany after a suitcase full of Third Reich memorabilia is mysteriously delivered to his door. The man travels to historic sites of the Reich to explore and photograph them with a camera used during the war.

His trek eventually leads him to Eva Adolphina Hitler, a girl who claims to be Hitler's granddaughter. As the past becomes mixed with reality, The

Sleepwalker's gradual realization of the regime's horror drives him to a desperate act.

"The Sleepwalker is the personification of a future when there will be no memory of World War Two. There will only be history," said Gallagher. "I wanted to explore the relationship of memory to history in terms of the Third Reich. I feel that history becomes more theoretical and abstract as it loses the emotion of memory."



Gallagher

To achieve a feeling of past meeting present, Gallagher obtained period photos and footage of Nazi Germany and then travelled with a film crew to re-photograph those sites in the present day. A chilling sense of reality is achieved by dissolving between past and present.

The film also explores the difference between written history and photographic evidence.

Said Gallagher: "History can have an element of fiction to it with its editorial slant or omission of facts. But an image has a raw quality and can serve as a window to the reality of that time."

Shot in color and released with optical sound, Where is Memory had a budget of \$120,000, some of which was raised through Canada Council, the Ontario Arts Council, B.C. Film, the Saskatchewan Arts Board and UBC Humanities and Social Science Research.

**New restaurant pays tribute to Trekkers**

More than 150 people helped celebrate the Oct. 28 official opening of Trekkers, the first major new food service facility to be built at UBC since 1968.

Trekkers is named in honor of the students who marched through the streets of Vancouver in 1922 to convince the government to make the tip of Point Grey UBC's permanent home. Five Great Trekkers were on hand for

the ribbon cutting ceremony.

The \$2.7-million facility replaces the old Bus Stop coffee shop which was torn down to make way for the David Lam Management Research Centre.

UBC Food Services employs more than 300 staff and is expected to gross approximately \$14 million in sales this year, second only to food sales generated by the B.C. Ferry Corporation.



THE UNIVERSITY OF BRITISH COLUMBIA

PRIZES FOR EXCELLENCE  
IN TEACHING, 1993CALL FOR NOMINATIONS  
IN THE  
FACULTY OF ARTS

Once again the University is recognizing excellence in teaching through the awarding of prizes to faculty members. The Faculty of Arts will select five (5) winners of the prizes for excellence in teaching for 1993.

**Eligibility:**

Eligibility is open to faculty who have three or more years of teaching at UBC. The three years include 1992-3.

**Criteria:**

The awards will recognize distinguished teaching at all levels, introductory, advanced, graduate courses, graduate supervision, and any combination of levels.

**Nomination Process:**

Members of faculty, students, or alumni may suggest candidates to the Head of the Department, the Director of the School, or the Chair of the programme in which the nominee teaches. These suggestions should be in writing and signed by one or more students, alumni, or faculty, and they should include a very brief statement of the basis for the nomination. You may write a letter of nomination or pick up a form from the office of the Dean of Arts in Buchanan Building, Room B 130.

**Deadlines:**

The deadline for submission of nominations to Departments, Schools or Programmes, is 29 January 1993.

Winners will be announced in the Spring, and they will be identified as well during Spring Convocation in May.

For further information about these awards contact your department or call Associate Dean of Arts, Dr. Sherrill Grace at 822-9121.

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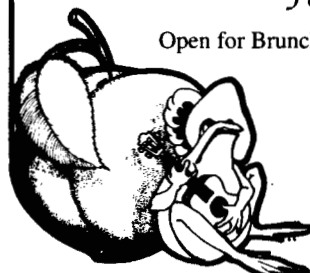
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# People

## Isaacson honored for career, community service

Michael Isaacson, head of the Dept. of Civil Engineering, is the winner of the 1992 R.A. McLachlan Memorial Award, the major award from the Association of Professional Engineers and Geoscientists of B.C.

The award is given annually to an engineer who combines a solid professional career with outstanding community service. Isaacson, a pioneer in the field of coastal and offshore hydrodynamics, has written more than 130 technical papers and has been involved in a wide variety of civil engineering projects in Canada and abroad.

He has also served as president of his synagogue, as a director of the Jewish Federation of Greater Vancouver and on the executive of the Canadian Jewish Congress, Pacific Region. Isaacson also helped establish Maimonides high school.

