

# UBC REPORTS

Volume 42, Number 2

January 25, 1996

## Two professors join Order of Canada

Two professors emeriti and a pair of UBC's major donors were among the 68 Canadians appointed to the Order of Canada earlier this month.

Prof. Emerita Margaret Ormsby was named a member, the order's third highest rank, for her contributions to Canadian heritage.

Ormsby, who was first appointed to UBC in 1943, has been called the undisputed doyenne of B.C. history. She wrote the first history of B.C., *British Columbia: A History* in 1958, a work which set the standard in the field.

She retired as head of the History Dept. in 1974.

Social Work Prof. Emeritus Richard Splane was also named a member of the Order of Canada for his role in creating Canada's social safety net.

Before joining UBC in 1973, Splane had a 20-year career in Canada's public service at Health and Welfare Canada. During this time he played a central role in establishing Canada's social security system.

Splane was the chief architect of the Canada Assistance Plan, a federal-provincial cost-sharing program that helped maintain national standards for social services.



Splane

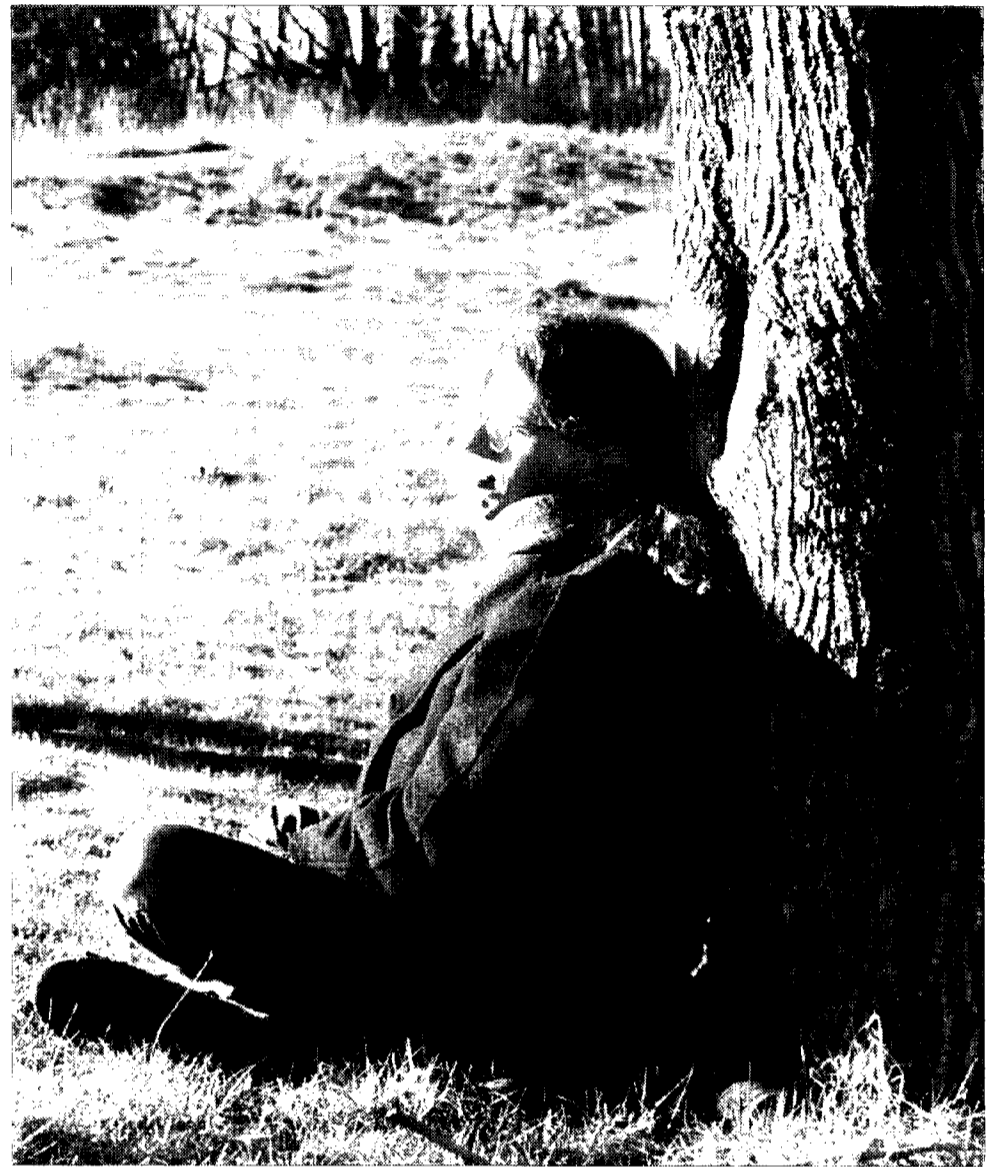
In recent years, he has done collaborative research with his wife, health care advocate Verna Splane. She was named an officer of the Order of Canada, the second highest rank.

A nurse known for her work in the health field as a practitioner, educator, consultant and author, Splane taught at UBC's School of Nursing for 10 years as an honorary sessional lecturer.

David Lam, the former B.C. lieutenant-governor who has made major contributions to UBC, was named an officer. Lam's gifts to the

university include funds for the David Lam Management Research Centre, the Asian Garden within the Botanical Garden, the Dorothy Lam Chair in Special Education and the David Lam Chair in Multicultural Education.

Jack Bell was appointed a member of the Order of Canada. He has made many contributions to UBC, including the Jack Bell building for the School of Social Work and to the First Nations Longhouse. He has also supported research into schizophrenia and provided funding for the Jack Bell Chair in Schizophrenia.



Staff photo

### Ray Day

This sun seeker was one of many who sought a peaceful and rare sunny spot behind the Museum of Anthropology recently. Environment Canada reported that 613 mm of rain fell at Vancouver Airport from October through to the end of December. It was the second greatest precipitation measurement for those months ever.

## Space map charts dark matter

by Charles Ker

Staff writer

Astronomer Gregory Fahlman overlays a computer-generated map of space onto a map of the stars and starts giving directions to his would-be intergalactic traveler.

"You'd better watch out if you plan on zooming through here," Fahlman warns, pointing to a particular spot on his mass map.

The one-of-a-kind map, which could pass for any topographical map of earth, shows where invisible pockets of dense mass, otherwise known as dark matter, are in a far-away cluster of galaxies. Measuring three million light years across, this is the largest mass map of space produced to date.

Using a long-standing technique known as gravitational lensing, Fahlman and a handful of associates are working towards calculating the mass density of the universe, more than 90 per cent of which is believed to be made up of invisible dark matter.

Calculating the mass density of the universe, the astronomy professor says, will help explain whether the universe will keep expanding forever or eventually collapse.

"Because these clusters of galaxies are the largest masses in the universe, are made of the same stuff as the universe, and because we have an understanding of how these clusters form, they represent a legitimate sample of the universe as a whole," says Fahlman.

Fahlman explains that the galaxies within the cluster move rapidly amongst each

other but can't escape their own gravitational pull. Given that gravity bends light, Fahlman and colleagues have statistically measured how light from a galaxy behind the cluster is distorted as it passes through and around it. In effect, the cluster acts as a giant gravitational lens.

Using the Canada-France-Hawaii Telescope, Fahlman's team electronically imaged a particular cluster for three nights and looked for evidence that background objects were being lensed. From the characteristics of the lensed images, the scientists were able to deduce how the dark matter was distributed among the shining stars within the cluster.

The team calculated that the visible light comes from only one per cent of the cluster's entire mass. The distortions seen through the telescope could only have been caused by the gravitational pull from dark matter making up the remaining 99 per cent of the cluster's mass density.

"It's a little like taking glasses to an optometrist," says Fahlman. "He can take the image he sees through the lens and deduce all the important characteristics about it. We're able to take distortions we've measured and reconstruct how the matter or mass must be distributed in that lens to produce the pattern we see in a sizeable chunk of space."

Despite its dimension of three million light years, Fahlman's map represents only one-sixteenth of one-forty-four-thousandth of the sky.

Still, the Canada-France-Hawaii Telescope team is doing the most advanced work anywhere in the field of weak

See **SPACE** Page 2

## Initiatives underway to better campus safety

by Connie Bagshaw

Staff writer

UBC is listening to your bright ideas for creating a safer campus.

"People are worried about personal safety at UBC, and inadequate lighting is a common area of concern," said Byron Hender, executive co-ordinator to the vice-president, Student and Academic Services. "The university takes these issues seriously and we have taken several steps to address them."

The initiatives directly respond to spe-

cific concerns raised at "Safety on Campus," one in a series of "Your UBC" forums inaugurated last fall by the university in conjunction with the Alma Mater Society (AMS) to encourage dialogue between students and the administration.

More than 200 students, faculty and staff turned out for the forum, the highest attendance to date.

"The audience told us that even though campus lighting has been improved, it still had a long way to go," Hender said.

See **SAFETY** Page 2

### Inside

#### Walking Wonder

3

The Platonic Beast just keeps going and going and going

#### Travelling Table

3

Offbeat: It has crossed a continent but crossing campus took longer

#### Streamlining Service

5

Campus works: The Bookstore does it well and then tries to do it better

#### Wild Wisdom

12

Profile: Fred Bunnell sees the forest for more than the trees

## Safety

Continued from Page 1

"They suggested that burnt-out light bulbs had to be replaced faster and they wanted to know of a way to report them."

In December, Plant Operations staff swept the campus looking for and replacing burnt-out exterior light bulbs, and reports can now be made to a new e-mail address—lightsout@plantops.ubc.ca—established by Plant Operations on Jan. 14.

Plant Operations will normally replace the light bulbs within two weeks.

The university also plans to expedite the installation of more external lighting on campus, citing a proposed night audit of

campus this spring with students and relevant campus units to identify outstanding problem areas.

Additional concerns which emerged at the campus safety forum dealt with UBC's security bus service and accessibility to information about crime on campus, he said.

"The audience felt that the existing security bus service was great but that more buses were needed. The university has responded by funding a second bus which will operate on a trial basis five days a week from 6 p.m. to 2 a.m. until the end of term."

The bus will circuit the campus every 30 minutes with stops at 14 points.

Forum participants also expressed uneasiness with having to rely on rumour instead of fact

when trying to find out about alleged incidents such as assaults, break-ins and thefts occurring at UBC.

The university's Personal Security Advisory Committee is currently investigating how to provide the campus community with better information about such events reported to Parking and Security Services and the university detachment of the RCMP.

"Several campus units are working co-operatively to ask how the university can increase safety on campus and we're doing it," Hender said.

He noted that the administration has also contributed funds to Main Library to hire additional safety monitors, and to the AMS which needs flashlights for its SafeWalk program volunteers.

