

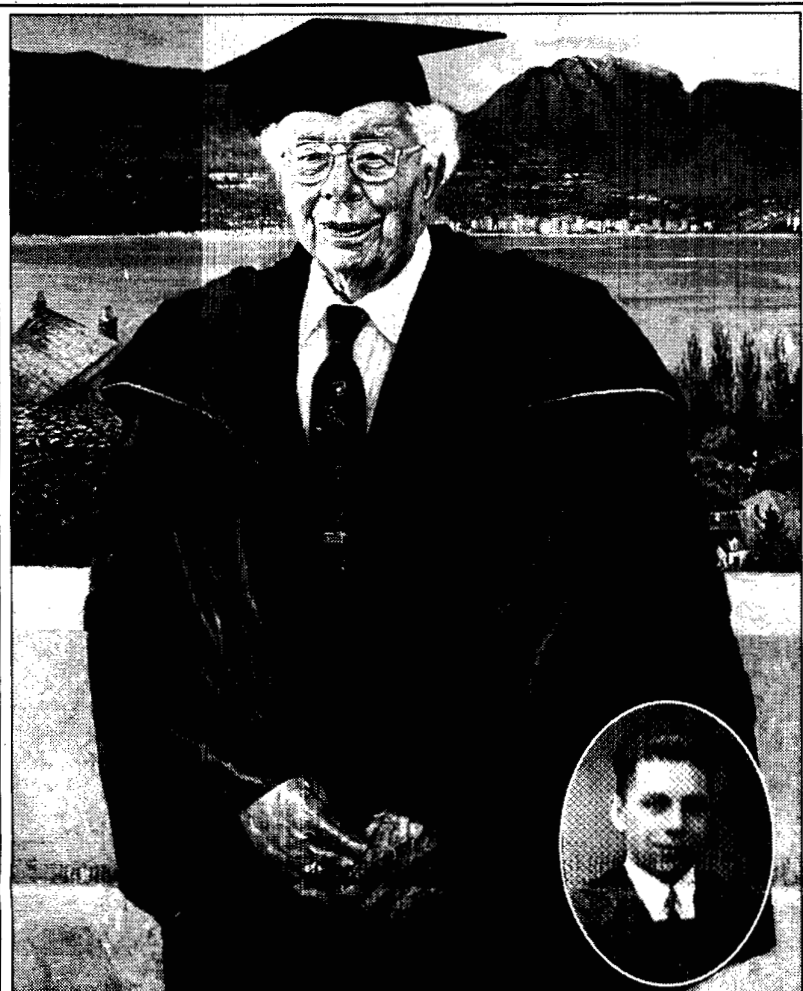
# CONGREGATION ISSUE

# UBC



The University of British Columbia  
Vancouver, British Columbia

Volume 37, Number 21  
November 28, 1991



"Joseph Kania" by Elfleda Russell. Inset: Kania's 1926 yearbook picture

## Grad waits 65 years to be granted Arts degree

By CONNIE FILLETTI

No one knows more about patience and persistence than Joseph Kania.

He has waited 65 of his 91 years to receive the BA degree he earned from UBC in 1926.

"It's the longest gestation period I know of," Kania quipped.

Kania, of Vancouver, completed the requirements for both a BA and B.Sc. degree at UBC in 1926. Self-taught in both French and German, he took the second-year language requirement for his BA in his freshman year. To make matters more interesting, he completed both degrees in five years instead of the usual six. Bureaucratic confusion ensued and Kania never obtained his BA.

Undeterred, and with his B.Sc. in hand, he subsequently earned an M.Sc. from UBC in 1928, before enrolling in M.I.T., where he was awarded a PhD in economic geology in 1930.

"I've enjoyed kidding every UBC president there's been over the past half century about not giving me that degree," Kania said. "I was becoming an institution."

Born in 1901, Kania emigrated from Czechoslovakia, with his family, to a nine-acre ranch in the Kootenays in 1913.

After his father's death three years later, Kania found work in the smelter at Trail, B.C., to help support his mother and three sisters.

He supplemented his paycheque by accompanying silent films with his violin in the evenings, earning \$1 a night. He spent any spare time giving dance lessons, playing in a band at Saturday night dances, and teaching the clarinet, even though he never played one in his life.

Kania quit the smelter on his 20th birthday, in the spring of 1921. To prepare himself for a UBC education, he embarked on a 12-hour-a-day home study program and completed an entire high school education in three and a half months.

"I made up my mind that I was going to go to university," Kania said. "I guess I was a punk kid."

After graduating from M.I.T., he joined the faculty at the University of Illinois, but was forced to leave by U.S. immigration in 1932 because of the Great Depression.

Returning to B.C. unemployed, Kania talked his way into a sales position with Pemberton Securities.

He quickly established himself a top sales representative and remained with the firm, spending the last 40 years as a director, until his retirement in 1986.

Kania's successful career with Pemberton was rewarded with a membership to the prestigious Vancouver Club. That's where he encountered his first UBC president, Norman MacKenzie, in 1944, and every subsequent UBC president.