Also honored by the association was Noel Nathan, professor emeritus of Civil Engineering, who received the Professional Service Award for

his outstanding service to the association and other professional groups.



Nathan

The association also presented a special award certificate of appreciation and service pin to Adelia Livesey, senior instructor emerita in the Dept. of English.

Livesey has for many years volunteered her time and expertise to help engineers express themselves more clearly and improve technical and report writing skills.

Dr. Judith Hall, head of the Dept. of Pediatrics, has been named to the program management committee of the Canadian Genome Analysis and Technology Program.

The project is a multidisciplinary effort by scientists around the world to map and sequence genetic information stored on human chromosomes.

The management committee will set overall program direction and determine resource allocation for the \$22-million project being funded by the

federal government, including the Medical Research Council of Canada and the National Cancer Institute of Canada.

Richard Pearson, head of the Dept. of Anthropology and Sociology, has recently completed a six-year project as guest curator for the acclaimed Smithsonian Institution exhibit, Ancient Japan.

Held at the Institution's Arthur M. Sackler Gallery last month, the exhibition featured about 250 artifacts dating back 200,000 years. Many of the objects are archeological finds from the last 30 years.

It was the third gallery showing in the West devoted to Japan's prehistoric art. Pearson was also responsible for organizing the previous two shows, the most recent of which was the 1990 exhibit at the IBM Gallery of Art, Science and Technology in New York.

David Vogt has been appointed director of Science at Science World, effective Oct. 15.

Vogt has been curator of UBC's Geophysics and Astronomy Dept. since 1980 and the director of Science Communications for the Faculty of Science since 1991.

He will use his many connections with educational institutions and science industries in B.C. to strengthen Science



Vogt

World's role in the province's scientific community and to enhance the science content of its permanent and travelling exhibits. Vogt has been a member of Science World's exhibits committee as well as a member of the B.C. Space Sciences Society board of directors and a founding member of the Committee on Public Participation in Science and Technology.

Pathology professor Dr. David Hardwick has been elected president of the International Academy of Pathology.

He was selected at the academy's 19th congress held recently in Spain.

Hardwick will serve the one-year term beginning in 1993. He succeeds Dr. Antonio Llobart-Bosch, a professor of pathology and dean of medicine at the University of Valencia, Spain.

The International Academy of Pathol-

ogy, founded in 1906, has 11,000 members worldwide. The academy provides continuing education and promotes research in pathology through annual meetings, academic congresses and courses, as well as through publications, including some of the world's leading pathology journals.

Gerald Straley, a research scientist at the UBC Botanical Garden, has won the 1992 City of Vancouver Book



Straley

Award for his book *Trees of Vancouver*.

Published by UBC Press, the book identifies 470 kinds of trees in the City of Vancouver and on the UBC campus.

The award was made at the opening reception for the Vancouver International Writers and Readers Festival at Granville Island. The award includes a \$2,000 cash prize.

Among the other books nominated was *Vancouver and Its Region*, by Geography Department Head Timothy Oke and Geography Professor Graeme Wynn.

## Looking good is no cure if it deceives your doctor

By CHARLES KER

Do health professionals think physically attractive patients are healthier than unattractive patients?

If so, are their appearance-based judgements accurate?

Psychologist Thomas Hadjistavropoulos hopes to get answers to these and other related questions from a study he is conducting at UBC.

"The general findings in this area are that there is a physical-attractiveness stereotype which means those with good looks are perceived by oth-

ers as having more desirable characteristics," said Hadjistavropoulos.

"In the medical setting, previous research by others has shown that physically attractive patients are perceived by physicians as being healthier."

Previous studies with students have concluded that biases towards the physically attractive also affect employment decisions made in the workforce and jury decisions in court.

But Hadjistavropoulos points out that while past research has involved students in labs pretending to be pa-

tients, his study will focus on real patients.

For the study, he and Psychology Professor Ken Craig will videotape, without sound, facial closeups of about 90 people with back pain while they are performing leg raises at a physiotherapy clinic. The attractiveness of the patients will have been previously assessed using an established statistical method.

Physicians, nurses, clinical psychologists and other health professionals will be given basic health information on each subject. They will then be

asked to give their impressions about the current medical and psychological condition of each patient based on what they view on video.

The accuracy of these impressions will be checked against the actual condition of the patients.