## Space

Continued from Page 1

lensing, an application which statistically measures distortions of light at the outer edges of a cluster. Unlike at the centre of the cluster where distortions are easily discernible, background light farther from the cluster's core is weakly lensed and distortions can only be measured statistically.

Fahlman and his associates wrote the first detailed account in December 1994 of how weak lensing provides valid information about large-scale structures, such as clusters, in the universe.

Their current study, due out in the March issue of *The Astrophysical Journal*, not only maps the largest area yet, but also includes corroborating data from X-ray analysis of the cluster. According to Fahlman, such groupings of galaxies emit X-rays from hot gas up to 10 million degrees Celsius. The X-rays, though not as reliable as lensing, provide an alternate way of tracing the mass density of clusters.



THE UNIVERSITY OF BRITISH COLUMBIA

### Faculty of Arts Dean

The University of British Columbia invites nominations and applications for the position of Dean of the Faculty of Arts. The appointment will take effect July 1, 1996 or as soon thereafter as possible.

The Faculty of Arts includes more than 450 full-time faculty members in 16 departments and three schools covering the Creative and Performing Arts, the Humanities, Social Sciences, and the professional fields of Library, Archival and Information Studies, and Social Work. Programs of study at the bachelor's, master's and PhD levels are offered to almost 9,000 students. Operating budget is about \$42.5 million.

The University seeks a candidate with a recognized reputation in one of the disciplines represented in the Faculty, dedication to good teaching, and successful administrative experience. The Dean is expected to provide the leadership for the faculty in its pursuit of excellence, and to play a constructive role in the general academic direction of the University.

The University is concerned about the under-representation in administration of women, aboriginal people, visible minorities and persons with disabilities and welcomes all qualified applicants especially members of these designated employment equity groups.

Applicants should write and send a curriculum vitae and the names and addresses of at least three references to Dr. Daniel R. Birch, Vice-President Academic and Provost, The University of British Columbia, 6328 Memorial Road, Vancouver, British Columbia, V6T 1Z2. Applications and nominations are welcome until March 22, 1996, or until an appointment is concluded.

In accordance with Canadian Immigration requirements this advertisement is directed to Canadian citizens and permanent residents.

## Berkowitz & Associates

Statistics and Mathematics Consulting

- research design
- data analysis
- sampling
- forecasting

Jonathan Berkowitz, Ph.D  
4160 Staulo Crescent, Vancouver, B.C., V6N 3S2

Office: (604) 263-1508 Home: (604) 263-5394

## Wax - it

Histology Services

Providing Plastic and Wax sections for the research community

George Spurr	RT, RLAT(R)	Kevin Gibbon	ART FIBMS
Daytime	(604) 266-7359	Daytime	(604) 856-7370
Evening	(604) 266-2597	Evening	(604) 856-7370
E-Mail	spurrwax@infomatch.com		

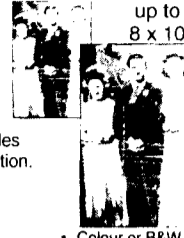
## Largest selection of NEW & USED in Western Canada

No negative. No problem.



Bring in those wonderful old Heritage photos or slides from your treasured collection. We'll make perfect reproductions while you wait.

Bring in several photos and we'll make an 8x10 collage!



- Colour or B&W
- No negative needed
- Larger or smaller than original
- We can even copy real objects!



The Best Quality in the Lower Mainland

- Glossy or Matte
- New 6x9 size now available in Vancouver
- Colour video monitor allows our lab operator to make precise adjustments for perfect photos
- Earn FREE ENLARGEMENTS with our Club Card

FAMILY OWNED & OPERATED SINCE 1961



VANCOUVER 2170 W. 41 Ave., 263-3221  
RICHMOND · BURNABY · WEST VANCOUVER  
NORTH VANCOUVER · COQUITLAM

## Technical Support for Social Science Projects

- \* Course & Instructor Evaluations
- \* Scannable Forms (multiple-choice)
- \* Data Collection
- \* Statistical Analysis
- \* Custom Reports/Graphics
- \* Questionnaire/Survey/Test Design

## Applied Research and Evaluation Services

(formerly Educational Measurement Research Group)

University of British Columbia  
Room 2 Scarfe Building  
2125 Main Mall



Dr. Michael Marshall  
Executive Director  
Tel: 822-4145 Fax: 822-9144

## Edwin Jackson

This year's RRSP Deadline:  
February 29th.

E-Mail: 102343.1610@compuserve.com  
http://ourworld.compuserve.com/homepages/EdJackson

Financial,  
Retirement  
Income,  
Estate  
Planning

Term  
Deposits,  
RRSP/RRIF's  
Competitive rates  
with leading financial  
institutions.

Mutual Funds  
licensed through  
Ascot  
Financial  
Services Ltd.

Annuities,  
Life and  
Disability  
Income  
Insurance



## UBC REPORTS

UBC Reports is published twice monthly (monthly in December, June, July and August) for the entire university community by the UBC Public Affairs Office, 310 - 6251 Cecil Green Park Road, Vancouver B.C., V6T 1Z1. It is distributed on campus to most campus buildings and to Vancouver's West Side in the Sunday *Courier* newspaper.

Associate Director, University Relations: Steve Crombie (stephen.crombie@ubc.ca)

Managing Editor: Paula Martin (paula.martin@ubc.ca)

Editor/Production: Janet Ansell (janet.ansell@ubc.ca)

Contributors: Connie Bagshaw (connie.filletti@ubc.ca),

Stephen Forgacs (stephen.forgacs@ubc.ca)

Charles Ker (charles.ker@ubc.ca),

Gavin Wilson (gavin.wilson@ubc.ca).

Editorial and advertising enquiries: (604) 822-3131 (phone), (604) 822-2684 (fax).

UBC Reports welcomes the submission of letters and opinion pieces. Opinions and advertising published in UBC Reports do not necessarily reflect official university policy.

Material may be reprinted in whole or in part with appropriate credit to UBC Reports.

**SELF SERVE**  
**Canon**  
**COLOR LASER**  
**COPIES**

**85¢** ea.  
8 1/2 X 11 ONLY

University Village  
2nd Floor 2174 W. Parkway  
UBC, Vancouver, B.C.  
fx: 224-4492

**224-6225**  
Open 7 Days a week  
Mon-Fri • 8-9 — Sat & Sun • 10-6

**copies+** DISCOVER THE FRIENDLY COMPETITION

**DEDICATED**  
**PWT** INC.  
**TO SERVICE**

**PROFESSIONAL**  
**WORLD TRAVEL**

**Christine Wisenthal**  
Travel Consultant

200 - 1847 West Broadway  
Vancouver, B.C. V6J 1Y5  
Tel: (604) 739-9199

**Complete Travel**  
**Arrangements:**  
Air, Rail, Cruise, Car Rental,  
Accommodation, Tours,  
Special Interest Travel

# Former PM, Nobel laureate among Institute speakers

Former Prime Minister Kim Campbell and political columnist Lysiane Gagnon are among the speakers participating in the Vancouver Institute of Spring lecture series at the University of British Columbia Jan. 27 to March 30. Lecture topics range from health care reform to endangered languages.

The series kicks off Jan. 27 with Dr. Fraser Mustard's talk, "Prosperity or Decline: Canada's Choice."

Dr. Mustard spent 16 years at McMaster University as a medical scientist and educator prior to creating the Canadian Institute for Advanced Research (CIAR) in 1982. CIAR is a research network that studies complex problems in the sciences and social sciences. The institute involves 200 researchers from Canada, the U.S., Europe, Israel and Japan studying such diverse topics as cosmology, evolution biology, and the determinants of economic growth.

Other series speakers and topics include:

- Feb. 3: Prof. Robert Evans, "Healthy, Wealthy and Cunning? Profit and Loss from Health Care Reform"

- Feb. 10: Lysiane Gagnon, "Between Two Referendums: The Future of Quebec and Canada"
  - Feb. 17: UBC linguist Patricia Shaw, "The Sounds of Silence: Endangered Languages"
  - Feb. 24: Nobel Prize winner Roald Hoffmann, "One Culture: What Art and Science Have in Common (and How They Differ)"
  - March 2: The Rt. Honorable A. Kim Campbell, "What's a Nice Country Like Us Doing in a Place Like This?"
  - March 9: Harvard economist Jeffrey Williamson, "Dealing with the Challenge of Globalization: The Long View"
  - March 16: Prof. Stewart Clegg, "The Rhythm of the Saints"
  - March 23: Prof. Timothy Johns, "Myrrh, Medicine and Masai in the Land of Milk and Honey"
  - March 30: Oceanographer Paul Falkowski, "Phytoplankton, Oil Futures and Global Climate Change"
- The free public lectures take place at 8:15 p.m. in Lecture Hall 2 of the Woodward Institute Resources Centre at 2194 Health Sciences Mall.

## Campus input to HR review welcomed

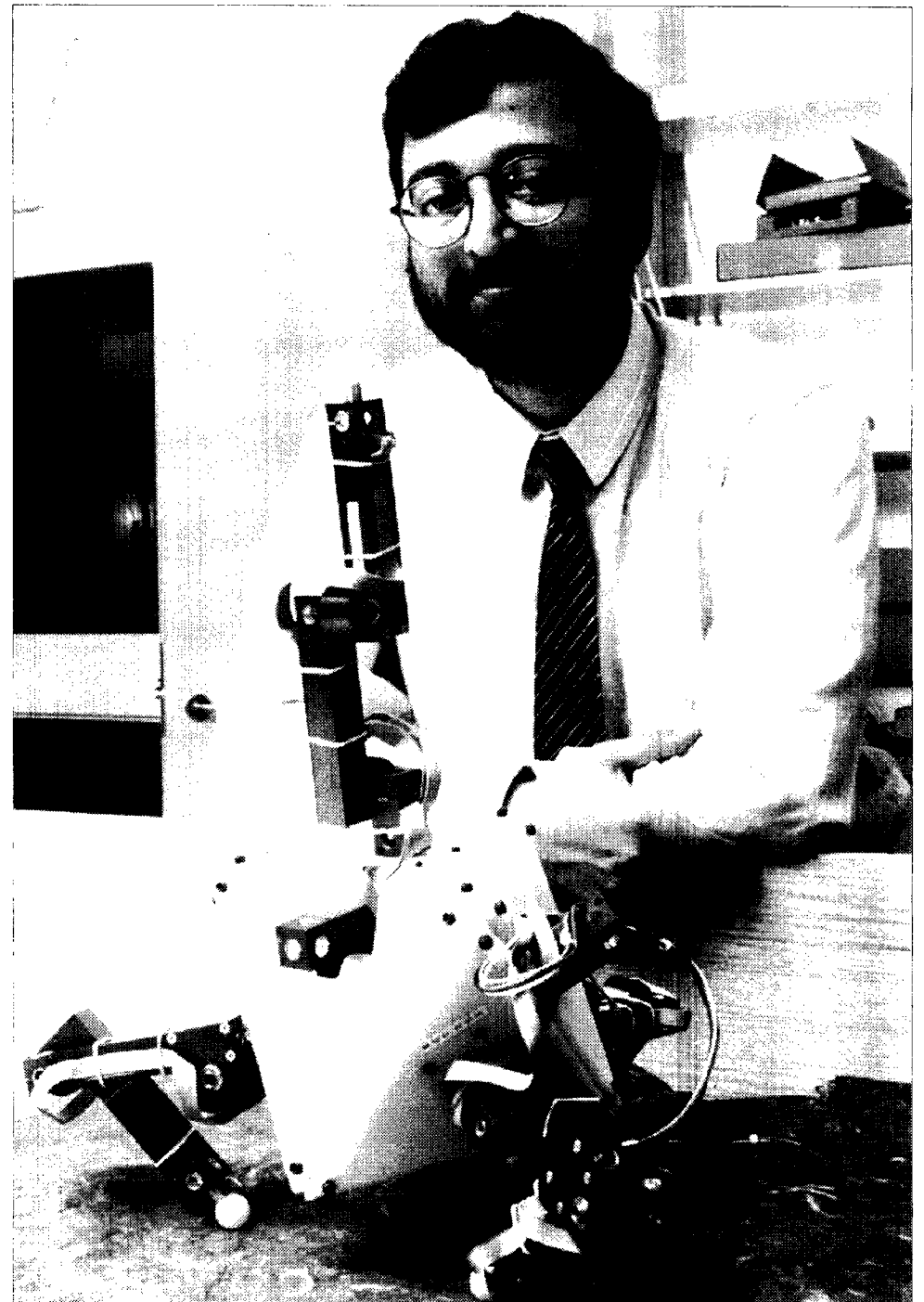
A Human Resources Review Committee has been convened to manage a review of the Human Resources Dept. All service units reporting to the vice-president, Administration and Finance, undergo regular reviews.

The committee will review the department's mandate, strategic plan, structure, operations, staffing, budget and cost recovery programs; evaluate its overall effectiveness and accountability, and in particular, assess the effectiveness of the role of generalists both from the users' and the Human Resources Department's perspective; and identify opportu-

nities for improved service, processes and relationships with campus consumers and with other service departments.

Committee members come from a variety of departments on campus as well as from two other universities. The review is to be completed and a report submitted to the vice-president by Mar. 31.

Contributions from the university community that will assist the committee with its review are welcome prior to Feb. 23. Peter should be sent to committee chair Peter Frost, Faculty of Commerce and Business Administration or by e-mail to hrreview@unixg.ubc.ca.



Martin Dee photo

Designing a robot that can right itself required Computer Science Asst. Prof. Dinesh Pai and colleagues to take a close look at the principles of locomotion.

## Cartwheeling robot never backs down

Resting in a small pen, the Platonic Beast waits patiently to be brought to life. Its creator, Dinesh Pai, is more than willing to oblige.

"Wanna go for a walk?" Pai asks as he seats himself at the control panel of the Platonic Beast simulator.

Moments later the machine stands on three of its four legs and begins a fluid, methodical cartwheel across the enclosure.

The Platonic Beast is the only robot in the world designed to avoid getting stuck. Where other robots might hit a stumbling block, fall over and flail helplessly on their backsides, Pai's beast has the ability to pick itself up and keep on moving.

Given its perfectly symmetric torso and the equidistant positioning of its legs, it is impossible for the beast to fall down.

"We wanted to make something very different from biological four-legged animals," says Pai, an assistant professor in the Dept. of Computer Science. "Building something from scratch forced us to re-think what locomotion involves and what it means to walk."

The name for Pai's beast dates back 2,300 years when Plato discovered the five most symmetric solids: the tetrahedron (four sides), cube (six), octahedron (eight), dodecahedron (12) and the icosahedron (20). Together they are known as Platonic solids.

Pai's Platonic Beast is an octahedron with four, three-jointed limbs attached to alternate faces. The beast begins a series of what Pai calls controlled tumbles with three legs on the ground and the fourth sticking vertically from the top face. A step involves the top leg swinging down while a supporting leg lifts and assumes the top position. With no designed orientation, the

beast is "fall tolerant" and looks the same no matter what its position.

Pai has been working on the Platonic Beast for three years with support from the Natural Sciences and Engineering Research Council and the Institute for Robotics and Intelligence Systems, one of the Networks of Centres of Excellence programs.

For the last six months the beast has undergone the equivalent of a brain transplant with the installation of four, new on-board computers controlling 12 motors, one for each limb joint. Pai points out that the most sophisticated industrial robots found on assembly lines typically have six joints.

"The beast has a high degree of freedom which makes it among the most complex robots around," says Pai, who developed the robot with colleagues Rod Barman and Scott Ralph.

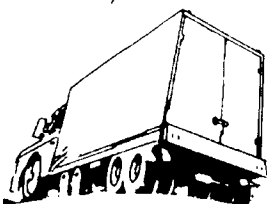
A meld of aluminum and plastic, the Platonic Beast weighs in at approximately five kilograms. While its predecessor was able to negotiate flat surfaces only, the computer upgrade enables the new improved beast to react to changes in terrain and the attendant forces on its feet.

One of the industrial applications Pai foresees for the robot is carrying sensors into hazardous environments such as nuclear facilities.

But the robotics specialist cautions that the beast is still only a research prototype characterized by slow motion and an inability to carry large payloads. A larger, more nimble beast, capable of carrying cameras, is in the works. Pai is also working with an industrial consortium on the development of a wall-climbing robot.

## Offbeat

by staff writers



The Institute of Asian Research (IAR) is moving, unofficially, into its new digs next month. Given the 30 or so metres separating the Asian Centre from the C. K. Choi Building, which will house the IAR on West Mall, the transfer shouldn't be too onerous.

However, Eleanor Laquan, IAR manager, says the move won't be complete until the institute recycles a bit of its past.

When the Institute of Pacific Relations and its director Bill Holland moved to UBC from New York City in 1961, Holland insisted on bringing the institute's boardroom table with him.

For more than 30 years, the magnificent oak table, which measures four metres when fully extended, has resided in the second floor of the dilapidated old mechanical engineering annex. When the IAR emerged in 1978 and moved into the Asian Centre, Holland's table sadly got lost in the shuffle. It has since been gathering dust in what used to be the IAR reading room in mechanical engineering's Hut M-17.

"With only four offices in the Asian Centre there just wasn't room for a table that big," said IAR director Terry McGee. "It will be good to have it back in circulation."

The table has been taken away for an overhaul before it returns to active duty in the new ground-floor office of *Pacific Affairs*, the leading academic journal of Asia Pacific issues which Holland edited for more than two decades.

The C. K. Choi Building opens officially in October.

Continuing Studies

# Societal violence, equality among upcoming courses

Some of the most pressing issues facing Canadians will be explored in a series of courses offered this term by UBC Continuing Studies.

Violence in the home and in the street, questions of national unity and the Charter of Rights' effect on women's equality are three questions that will be addressed by experts drawn from among UBC faculty and the greater community.

How can we accommodate Quebec's nationalist aspirations and yet remain a vigorous and confident country? That is the difficult question to be posed at a day-long forum Feb. 10.

Called "Alternative Visions: Canada-Outside-Quebec After the Referendum," it will examine issues of how Canada can define its identity with or without Quebec and other issues vital to the future of the country.

The forum is co-hosted by the Political Science Students Association, who felt strongly that they should contribute to the debate about English-speaking Canada's response to the Quebec referendum.

Speakers will include jurist Thomas Berger, author Susan Crean, McGill Prof. Emeritus Paul Lin, Political Science Prof. Phil Resnick and History Assoc. Prof. Allan Smith.

"Violence in our Society: Reality and Perception," to be held on Tuesdays from Feb. 13 to March 19, examines one of to-

day's most controversial issues.

It will look at the true extent of violence in our society, what its causes might be and suggest some constructive approaches for dealing with it.

Addressing these issues will be: Psychology Prof. Robert Hare; Anthropology and Sociology Prof. Robert Ratner; Shari Graydon, president of Media Watch; Michael Goldberg, research director, Social Planning and Research Council of B.C.; Patti Pearcey, B.C. Coalition for Safer Communities; and Nursing Asst. Prof. Angela Henderson.

Since the Charter of Rights came into effect a decade ago, a series of landmark legal cases on women's equality has been heard in the Supreme Court of Canada.

"Precedents and Setbacks: Women, the Charter and the Courts," will examine some of these cases and discuss what effect the law has had on the lives of Canadian women.

Featured speakers are: Christine Dearing, vice-president of the Legal Education and Action Fund; Law Assoc. Prof. Isabel Grant; Law Assoc. Prof. Claire Young; and Law Prof. Christine Boyle.

The program will be held Tuesdays from March 12 to April 2.

For more information about any of these programs or to register, call Continuing Studies at 822-1450.



Stephen Forgacs photo

## Child's Play

UBC Bookstore Director Debbie Harvie (right) pulls a coupon from a dispenser placed in the store to raise funds for B.C.'s Children's Hospital Foundation while the Foundation's Fundraising Manager Rose Terzariol looks on. By taking a coupon from a dispenser and presenting it to the cashiers a \$1 donation to the hospital was added to the customer's purchase. During October and November, UBC Bookstore and Health Sciences Bookshop customers donated \$2,231. Children's Hospital is the province's only specialized treatment, research and educational health care centre devoted to children.

## GIVE SOMEONE A SECOND CHANCE.

Discuss organ donation with your family and sign a donor card today.



THE KIDNEY FOUNDATION OF CANADA

# Snow?

"The University will remain open during snow storms but may cancel or reschedule classes on a university-wide basis and/or curtail non-essential services in response to the conditions."—UBC Policy on Disruption of Classes/ Services by Snow, May 1994

In the event of extreme snow conditions, listen to CBC Radio, CKNW and other local radio stations for information.