"Our study will either substantiate that appearance-based judgements of professionals carry validity or determine that these impressions are indeed inaccurate and a source of bias that should be eliminated," he said.

Hadjistavropoulos added that per-

sonal appearance may be a valid source of information for physicians because patients often neglect their personal appearance when they are ill.

"We are only touching the tip of the iceberg in terms of understanding why people hold this stereotype," said Hadjistavropoulos. "Our recent findings suggest that people are often reluctant to disclose the extent to which they are attracted by the physical attractiveness of others."

Hadjistavropoulos hopes to have these studies completed within a year.

## Forestry dean urges students to expand their job horizons

By ABE HEFTER

Diversification and consultation are two words that forestry students should keep in mind when considering career opportunities in the 1990s.

That's the message Dean Clark Binkley is delivering as the Faculty of Forestry prepares to host a forestry career evening on Nov. 26, from 5-9:00 p.m. at the MacMillan Building Student Lounge.

The road to employment for recent UBC Forestry graduates has been a relatively smooth one, said Binkley, usually leading to jobs in government or industry. This year, 95 per cent of the 22 graduating students who responded to a faculty survey had found employment by the time they had graduated.

In addition, all of the respondents who graduated the previous year were employed or pursuing advanced degrees.

Binkley said the next step is to get forestry students to consider jobs, in addition to those in government and industry, with consulting companies,

environmental groups and parks agencies, for example, and to get them to start considering career options earlier in their undergraduate years.

"We want to broaden the definition of a career in forestry. That will be a main thrust of forestry career evening."

Binkley said some of the largest job growth is being experienced in the service sector as a result of the decision by many firms to contract out more and more work. Forestry graduates who are prepared to step in stand to benefit the most in today's job market.

"There's a real demand on the local, national and international level for consultants who can manage everything from land management plans in British Columbia to plantation projects in China," said Binkley.

"I want to make sure that it's being filled by UBC graduates."

Binkley pointed out that meaningful summer employment for second and third year forestry students is an integral part of the equation.

"This type of work experience is educational, in that it produces a better student in the end, and is also quite pragmatic. Students can earn \$10,000 over the summer to pay for costs associated with their education, while broadening their skills.

"It will pay significant dividends when they go out on the permanent job market."

The aim of forestry career evening is to familiarize students with the range of career opportunities that are available to undergraduates; to give students opportunities to meet and discuss careers with foresters and alumni who are working in a range of jobs; and to help them make decisions about which forestry degree program is best to achieve their career goals.

A panel presentation by speakers from a variety of companies, consulting firms, government and industry will offer insight into different career options.

Companies and organizations will also display promotional material in the lounge area.

## Classified

Classified advertising can be purchased from Community Relations. Phone 822-3131. 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, November 17 at noon is the deadline for the next issue of UBC Reports which appears on Thursday, November 26. Deadline for the following edition on December 10 is noon Tuesday, December 1. All ads must be paid in advance in cash, by cheque or internal requisition.

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### Miscellaneous

**LONDON, ENGLAND:** Two bedroom fully furnished apartment for rent. Pleasant area of North London, 25 minutes from London University by public transit. Perfect for a sabbatical. Available mid-February, 1993 for up to a year. Contact John Calvert, 2584 Yale St., Vancouver, B.C., V5K 1B9. Tel 604-255-6601.



United Way



# The challenge of undergraduate education

By R. J. ROWAN

It has for a very long time been acknowledged by a number of intelligent friends of higher education that undergraduate education in North America, most inexcusably in the first two years, the lower division, is a failure. This heavy criticism is voiced by friends of the enterprise, not by hostile critics or Philistines.

Responsibility for the failure lies with the dominating, prestigious, research-driven universities, and within those institutions the responsibility can only be traced to the overwhelming majority of faculty whose minds and hearts are devoted to research, to graduate students and post-bachelor degree training.

Now there may be uneasiness, some ambivalence or even residual guilt on this matter within the professoriate, I suspect there is. Nonetheless, as judged by practice, one would have to conclude that professors think undergraduate education should consist almost entirely of the initial or preparatory stages of training for an academic or research profession, as though undergraduate students were going to follow the paths of their teachers, but then don't.