THE UNIVERSITY OF BRITISH COLUMBIA

## Peter Wall Institute for Advanced Studies Director

Applications and nominations are invited for the position of Director of the recently established Peter Wall Institute for Advanced Studies. The Institute, made possible by an endowment of \$10M from the Hampton Fund, is intended to enrich the research and intellectual life of UBC and the community by encouraging major interdisciplinary projects, visits and events on major themes and topics. In the near term, the Institute is expected to provide funding for one new "thematic concentration" per year, each of which will involve a 3-year interdisciplinary exploration of a topic of contemporary and/or scholarly importance by groups of researchers from UBC departments and visitors. The first successful group and theme should be selected and announced by the end of February, 1996. From time to time the Institute may also sponsor individual lectures or visits of broad interest to the University. The Institute is also expected to maintain close links with the Peter Wall Distinguished Professors and Distinguished Visitors supported by a \$15M endowment from Peter Wall. The Director will be expected to provide leadership in promoting teamwork and excellence in addressing major research themes by coordinating the annual thematic concentration competition, by monitoring and facilitating funded projects, and by undertaking related initiatives.

The Director is expected to be a Full Professor with a demonstrated commitment to excellent research and proven organizational abilities. He/she must have broad scholarly interests and good interpersonal skills. Administrative experience, service on grant selection committees, experience in working in teams and a record of holding research grants are other important assets. Only candidates internal to UBC will be considered. The appointment as Director will be for a period of five years, initially 40% in the Institute and 60% in the home department, later converting to 60% in the Institute when the latter is fully operational. An administrative stipend will be available. Office space and secretarial support will initially be located at Green College.

Applicants should send a letter describing their interest in the position, a curriculum vitae and the names and addresses of at least three references to Dr. John Grace, Dean, Faculty of Graduate Studies, 180-6371 Crescent Road, Zone 2. Nominations should contain a justification and, where possible, include a curriculum vitae; they should be sent to the same address. The deadline for applications and nominations is February 19, 1996. It is expected that the appointment will begin July 1, 1996.

The University is concerned about the under-representation in administration of women, aboriginal people, visible minorities and persons with disabilities and welcomes all qualified applicants especially members of these designated employment equity groups.

UBC BOOKSTORE PRESENTS  
**STAEDTLER DAY** PLUS!

**SALE OF THE YEAR!**

**ONE DAY ONLY!**

**40-50% OFF**

ALL STAEDTLER PRODUCTS AT UBC BOOKSTORE

**Wednesday February 7th, 1996**

**9:00am - 5:00pm**

PLUS! In-Store Specials on Souvenirs & Gifts, Clothing and Electronics



UBC BOOKSTORE

6200 UNIVERSITY BLVD., VANCOUVER, BRITISH COLUMBIA, V6T 1Z4 TEL (604) 822-2665 FAX (604) 822-8592

# Forum spotlights job futures for Arts grads

by Gavin Wilson

Staff writer

What can you do with a Bachelor of Arts degree? Ask playwright John Gray and TV news anchor Mi-Jung Lee.

They are two of the UBC arts alumni who will be on hand at "Beyond the BA," a three-day forum on career opportunities and job-hunting techniques for arts students to be held Jan. 29 and 30 and Feb. 2.

Sponsored by the Alumni Association, Faculty of Arts and Arts Undergraduate Society, "Beyond the BA" aims to convey the kind of information and life skills not provided in the classroom, said Dawn Levy, a program coordinator with the Alumni Association.

Students will learn how to write cover letters, learn where the jobs are, what to do in a job interview, and hear alumni explain how they used their BAs as springboards for interesting and varied careers.

"There are many more options out there than many students think," Levy said. "Accounting, for example, is an excellent career option open to Arts graduates. You don't need to have studied math to become an accountant."

Arts students also tend to overlook the value of the skills they acquire in the classroom, such as writing, presentation and teamwork.

"Unfortunately, some students view

their coursework as a series of hoops they have to jump through to get a piece of paper," Levy said. "They're actually learning valuable skills."

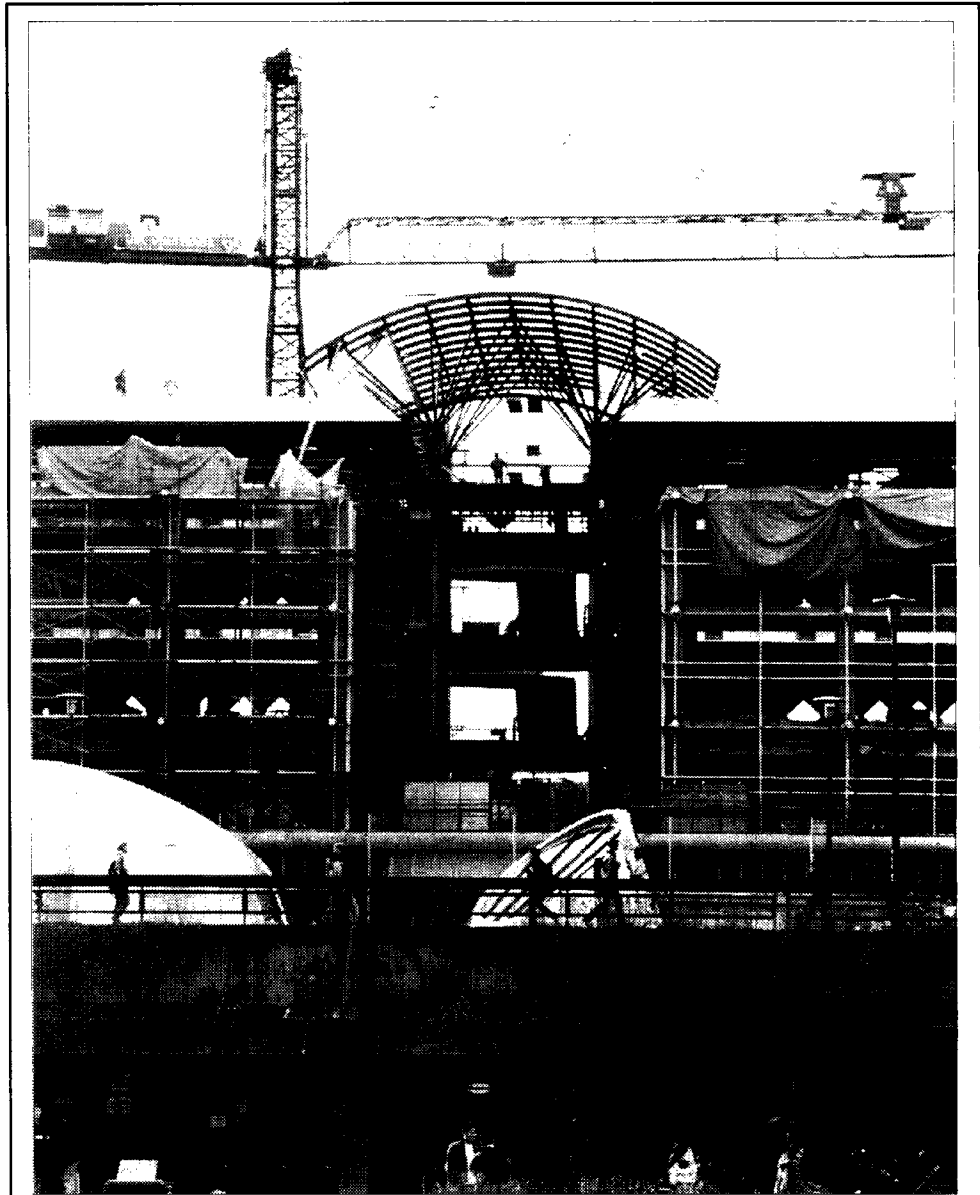
Beyond the BA begins with a talk on trends in the job market by Economics Prof. Craig Riddell.

The second day focuses on how to prepare yourself for entering the job market. Casey Forrest of Pinton, Forrest and Madden Group Inc., a consulting and executive search company, and Blair Grabinsky, manager of UBC's Career and Placement Services, will speak.

On the third and final day, a panel of alumni will discuss their careers.

The panelists are: Mi-Jung Lee (BA English '88), a television reporter and anchor with BCTV; John Gray (MA Theatre '72), an author, actor, playwright and singer-songwriter whose credits include *Billy Bishop Goes to War* and *18 Wheels*; Liz Grant (BA Psychology '84), a career consultant who is a partner in the company Geode Consulting Group; and Maria Cavezza (BA Geography '92) who has worked with international aid organizations and founded Water for Life, an ongoing project to supply clean water to villages in Ghana.

"Beyond the BA" is free of charge and, despite its focus on arts undergraduates, open to anyone at UBC. The forum will be held each day from 12:30 to 1:30 p.m. in SUB Auditorium.



Gavin Wilson photo

## Storeys Above

Rising above Sedgewick Library, the first phase of the Walter C. Koerner Library Centre takes shape on Main Mall. The building is designed by Arthur Erickson/Aitken Wreglesworth Associates and will be UBC's new main library. It will merge Sedgewick's services and collections with the current Main Library divisions of humanities and social sciences, government publications and microforms and the data library. The Koerner Library is scheduled to open next autumn.



**Campus works**  
The Bookstore

## Constant review key to improving service

by Stephen Forgacs

Staff writer

Several changes in the way the UBC Bookstore operates have resulted in increased efficiency and improved customer service.

By re-evaluating the way it operates, the Bookstore is getting the sort of results that departments across campus are aiming for and attaining through process improvement, said John Chase, UBC's director of Budget and Planning.

"A lot of the processes we're involved in on a daily basis have developed over time," said Chase. "And when we pose the question 'why are we doing it this way,' the answer is often 'because we've always done it that way'."

Bookstore Director Debbie Harvie said the changes, which range from the relocation of a customer service counter to the acceptance of debit cards, are part of an ongoing process aimed at keeping customers happy and the Bookstore profitable.

She said a key to maintaining efficient operations is constantly reviewing procedures and looking for ways to improve rather than making it an occasional process.

"I believe very firmly that we are always re-engineering our processes. As retailers we can't afford to let administrative costs skyrocket because this would drive our prices up and decrease our competitiveness," she said.

Established in 1994, the primary focus of the President's Advisory Committee on Process Improvement and Development is the redesign of processes which cut across departmental boundaries.

Responding to one of the major recommendations of the 1994 Dupré Report on Administrative Organization and Effectiveness, the committee is examining the two major processes which provide input to the Financial Record System (FRS)—appointments and procurements.

The faculties of Forestry and Commerce and Business Administration, as well as the Dept. of Housing and Conferences, are serving as pilot projects for testing the feasibility of some of the recommendations contained in the appointment process review.

The examination of the procurement process is continuing with a report from the procurement working committee anticipated in the next several months.

"Improvements in the management of financial information are key to helping campus managers better utilize their resources," Chase said.

He said the emphasis on process improvement is a sign of the times and comes in response to several factors: the university is committed to delivering the highest possible quality of service to its customers; changes in revenue require cost restraints if not reductions; the university is committed to empowering employees and staff as much as possible; and new technology allows for changes not possible in the past.

These continuous improvement activities are occurring both within individual organizational units and across units on shared processes.

## Experts seek solutions to vision loss in Third World

by Gavin Wilson

Staff writer

Ophthalmologists debated the best ways of helping the millions of people who suffer unnecessarily from blindness in the developing world at a recent clinical day at St. Paul's Hospital.

An estimated 35 million people are blind worldwide, and 80 per cent of them are in developing countries, said Dr. Peter Nash, one of the clinical day chairpersons and a clinical associate professor at UBC.

The overwhelming cause of blindness in the developing world is cataracts, a condition in which the lens of the eye become progressively opaque, said Nash, who has worked in Nepal, India and Malawi.

The tragedy is that cataracts are reversible with surgery, but many developing countries lack the funding, infrastructure and personnel to deal with it, he said. Africa is the worst off, with only one eye care physician for every million people.

At the clinical day, local ophthalmologists and other eye care professionals discussed the issues and listened to guest speakers from organizations such as Surgical Eye Expeditions International, Seva Blindness Prevention Programs, Operation Eyesight and Christian Blind Mission International.

Despite the efforts of such organizations, the battle against blindness is losing ground. By the year 2020 an estimated 50 million elderly people will be blind due to cataracts.

One issue facing ophthalmologists is

how to best treat cataracts: intraocular lenses implanted in the eye, a technique used in developed countries, or, as is more common in the developing world, removal of the eye lens and replacement with glasses. The former results in better vision, but the latter is easier and less expensive, allowing more people to benefit.

Also at issue are different approaches to eye care. For example, Surgical Eye Expeditions International conducts short-stay programs in which local surgeons are taught cataract techniques. Most other eye care organizations, on the other hand, concentrate on long-term projects that help build an eye care infrastructure.

Other topics covered at the clinical day, which was attended by more than 125 people, included eye banking, training techniques, the effect of AIDS on African blindness programs and personal experiences in countries such as Malawi, Thailand and Sudan.

Organizers say the turnout reflects the growing interest among B.C. ophthalmologists in the problems of blindness facing the developing world.

This interest can also be seen in the creation earlier this year of the B.C. Centre for Epidemiologic and International Ophthalmology in the Dept. of Ophthalmology.

The centre's director is Asst. Prof. Paul Courtright, who spent five years working in Africa before joining UBC.

The centre works with health agencies in Canada and internationally with governments and non-governmental organizations to help development programs, provide training and conduct research.







THE UNIVERSITY OF BRITISH COLUMBIA

## Faculty of Graduate Studies Dean

Outstanding candidates are sought for the position of Dean of the Faculty of Graduate Studies to take office July 1, 1996. The appointment is normally for a six-year term and may be renewed. The Faculty of Graduate Studies and Graduate Council (chaired by the Dean) supervise more than 6,000 graduate students in about 90 areas. The Dean is currently responsible for the administration of the School of Community and Regional Planning; a number of interdisciplinary programs, research institutes and centres; several academic journals and two residential colleges.

The search is limited to candidates within UBC. The successful candidate will be a scholar with an international reputation in a field of academic or professional scholarship. She or he will have proven administrative ability and will be dedicated to excellence in teaching and graduate supervision. The Dean will provide dynamic leadership for the Faculty and for the University in general.

Applicants should send a letter describing their interest in the position, a curriculum vitae and the names and addresses of three references to Dr. Daniel R. Birch, Vice-President Academic and Provost, Office of the President, 6328 Memorial Road, Campus Zone 2. Nominations should be sent to the same address. **The deadline for applications and nominations is March 1, 1996.**

The President's Advisory Committee for the Selection of a New Dean for the Faculty of Graduate Studies is concerned about the under-representation in administration of women, aboriginal people, visible minorities and persons with disabilities and welcomes all qualified applicants, especially members of these designated employment equity groups.



THE UNIVERSITY OF BRITISH COLUMBIA

## Task Force on Health

On May 17, 1995 Senate passed the following recommendation:

*That the Vice-President Academic and Provost be requested to establish by September 1995, a task force with appropriate staff support and financial resources to examine the administrative organization of studies in human health at the University of British Columbia and to make recommendations, as appropriate, to the Vice-President Academic and Provost and to Senate by December 1996.*

### Terms of Reference

1. To evaluate the current missions and directions of the various health sciences faculties, schools, departments and programs in light of changes in health care education and practice.
2. To evaluate the effectiveness of the health sciences faculties, schools, departments and programs in meeting their current teaching, research and service objectives and their potential in meeting their future objectives.
3. To evaluate the success of the Office of the Co-ordinator of Health Sciences in enabling the health sciences faculties, schools, departments and programs to collaborate appropriately in the education of human health professionals.
4. To determine whether the current administrative structures require further modification in order to meet these missions and academic objectives.
5. To report the findings at the January 1997 Senate meeting.

The membership of the Task Force has been established as listed below:

Name	Dept.
Prof. Bonita Long	Dept. of Counselling Psychology
Prof. Morris Barer	Centre for Health Services & Policy Research
Dr. Julyet Benbasat	Science One Program
Prof. Bernie Bressler	Dept. of Anatomy
Prof. Bob Evans	Dept. of Mechanical Engineering
Prof. Lawrence Green	Institute of Health Promotion Research
Prof. Carol Herbert	Dept. of Family Practice
Prof. Michael MacEntee	Faculty of Dentistry
Prof. Kathleen MacLeod	Faculty of Pharmaceutical Sciences
Prof. Katharyn May	School of Nursing
Prof. David Measday	Faculty of Science
Prof. Pat Vertinsky	Faculty of Education
Prof. Elvi Whittaker	Dept. of Anthropology & Sociology
Mr. Uli Rauch	Dept. Of Anthropology & Sociology
Ms. Smita Sugwekar	Faculty of Pharmaceutical Sciences

The Task Force welcomes comments on any aspect of studies in human health, as mandated, from all members of the academic community.

Submissions may be sent to the Chair of the Task Force:

Prof. John H.V. Gilbert  
Coordinator of Health Sciences  
400-2194 Health Sciences Mall  
Vancouver, B.C. V6T 1Z3  
e-mail: johnhvg@unixg.ubc.ca  
Fax: 822-2495  
Tel: 822-5662

## Forum

# Growth without pollution

By Dr. David V. Bates

*David Bates is an emeritus professor of medicine. Dr. Bates addressed the Vancouver Habitat II Colloquium last fall in advance of the Second UN Conference on Human Settlements (Habitat II) to be convened in Istanbul in June 1996.*

The Lower Mainland knew that it had a serious air pollution problem when, on Sept. 3rd, 1988, at 4 p.m., ozone levels in the Fraser Valley reached 212 parts per billion. Such a high level was totally unexpected. It is easy to miss such events because the highest ozone concentrations are reached some miles downwind from where the significant emissions - mostly oxides of nitrogen from transportation - occur.

Such ozone levels hurt plants and people. In a study of farm workers in

the Fraser Valley in the summer of 1993, it was shown that the ozone level (at about 70 parts per billion) was seriously reducing their maximum lung capacity.

**"We don't have to look very far to answer the question of why people are driving more..."**

- David Bates

Since between 1985 and 1992, population in the Lower Mainland has increased 20 per cent and the trips by car drivers have increased by more than 40 per cent. Vehicle miles travelled have consistently exceeded the growth in population.

We don't have to look very far to answer the question of why people are driving more: with both parents working, car trips to day-care centres become obligatory; young families find that they have to live further away from their work to avoid excessive mortgages; and concern for child safety usually involves parental car journeys.

The Greater Vancouver Regional District, in concert with the Fraser Valley Districts and with the provincial government, has taken some significant steps to try to reduce vehicle emissions. The AirCare initiative (generally ridiculed by the media when it was introduced) has revealed that significant numbers of new cars have emissions higher than their design specifications; and the correction of this in both old and new models has lowered emissions.

Efforts have been made to reduce single driver commuting trips by van-pooling arrangements and plans have recently been published for more transit initiatives on an ambitious scale. Proposed initiatives include extensions of rapid transit, expansion of the bus and trolley fleet from 930 to more than 1,200 and expansion of the articulated bus fleet from 21 to 160 by the year 2006. It is obviously not sufficient, however, to expand public transit without dealing with emissions from vehicles.

It seems likely that the population of the Lower Mainland will continue to increase and that car use will continue to increase disproportionately. If air pollution is not to worsen, emissions per vehicle must

be reduced as the size of the fleet increases. If air pollution is allowed to get worse, we will have to meet increasing costs incurred as a result—these include human health costs and reduced agricultural productivity.

What more should we be doing?

There are significant ways of reducing single occupant vehicle trips that we have not yet adopted. Our roads can be made more friendly to cyclists. We can urge mandatory testing of heavy diesel vehicles which are responsible for a disproportionate amount of the fine particle pollution.

We can also hope that the Ballard Fuel Cell being developed in North Vancouver, will provide a commercially competitive zero emission bus. When it does so, we should insist that our transit authorities invest heavily in it.

We can support the California initiative to mandate the introduction of zero emission cars, and make sure that if and when these become available, we are not denied the opportunity to purchase them.

Although effective planning to reduce air pollution requires that we think of the whole region as one "airshed," individual communities and municipalities are reluctant to relinquish any of their sovereignty to permit effective land use planning and transportation policy for the region as a whole.

"Growth without Pollution" is presumably what we mean when we talk about a sustainable environment. There is no doubt that a real threat to attaining this is the fiercely defended, autonomous decision-making of different parts of the whole. No one seems to have any solution to this problem with the result that whole regions can suffer a progressive deterioration in air quality because collaborative planning did not occur.

As the complexity of regional air pollution problems becomes clearer, we learn that solutions must be planned and implemented at the local level. Dependence on a distant central government for environmental protection has, over the past few years, been somewhat (some would say entirely) discredited. This is why we cannot evade our own responsibility for taking the necessary measures to prevent an unacceptable degradation of our air quality.