Why is that? Why should professors have adopted such an ill-suited set of attitudes towards undergraduate education? Because in their eyes it represents things as they should be, for it reflects their training and recruitment, it stands behind their competence and confidence and is the focus of their academic values, interests, ambitions, rewards and prestige. That is to say,

it represents virtually everything solid and good that they see attached to faculty research careers. That is why the research-graduate school tail now wags the educational dog. So the resulting lack of respect for and intelligent care of the undergraduate level should only have been expected, and that's a pity.

Don't take my word for it. The failure is widely and authoritatively acknowledged and has been so for many years.

Early in the century Alexander Meiklejohn indicted it. In 1984, Clark Kerr, the former President of the University of California, baldly described undergraduate general education as a "disaster area." Other studies by eminent, knowledgeable Canadian and U.S. figures could be cited to the same effect. And to all these we should add the half-articulated dissatisfaction of those who have recognized the deep, persistent failure of undergraduate education as it is offered almost everywhere in North America.

I refer here to students and ex-students, many of whom in my own (and in my colleagues') experience express a nagging intuition that some-

how it didn't turn out quite right. Something didn't happen that would have made a difference.

The sensed deficiency in their university education has to do with its

utter failure to provide any sense of the whole.

Undergraduate years consist almost entirely of narrow, segmented, disconnected pieces or bits, lacking depth, range and perspective. Thus, these years utterly fail to illuminate even so central a question as who we are and what we're doing. That kind of illumination is just what programs of a liberal sort set out to provide.

They can provide it well if given the chance. And there really has to be some corner of the university which sets about to do that, because if not then and there, then where and when?

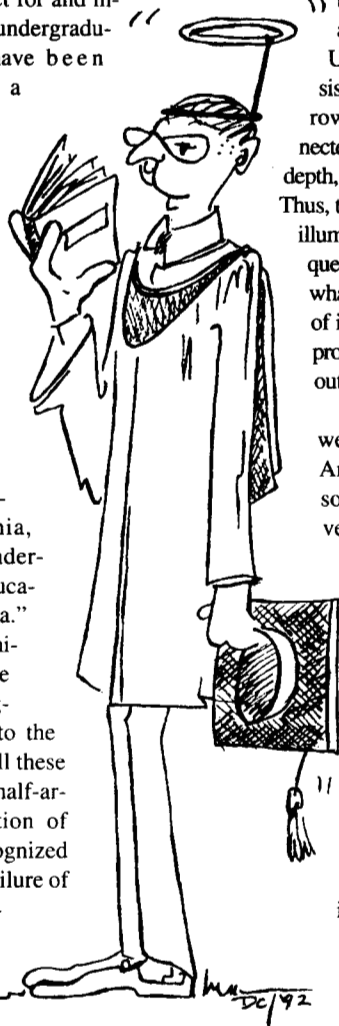
The features collected together to constitute this indictment have been variously emphasized by critics.

1. The lower division lacks centre and integrity altogether.

2. A far too large contingent of graduate students simply cannot read with comprehension or write clearly and gram-

matically.

3. Despite the heavy third and fourth-year major, graduating BAs and B.Sc.s are not very well schooled. They



are apt to know some aspects of the discipline well, but many would be unable to pass a broadly conceived comprehensive exam in the discipline.

4. The use of teaching assistants in lower division for anything other than the most routine and non-sensitive of tasks is impossible to defend.

5. Far too many graduating students, probably most, have never wrestled in a serious or sustained way with even one great and abiding human theme or concern at an appropriate philosophical level.

6. Far too many graduating students are abysmally ignorant of history. They neither know nor can they appreciate the nature and role of the central moral, intellectual, political, legal and social institutions of their culture.

Moreover, and as I said earlier, the overwhelming majority of graduating BAs and B.Sc.s are not headed for graduate schools or lives devoted to research nor, note this, are they even likely to end up in careers for which their undergraduate education has provided direct or specific training. What we have, therefore, is something of the worst of both worlds: neither degree offers a good general education nor adequate training for a career in a field where there are jobs to be had.

That I not be misunderstood I want to insist right now that the pursuit of knowledge, thus, is one of the great human vocations, and its achievements are among the glories of the human mind. If it's not the brightest star in that constellation, there are few brighter ones.

The pursuit of knowledge is a truly important thing. But in its modern university mode it has become self-important and domineering, and that's

a different thing. In its self-importance it relegates other vital concerns not merely to second or third place, but in practice, relegates them almost off the scale. The heedless treatment accorded undergraduate education, especially the lower division, is a case in point.