# Deadlines 1996

DEADLINE AT NOON	Publication Date	Vol./ Issue	CALENDAR COVERS PERIOD:
Tues. Jan. 2	Jan. 11	42/01	Jan. 14-Jan. 27
Tues. Jan. 16	Jan. 25	42/02	Jan. 28-Feb. 10
Tues. Jan. 30	Feb. 8	42/03	Feb. 11-Feb. 24
Tues. Feb. 13	Feb. 22	42/04	Feb. 25-Mar. 9
Tues. Feb. 27	Mar. 7	42/05	Mar. 10-Mar. 23
Tues. Mar. 12	Mar. 21	42/06	Mar. 24-Apr. 6
Tues. Mar. 26	Apr. 4	42/07	Apr. 7-Apr. 20
Tues. Apr. 9	Apr. 18	42/08	Apr. 21-May 4
Tues. Apr. 23	May 2	42/09	May 5-June 15
Tues. May 14	May 23	42/10	no calendar
Tues. June 4	June 13	42/11	June 16-July 13
Tues. July 2	July 11	42/12	July 14-Aug. 17
Tues. Aug. 6	Aug. 15	42/13	Aug. 18-Sept. 7
Mon. Aug. 26	Sept. 5	42/14	Sept. 8-Sept. 21
Tues. Sept. 10	Sept. 19	42/15	Sept. 22-Oct. 5
Tues. Sept. 24	Oct. 3	42/16	Oct. 6-Oct. 19
Mon. Oct. 7	Oct. 17	42/17	Oct. 20-Nov. 2
Tues. Oct. 22	Oct. 31	42/18	Nov. 3-Nov. 16
Mon. Nov. 4	Nov. 14	42/19	Nov. 17-Nov. 30
Tues. Nov. 19	Nov. 28	42/20	Dec. 1-Dec. 14
Tues. Dec. 3	Dec. 12	42/21	Dec. 15-Jan. 11

For further information please contact *UBC Reports* at Public Affairs Office. Phone 822-3131. Fax 822-2684. 310-6251 Cecil Green Park Road, Vancouver, BC, V6T 1Z1.

# Calendar

*UBC Reports* carries a two-week calendar of UBC-sponsored events in each issue. Submissions are published free of charge and are accepted from all UBC departments. **To appear in the pertinent issue, submissions must be received by the deadline for that issue as noted in the accompanying Deadlines section.**

To submit an event for publication, please:

1. Type or clearly print your submission on the following form and limit it to 35 words.
2. Fax this form to the Public Affairs Office at 822-2684.

It is the submitting department's responsibility to ensure that all information is correct.

**Event:** Seminar    Lecture    Workshop    Concert  
(circle one) Other \_\_\_\_\_

**Date(s):** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Speaker(s):** \_\_\_\_\_  
(please specify: name, title, department and other affiliations)

**Building:** \_\_\_\_\_ **Room #:** \_\_\_\_\_

**Time:** \_\_\_\_\_ **Tel. # for information:** \_\_\_\_\_

**Additional Information:** \_\_\_\_\_  
(fees, refreshments, etc.)

**Submitted by:** Name \_\_\_\_\_  
Department \_\_\_\_\_  
Telephone \_\_\_\_\_

For further information please contact *UBC Reports* at Public Affairs Office. Phone 822-3131. Fax 822-2684. 310-6251 Cecil Green Park Road, Vancouver, BC, V6T 1Z1.

## UBC REPORTS Advertising Rates 1996

**Circulation:** 37,000

**Distribution:** Twice monthly on the UBC campus and in *The Courier* on Vancouver's West Side except, once a month in June, July, August and December

**Mechanical Requirements**

**Page Size:** 260mm (W) x 390mm (H) (10.25" x 15.5")

**Columns:** five per page  
Black and white copy only

**Display ad rates:**

\$15.50 per column inch, GST not included

Full page (260mm x 390mm, 10.25" x 15.5" )	\$826.00
1/2 page (260mm x 195mm, 10.25" x 7.75" )	\$551.00
1/4 page (152mm x 178mm, 6" x 7" )	\$331.00
1/8 page (100mm x 120mm, 4" x 4.75" )	\$149.00
1/16 page (48mm x 127mm, 1 7/8" x 5" )	\$77.00
Business card (100mm x 50mm, 4" x 2" )	\$62.00

**Classified ad rates:**

\$15.75 for 35 words or less, GST included. 50 cents for each additional word.

**Discounts:**

3-9 ads	10%
10+ ads	20%

**1/8**  
2 columns (100mm) x 120mm  
**\$149**

**1/16**  
1 column  
(48mm) x 127mm  
**\$77**

**Business card**  
2 columns (100mm) x 50mm  
**\$62**

**1/4**  
3 columns  
(152mm) x 178mm  
**\$331**

**1/2**  
5 columns  
(260mm) x 195mm  
**\$551**

For advertising information call Public Affairs at (604) 822-3131

## News Digest

The Dept. of Animal Science in the Faculty of Agricultural Sciences is seeking support to establish an endowed chair in Animal Welfare.

The chair will provide leadership in promoting education and original research concerning the welfare and care of domestic animals, and wildlife species in captive and natural settings.

Focusing on animal welfare issues arising from handling, health, housing, nutrition and transportation of animals, the chair will also promote alternatives to the use of animals for testing and research. For more information, call 822-2794 or fax 822-4400.

•••••

All third- and fourth-year undergraduate students and graduate students at UBC are invited to enter a new essay writing contest offering a \$1,000 cash prize for the best original composition on the responsible use of freedom.

Entries must be approximately 3,000 words, typewritten, double-spaced and submitted in triplicate.

A committee of faculty and emeriti will judge the essays. Application forms are available by writing to: #1509 - 1450 Chestnut Street, Vancouver, B.C. V6J 3K3. Deadline for submissions is May 31.

•••••

Women on campus are invited to participate in a two-day event designed to unite them in an exploration of their spirituality and provide inspiration and companionship.

Women & Spirituality Dialogue '96 takes place Feb. 23 and 24 at the Vancouver School of Theology located on campus at 6000 Iona Drive. Registration is required. For more information, call 822-4671 or fax 822-4714.

•••••

The Dept. of Chemical Engineering and the Dept. of Bio-Resource Engineering will merge to form the Dept. of Chemical and Bio-Resource Engineering.

Approved by the UBC Senate Dec. 13, the merger will take effect by April 1, 1996.

The merger will allow the departments to combine their efforts in subject areas such as environmental engineering, bioprocessing and biotechnology, as well as offer students a wider choice of electives.

The new department will offer two distinct and accredited undergraduate programs leading to B.A.Sc. degrees in Chemical Engineering and in Bio-Resource Engineering. It will be housed in the new Chemical Engineering/Bio-Resource Engineering building after its completion in 1997.

•••••

Vancouver Hospital and Health Sciences Centre is opening its doors to the public for tours of the first three floors of the Laurel Pavilion, its new tower at 899 West 12th Ave.

A wide range of equipment ranging from imaging machines to computer models dealing with genetics will be on display and staff members will be on hand to answer questions.

The open house will be held Saturday, Jan. 27 and Sunday, Jan. 28 from noon until 4 p.m. For more information call 875-4838.

# '96 Honda Civic Hatchback

For the way you live, at a price you can live with.

Max your freedom & your buying power.

Your go-anywhere spirit demands a car that gives you maximum choices. The all-new Civic Hatchback CX answers with great new looks, plus loads of value packed standard features, including:

- 1.6 litre engine with more power and torque
- driver's side airbag
- rear window defroster w/timer
- ground-grabbing 4-wheel double-wishbone suspension
- 50/50 fold-down rear seatback
- longer wheelbase...more room for friends & life's necessities
- glare-reducing tinted glass
- dual remote mirrors
- 2-speed intermittent wipers
- body-coloured bumpers
- beverage holder

**\$198.93\*** Per Month  
OAC plus G.S.T. & P.S.T.

The '96 Honda Civic Hatchback test drive. It costs nothing. And it proves everything.

**ABBOTSFORD**  
THE HONDA WAY  
Fraser Valley Automall  
9577 1430

**PORT MOODY**  
WESTWOOD HONDA  
2400 Barnet Hwy  
461-0633

**SURREY**  
SUN-DEL HONDA  
15391 Fraser Hwy  
583-7422

**VANCOUVER**  
CARTER HONDA  
2390 Burrard St  
736-7827

**RICHMOND**  
RICHMOND HONDA  
Richmond Auto Mall  
273-1927

**BURNABY NORTH**  
HAPPY HONDA  
4780 E. Hastings  
294-2111

**LANGLEY**  
LANGLEY HONDA  
19615 Langley Bypass  
536-6281

**WHITE ROCK**  
WHITTE ROCK HONDA  
2466 King George Hwy  
536-2111

**MAPLE RIDGE**  
MARY JONES HONDA  
29811 Lougheed Hwy  
465-5464

**REGENCY HONDA**  
445 Kingsway 673-3676

**NEW WEST**  
MCDUGGIE HONDA  
6984 K. 101way  
525-4667

**NORTH & WEST VANCOUVER**  
PACIFIC HONDA  
725 Marine Drive  
984-0331

YOUR B.C. **HONDA** DEALERS

BUILT WITHOUT COMPROMISE.



## Classified

The classified advertising rate is \$15.75 for 35 words or less. Each additional word is 50 cents. Rate includes GST. Ads must be submitted in writing 10 days before publication date to the UBC Public Affairs Office, 310 - 6251 Cecil Green Park Road, Vancouver B.C., V6T 1Z1, accompanied by payment in cash, cheque (made out to UBC Reports) or internal requisition. Advertising enquiries: 822-3131.

The deadline for the February 8, 1996 issue of UBC Reports is noon, January 30.

### Services

**WORD PROCESSING/TYPING** Secretarial services at reasonable rates: letters, essays, theses, reports, manuscripts, novels, etc. 30 years experience. APA specialist. 228-8346.

**FACULTY PENSION** and RRSP Asset Allocation Service. Let me remove the worry and hassle of making your pension and RRSP investment decisions! I use sophisticated computer software to analyse your investment personality and retirement goals to optimize your entire retirement portfolio. Call Don Proteau, B.Comm., R.F.P. at 687-7526 to receive a free Asset Allocation Kit. References available. RETIRE EARLIER WITH MORE!

**TIAA-CREF Members.** Arm yourself with the information you need to make the best investment decision. Call Don Proteau at 687-7526 and ask for the Asset Allocation Kit.

### Employment

**A REGISTERED ENVIRONMENTAL CHARITY** whose focus is restoration, is looking for a public relations manager. Applicants must have good communication skills, fundraising experience and a vehicle. Preliminary volunteering essential. Excellent career opportunity. Send resumes in confidence to: P.O. Box 2846, V.M.P.O., Vancouver, B.C. V6B 3X2. Attention: B. Siodmok.

### Accommodation

**POINT GREY GUEST HOUSE** A perfect spot to reserve accommodation for guest lecturers or other university members who visit throughout the year. Close to UBC and other Vancouver attractions, a tasteful representation of our city and of UBC. 4103 W. 10th Ave., Vancouver, BC. V6R 2H2. Phone or fax (604)222-4104.

**TINA'S GUEST HOUSE** Elegant accom. in Pt. Grey area. Minutes to UBC. On main bus routes. Close to shops and restaurants. Inc. TV, tea and coffee making, private phone/fridge. Weekly rates available. Tel: 222-3461. Fax: 222-9279.

**GREEN COLLEGE GUEST HOUSE** Five suites available for academic visitors to UBC only. Guests dine with residents and enjoy college life. Daily rate \$50, plus \$13/day for meals Sun.-Thurs. Call 822-8660 for more information and availability.

**VANCOUVER/CENTRAL RICHMOND** 3 bedroom, 2 baths, furn. condo, 20 min. to UBC, 7 appliances, insuite laundry, mtn view, close to shopping, park, theatres, pools, etc. Available Apr-Aug/96, non-smokers, \$1200/mo. (604)231-0631.

**FURNISHED 2 BEDROOM** basement suite close to UBC gates, on bus route, own entrance, available Feb. 1. Non-smoker, no pets. \$800 incl. utilities. 224-6274.

**FOR RENT LARGE 5+ BEDROOM HOUSE.** West Point Grey, inlaw suite, garage, recently painted, carpeted inside. Seek clean responsible renters, non-smoking, no pets. \$1730 monthly includes lawn care, utilities extra. Available March 1. Call 222-2492.

### Accommodation

**ARBUTUS GROUND LEVEL** one bedroom suite. NS. NP. Hydro included. \$570 per month. Available February 1. Phone 732-3190.

**FULLY FURNISHED HOUSE** in Richmond, 1/2 hour from UBC, 3 bedrooms, 2 1/2 baths, study, garage, fenced-in backyard, close to shopping and schools. No pets, non-smoking. Available June 1/96 for 12 months. \$1,600/month + utilities. Call 271-0839.

**BEAUTIFUL HOME AT KITS** beach, fabulous views, completely remodelled. 2 bedrm +, library, f/p, hdwd floors. Available Feb 15 - Aug 15. \$2100/mo. partially furnished. \$2400 fully furnished. Contact Mark Schneider 682-7751. ext. 25.

**FOR RENT FROM FEB 1** Self-contained main floor of house. 4100 block West 16th. 2 bedroom, fenced yard. Pet OK. Laundry room access. Overlooks park. \$1150/month + utilities. Phone 732-1498.

**PLEASANT, BRIGHT APARTMENT** Comfortable one BR apartment with patio, fully furnished and close to UBC. Available for three months or longer from mid-February. Reasonable rent in return for taking care of two affectionate cats. Please call Thomson, 228-8825.

### Housing Wanted

**WANTED: HOUSE TO RENT** Small family seeking 3 bedroom home in quiet neighbourhood close to UBC. Looking to rent long-term, starting in the spring of '96. Non-smokers, professional, very clean, quiet, responsible and trustworthy. Will care for garden and yard. References available. Please call Cindy at 533-0443.

**UBC**  
**Biomedical Communications**  
Dedicated to educational media & audio visual services

**ART & GRAPHICS:**  
• freehand illustration to computer graphics and design

**AV EQUIPMENT RENTAL:**  
• projectors, screens, PA systems, VCRs, LCD panels, etc.

**IMAGING SERVICES:**  
• slides, Photo CD  
New services: CD ROM mastering, video capture, scanning

**MEDIA SALES:**  
• full range of AV supplies  
• New 1996 catalogue now available  
— Phone 822-4819 to receive your free copy!

**PHOTOGRAPHY:**  
• clinical & scientific to PR, plus film processing

**TELEVISION PRODUCTION:**  
• complete production facilities and services

**Come down and see us!**  
We are in the IRC building Rm B32  
2194 Health Sciences Mall  
Phone: 822-5561 • Fax: 822-2004  
E-mail: biocomm@unixg.ubc.ca

UNIVERSITY BOULEVARD  
WEBBROOK MALL  
WOODWARD IRC  
HEALTH SCIENCES MALL  
BASEMENT OF THE WOODWARD IRC BUILDING

# T-bird notes

by Don Wells  
Thunderbird Athletics



## Athletes up for awards

Win graciously, don't brag, don't rest on laurels—these are the most common axioms of sport. However, it has also been said that rules are meant to be broken, so surely UBC's Athletic Dept. can be forgiven for, well, boasting just a teeny weeny bit every now and then.

These days, it's the upcoming Sport BC Awards Banquet, Mar. 5 at the Hyatt Regency, that has some coaches swaggering and strutting up and down the halls of the War Memorial Gym offices.

Seven present and former T-Birds are up for provincial awards in five separate categories despite the fact that under Sport BC guidelines universities are only allowed to nominate in the category of College/University Athlete of the Year. All-Canadian football receiver **Andrew English** and swimmer **Sarah Evanetz** have both been named finalists in that category along with University of Victoria field hockey player **Brenda Lannard**. Evanetz, currently ranked 13th in the world in the 100-metre butterfly, was last year's winner and is considered by many to be an obvious repeat winner at the 30th annual gala dinner. English, however, led the entire country in scoring this

year and is also a strong candidate for top honours.

Past winners in the College/University category include UBC gridiron standouts **Glenn Steele** (1982) and **Mark Norman** (1986); basketball scoring machines **Ron Thorsen** (1971) and **J.D. Jackson** (1990); high jumpers **Wilf Wedman** (1967, 68) **John Beers** (1972), **Rick Cuttall** (1975) and **Jeannie Cockcroft** (1985); volleyball's **Betty Baxter** (1974); soccer player **Ken Whitehead** (1976); rugby star **Preston Wiley** (1979); gymnast **Patti Sakaki** and backstroke specialist **Kevin Draxinger** (1991).

UBC swim coach **Tom Johnson** is a finalist in the Coach of the Year category, as is long-time assistant track coach **Mike Murray**. Johnson will be taking Evanetz and company to Halifax in early March to defend their national title at the CIAU Championships. The hardware given to last year's Coach of the Year is currently resting in the office of UBC soccer coach **Dick Mosher**.

One of three finalists for High School Athlete of the Year is UBC volleyball player **Brett Dravinskis**. The 18 year-old first-year science student starred in volleyball, basketball, rugby and track and field last year at Kelowna's KLO Secondary. Up for Official of the Year is UBC Gymnastics coach **Jeff Thomson**, a well-travelled veteran who has officiated extensively at the international level.

Finally, Human Kinetics graduate **Tracey Lipp** is a finalist in the Senior category along with cycling's **Alison Sydor** and speed skater **Neil Marshall**. The 23-year-old Tsawwassen native is continuing her pursuit of a spot on the LPGA tour having won the 1994 BC and 1995 Canadian Amateur Women's Golf Championships as well as a total of three NCAA Tournaments during her four years as a T-Bird.

And although men's basketball coach **Bruce Enns** is a former Sport BC Coach of the Year, neither he nor any of his players are finalists in any category. That sits just fine with Enns and his team, however, as they have their eyes on another prize: the Canada West Men's Championship.

Victory at the conference level guarantees the 'Birds a trip to the nationally televised CIAU Men's Basketball Championships Mar. 15-17 at the 11,000 seat Metro Center in Halifax. UBC, currently ranked fourth in the nation, is having a stellar season and is in a battle for first place and home court advantage for the conference championships which begin Feb. 23. As usual, that won't be decided until the T-Birds finish off their regular season scheduled Feb. 17 at home against the traditional cross-strait nemesis from the University of Victoria.

# People

by staff writers

**Hans Schreier**, a professor in Resource Management and Environmental Studies and in Soil Science in the Faculty of Agricultural Sciences, is one of five Canadian scientists being honored by the International Development Research Centre (IDRC) for significant contributions and dedication to the world of science.

A UBC graduate, Schreier joined the university as a faculty member in 1979. A mountain soil specialist, he is acclaimed for demonstrating that a personal computer-based geographic information system could be used as an effective tool for managing resources in Nepal—work which was heralded by the IDRC as helping that country develop reforestation, agriculture and irrigation projects, among others.

Schreier is currently working on a project to introduce sophisticated computer technology into Nepal as part of a joint Canadian-Nepali project to evaluate Nepal's natural resources.

In addition to natural resources inventories and evaluation, Schreier's research interests include geographic information systems techniques, environmental assessments, water quality, land-water interactions and watershed evaluations.

He will receive a certificate from the IDRC, signed by Prime Minister Jean Chretien, and a special edition of *In Person*, one of two books published by the IDRC in celebration of its 25th anniversary.

Schreier's work is profiled in a chapter of the publication which highlights scientists of significant accomplishment whose work has largely gone unheralded in developed countries.

•••••

**Law Dean Lynn Smith** has been elected chair of the Law Foundation of British Columbia for a two-year term. Smith, who earned her law degree from UBC, joined the university as a faculty member in 1981. Her major scholarly work has been in the areas of equality and human rights, advocacy, feminist legal theory, constitutional law and civil procedure.

She is a past director of the Women's Legal Education and Action Fund (Canada) and former chair of the national committee of the Canadian Bar Association on equality rights.

A member of the National Forum on Health, she is the past chair and a current director of the board of the B.C. Women's Hospital and Health Centre. In 1990, she was honoured with the YWCA Woman of Distinction Award, Communications and Public Affairs.

Smith was appointed Queen's Counsel three years ago. In 1994, *Canadian Lawyer* magazine listed her among the nation's 20 most powerful lawyers.

The Law Foundation of British Columbia is a non-profit organization which provides financial support for legal research, law reform, legal education, legal aid and law libraries. Smith has served as a governor of the foundation since 1990.



Smith

•••••

**Adult Education Prof. Emeritus Gordon Selman** received an honorary degree from St. Francis Xavier University in Antigonish, N.S. on Dec. 2.

Selman, who received his undergraduate degree, Master of Arts degree and teaching training diploma from UBC, served as a faculty member and administrator at the university for 40 years, including a term as associate director of the Extension Department.

A founding member of the Vanier Institute of the Family in 1965, he also served as vice-president of the United Nations Association in Canada and was president of the association's Vancouver branch.

Selman was cited at St. Francis Xavier University's convocation ceremony for his work as a prolific published scholar, a teaching practitioner and a leader of professional organizations.

A specialist in the history of adult education in B.C. and Canada, Selman's research interests also include institutional, policy and professional development in the field.

•••••

**Graduate student Peggi-Lynn Clouston** is the 1995 recipient of the \$5,000 ENCON endowment, the Canadian Council of Professional Engineers announced in December.

Clouston, a member of the Association of Professional Engineers and Geoscientists of B.C., is working on a PhD in Wood Science.

She is focusing on development and verification of a micro-mechanics-based model to analyse the structural behaviour of a parallel strand wood composite. She is concerned with understanding and predicting wood composite failure and implementing this knowledge to design against structural damage or collapse.

The ENCON endowment provides assistance to engineers wishing to pursue studies in the area of engineering failure investigation and/or strength of materials.