Nothing will change, really, until the research-dominated orientation of universities loosens its strangling grip. Nothing will change until that orientation no longer decisively directs and rewards the moral and intellectual energies of the institution. Studies will proliferate, trenchant criticisms will continue to be heard, feeble gestures and much waving of hands will be seen, but unless a different and more appropriate set of standards to guide undergraduate education is somehow adopted nothing will change.

Probably the change which would make the most beneficial difference would be to create some kind of college out of the lower division, and devote those two years to liberal education. Until that unlikely event transpires, Arts One deserves our recognition and support. Its creation and maintenance over 25 years is, given what universities are today, a major miracle indeed.

*This article is based on a talk given by R.J. Rowan at the celebration of the 25th anniversary of Arts One in September. Rowan is a professor emeritus of Philosophy and a founder of the Arts One program. A complete text of Rowan's remarks can be obtained from the dean's office in the Faculty of Arts.*

## Architects targeted in push for 'universal design'

By CHARLES KER

Tali Conine of UBC's School of Rehabilitation Medicine has spent her life helping people with physical disabilities gain control of theirs.

But while patients may leave the hospital bolstered by new physical skills and positive attitudes, their hard-earned advances are too often negated by physical barriers at the office, at home or in the community.

"It sometimes feels like we're banging our heads against a wall," said Conine, a professor and physical therapist. "No matter how hard we work in the hospital, there are always physical obstacles waiting outside to knock patients down again."

Given that inaccessibility in and around buildings is a common complaint among seniors and people with disabilities, Conine and colleagues decided to tackle the problem at its source: architecture.

Since 1990, Conine and a group of experts have been compiling a set of resource materials aimed at teaching architecture students and architects the special design needs of Canada's aging population and others. The result of their collaborative effort is a four-binder set called Towards a Barrier-Free Environment.

The binders feature selected readings organized under major topics, an annotated bibliography with more than 100 carefully selected print and audio-visual citations, a binder of practical

self-assessment exercises and a separate book of VHS audio-visual tapes showing current attitudes, design problems and creative solutions.

Funded through the B.C. Health Research Foundation, the project was conceived by a committee which included the Architectural Institute of B.C. (AIBC), UBC's School of Architecture and the B.C. Paraplegic Association.

Despite a rising demand for barrier-free design, Conine said little was being done to help architects and other design professionals keep pace with research, technological developments and design innovations. As a result, Conine and others were constantly being asked to brief design professionals on ways to make their work more accessible.

Project materials will be made available to about 150 undergraduate and graduate students in architecture at UBC, 1,375 professional architects throughout the province and close to 100 provincial agencies dealing with issues of disability.

But Conine stressed that Towards a Barrier-Free Environment isn't just for the benefit of people with disabilities.

Statistics Canada estimates that almost one in four Canadians will be over the age of 65 by 2030. Homes and public buildings must therefore incorporate features to meet these changing physical and sensory needs and lessen

extensive renovations down the road.

The Canada Mortgage and Housing Corporation is presently sponsoring a cross-country tour of barrier-free design ideas. The CMHC "open" house display features wide-angle peepholes in the front door at standing and sitting levels, raised electrical outlets and lowered light switches. More sophisticated devices include an automatic door-entry system and visual intercoms using strobe lights to alert hearing-impaired residents to a smoke detector, telephone or doorbell.

Sandy Hirshen, a project organizer and director of UBC's School of Architecture, said future accreditation requirements for Canadian university programs in architecture are being devised to take into account human impairments affecting mobility, use of arms, vision, hearing, speech cognition and perception. The AIBC is also establishing a hotline to guide architects on questions of barrier-free design.

On campus, UBC has established its own Physical Access Advisory Committee to examine ways to eliminate barriers. Ruth Warick, director of the Disability Resource Centre, is also chairing a committee on hearing accessibility for faculty, staff and students.

Meeting four times a year, the 11-member physical access committee is drawn from UBC's schools of Architecture and Rehabilitation Medicine,

the Disability Resource Centre, Crane Library, Plant Operations, the Clinical Engineering Program, and the offices of Employment Equity and Campus Planning and Development.

Committee members hope this collaborative approach will lead to a 'universal design' for construction and renovation projects benefiting everyone on campus.



Photo by James Labonte  
Graduate student Vaughan Miller's residence in Acadia Park features lower light switches and counters and a wheel-in shower.