Clouston graduated from UBC in Civil Engineering in 1989.



THE UNIVERSITY OF BRITISH COLUMBIA

## Associate Vice-President Academic

### Call for Applications and Nominations

Applications and nominations are invited for the position of Associate Vice-President, Academic. Dr. William A. Webber completes his term July 1, 1996 and that is the preferred starting date for the new appointee. Applications should be accompanied by a curriculum vitae and the names of three referees. (Nominees will be approached by the Provost so documentation is not required at this time.)

Reporting to the Vice-President Academic and Provost, the AVP Academic is responsible for:

- overseeing the process by which faculty and other members of the academic staff are considered for appointment, tenure and promotion
- serving as secretary to the Senior Appointments Committee
- defining and implementing information and process support systems for academic personnel matters
- overseeing various faculty development activities including the Centre for Faculty Development and Instructional Services
- chairing the Advisory Committee on the Teaching and Learning Enhancement Fund
- implementing faculty, librarian and program director compensation and benefit policy in collaboration with Human Resources and Financial Services
- advising and consulting on policy development, particularly as it applies to faculty
- advising Deans, Heads, Directors and individual faculty members on policy and procedures related to faculty
- serving as a member of the team for day-to-day liaison and for negotiations with the Faculty Association

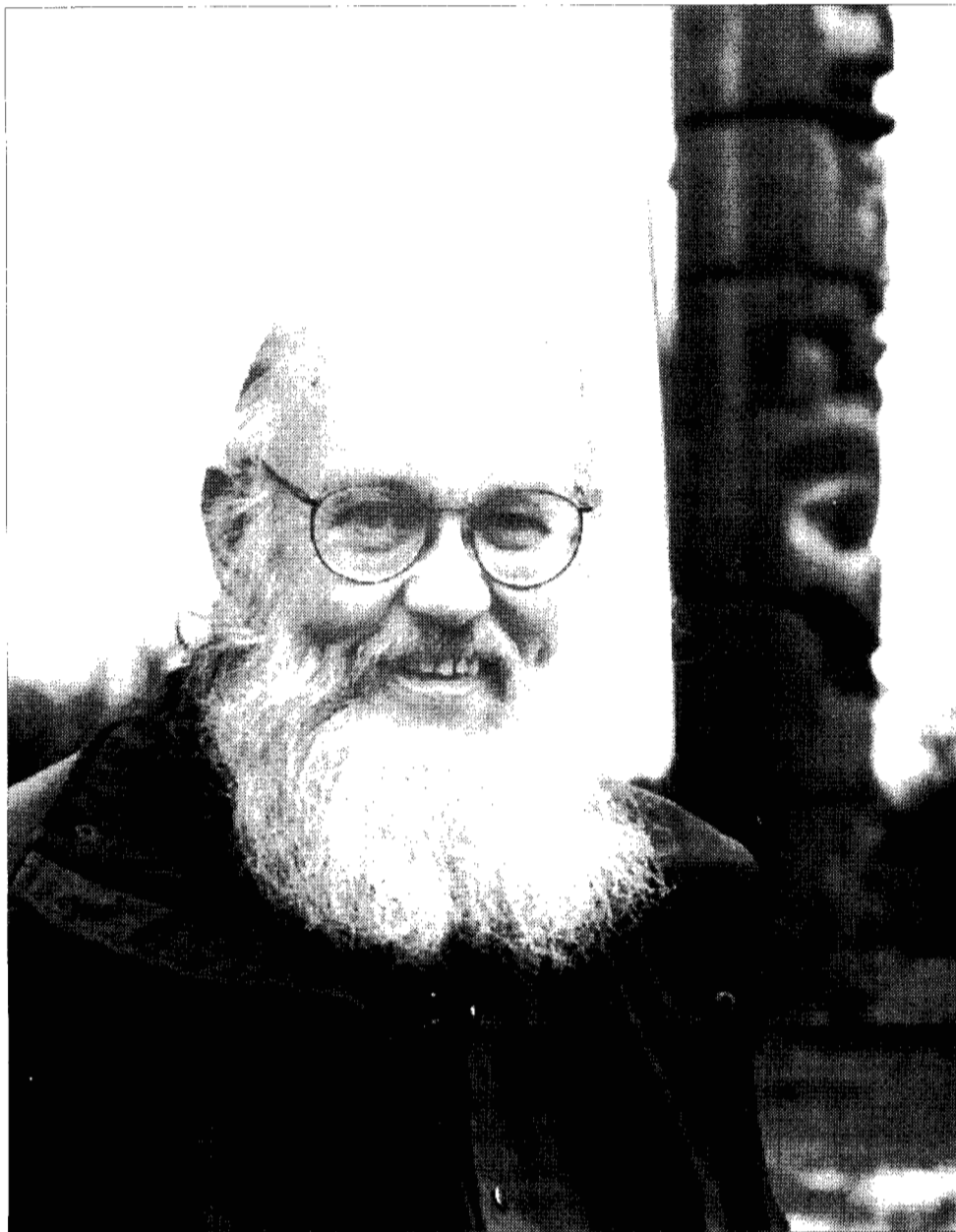
Carrying out these responsibilities entails teamwork with the Academic Vice-President and Provost; the Associate Vice-President, Academic and Legal Affairs; the Associate Vice-President, Equity; and the Vice-Provost. Duties may be shared or reassigned from time to time.

Applications and nominations should be forwarded by **February 23, 1996, to**  
Dr. Daniel R. Birch, Vice-President Academic and Provost  
6328 Memorial Road, V6T 1Z2

## Profile

# Achieving a natural balance

*Conservation and economics can work hand in hand, says Fred Bunnell*



Stephen Forgacs photo

by Stephen Forgacs

Staff writer

When Fred Bunnell was 16 years old he decided he'd rather live in a cabin among the trees on Vancouver's North Shore than join his peers in high school classes.

His early desire to minimize human contact ultimately steered him into forestry as a career path, a path that recently led him to the heart of B.C.'s highest profile environmental controversy—Clayoquot Sound.

Bunnell won't hesitate to tell you that for a good part of his life he was more comfortable around trees than people.

Now, as a professor of forest wildlife ecology and management, director of UBC's Centre for Applied Conservation Biology, and recent co-chair of the Scientific Panel for Sustainable Forest Practices in Clayoquot Sound, he is surrounded by both people and trees.

Student interest in conservation biology has grown rapidly in past years—so rapidly that Bunnell can't say off hand exactly how many students are doing their studies through the centre. He alone has 14 graduate students working under his supervision. Like his faculty members, who are housed in five separate buildings on campus, his students are also spread across campus.

This growth, says Bunnell, comes largely as a result of the environment's surge to the forefront of political issues during the past decade and because the unique expertise gained through his area of research suddenly came into great demand.

"We had always been directing a portion of our research at how to get wood harvested and still keep the wildlife there. Through this we learned to speak the forester's language as well as the biologist's, which gave us some credibility," he says.

"Then the need for our particular set of skills came. In 1992, the Earth Summit in Rio de Janeiro led to four international agreements which hugely expanded the range of values for which

**From living on his own in a cabin in the woods to building consensus at Clayoquot, Fred Bunnell has sought to find ways to bridge the gap between human beings and the world around them.**

Canadian foresters were responsible and all of a sudden the goal posts changed."

The centre promotes conservation of biological diversity while maintaining economic development. Beyond its rapidly growing graduate program, the centre is also closely linked to a Faculty of Forestry undergraduate program in Natural Resource Conservation, and offers short courses for professional foresters, resource managers and the public.

The centre's graduate students and faculty are working on a wide range of research projects that include everything from large mammals and grassland lichens to simulation modeling. One group is scrutinizing a 36-square-mile plot of Alberta forest land.

"One student is working on weasels, one on frogs and toads, and one is using decision-support tools that we have developed to examine biological and economic tradeoffs and consequences when you implement a particular management plan," says Bunnell, illustrating the diversity of activity underway.

Bunnell's education and work experience have left him well able to deal with diversity, biological and otherwise.

While living on the slopes of Hollyburn Mountain as a teenager, he completed high school by writing the provincial government's supplementary exams and won a scholarship to UBC. In 1965 he graduated from the Faculty

of Forestry at the head of his class and chose a Swiss technical university over Yale and Berkeley.

But it was the mid-60s and, after 18 months in Switzerland, the appeal of Berkeley won out and he enrolled in a multidisciplinary PhD program there.

His PhD encompassed the fields of forestry, zoology, botany, electrical engineering and computer science. "When they said multidisciplinary, what they meant was that you got examined in each and every discipline. It was gruelling, gruelling, gruelling," he says.

He still found time to get involved in the range of extracurricular activities on campus at the time. He brought black activist Eldridge Cleaver in to talk to the Faculty of Forestry — "It wasn't a huge success"—as well as a Dow Chemical representative who stood in front of the class and ate spoonfuls of the pesticide DDT to demonstrate it wasn't harmful.

Bunnell also got involved with the Vietnam protests on campus.

"My old man called me once from Vancouver. He'd seen me getting clubbed on TV. I'd go down and stand between the demonstrators and the police," says Bunnell, who is a Quaker now and has always supported non-violence. "I'd just talk to both sides and then I'd stand in between them, so it meant the first guy to get clubbed was always me."

Although he didn't succeed in getting police and students to see eye to eye at Berkeley, Bunnell says his more recent experience in consensus-building as a Quaker helped keep the Clayoquot panel on track.

"The panel was very enriching in that regard. The four First Nations members of the panel told us at the end they hadn't expected to last beyond the first meeting. But we did manage to create an environment in which we could be frank with each other and listen respectfully," he says.

Clayoquot Sound has been at the forefront of environmental controversies in B.C. for several years as environmentalists, industry and the government debate how much of the area should be harvested or preserved.

The panel, a group of 19 scientists charged with making forest practices in Clayoquot Sound the best in the world, issued its fifth and final report in May last year.

"It's probably the most complete description of a piece of land anywhere in B.C. or North America," Bunnell says of the report, adding that implementation of the recommendations does not come without problems.

"There are no trees falling in the Clayoquot now. So that means the IWA (International Woodworkers of America) members are not doing anything. Those are real people, real mortgages, real kids, and they're getting pretty antsy."

The Clayoquot panel and decades of involvement with conservation issues have given Bunnell a unique perspective on the way society views natural resources and its relationship with the environment.

"Maybe some of the problems we have, such as holes in the ozone and acid rain, wouldn't be as bad if we'd considered ourselves as part of the system," says Bunnell. "But sometime in our history we became 'unnatural.'"

"We really have to come to grips with our relationship with nature. And we've got a hell of a long way to go."