"I met MacKenzie and asked him how  
See KANIA's on Page 3

MORE GRAD  
STORIES PAGE 8

## Chancellor taps 866 grads in Fall congregation

By CONNIE FILLETTI

When Joseph Kania receives his long-awaited BA degree at the fall Congregation ceremonies, he'll be joined by 865 others.

Ceremonies begin at 9:30 a.m. and 2:30 p.m. in the War Memorial Gym. In addition to academic degrees, three distinguished Canadians, all of whom have made outstanding and significant contributions to society, will be presented with honorary degrees.

They are:

— Judith Forst, a UBC music grad and one of Canada's leading opera singers. She has performed with many opera companies and

symphonies in North America and abroad, including the New York Metropolitan Opera.

— Antonine Maillet, a major contemporary Canadian playwright, novelist, folklorist and the leading writer of Acadia, the Francophone Maritimes. She currently teaches at Laval University.

— Dorothy Smith, a professor in the Department of Sociology in Education at the Ontario Institute for Studies in Education in Toronto. She is known nationally and internationally for her groundbreaking work in feminist epistemology and methodology.

UBC alumnus Robert Wyman, former mem-

ber of the Board of Governors, chancellor emeritus and chairman of UBC's A World of Opportunity fund-raising campaign, will be presented with the Chancellor's Medal during the morning ceremony.

The Chancellor's Medal is awarded in recognition of extraordinary service and dedication to the university.

During the afternoon ceremony, the Honorary Alumni Award, awarded by the UBC Alumni Association, will be presented to John Chapman. The award recognizes outstanding contributions to the Association and the university by non-alumni.

Chapman has been called one of the builders of B.C.'s post-secondary education system. He was first appointed to UBC's Faculty of Arts as a professor of Geography in 1947, served as head of the department between 1968 and 1974, acting head from 1979 to 1981, and retired in 1988.

UBC's third annual Lights of Learning ceremony will also take place today, directly following Congregation, at 5 p.m.

Seasonal lights on the giant sequoia tree in front of the Main Library will be turned on to celebrate the coming holiday season and new year.

### Inside

**WHO'S FILLING THE NET?:** Mike Coffin, new T-Bird hockey coach, sets out to rebuild the team. Page 2

**MONTREAL 14 REMEMBERED:** Florence Ledwitz-Rigby pays tribute to the women slain at L'Ecole Polytechnique. Page 3

**B.C. HISTORY:** The clash of cultures during the goldrush of 1858 still resonates today. Page 8

## UBC tops in the country in '91-'92 NSERC strategic grants competition

By GAVIN WILSON

UBC is the top-ranked university in the country in the 1991-92 Natural Sciences and Engineering Research Council (NSERC) strategic grants competition.

NSERC awarded more than \$3.15 million to UBC researchers in the competition, a total that accounts for nearly one of every \$10 awarded in Canada. UBC researchers had requested nearly \$3.87 million.

The grants are shared by 36 UBC researchers in the faculties of Arts, Science, Applied Science, Forestry, Agricultural Sciences and Pharma-

ceutical Sciences.

Walter Hardy, of the Department of Physics, won a grant of \$240,000, the largest single award made to a UBC researcher. Other major awards include: \$151,000 to Mabo Ito, Electrical Engineering; \$136,700 to Philip Hill, Mechanical Engineering; and two grants worth a total of \$153,978 to Douw Steyn, Geography.

This year's strategic grants program had a budget of \$37.4 million, which funded about one-quarter of the grants requested. About \$23 million of the funds were already committed in previous competitions.

NSERC strategic grants are offered to promote and support targeted research and assist with the direct operating costs of high quality research projects or programs in selected fields of national importance.

Major areas eligible for support include advanced technologies (information systems, biotechnology, industrial materials and processes, manufacturing systems and energy), resources (food and agriculture, forestry, mineral resources, fisheries and oceans) and environmental quality.

### Memorial for 14 slain women

Wreaths will be placed at four locations on campus Dec. 6 in memory of the 14 women slain at L'Ecole Polytechnique in Montreal two years ago.

A memorial will be held at 12:30 in the SUB.

Memorial ribbons will be distributed free at the Women Students' Office and the University Bookstore lobby on Dec. 6.

Wreaths will be laid at the faculty club, SUB, the Women Students' Office and in the Library, at the entrance to the stacks.

For info, call the Women Students' Office at 822-2415.

# Coflin rebuilding T-Bird Hockey

By ABE HEFTER

A .500 record might not be anything to write home about. But for Mike Coflin, head coach of the UBC Thunderbird hockey team, it's certainly a step in the right direction.

Coflin's biggest challenge going into this season as Terry O'Malley's replacement behind the Thunderbird bench was to make hockey enjoyable again.

Hockey was anything but fun for the T-Birds last season. Despite occupying first place in the Canadian Western University Athletic Association standings at Christmas, the T-Birds closed out the season by failing to win a single game in their last 15 outings.

"The players went into this season hungover — hungover from the effects of a disastrous second-half season," said Coflin.

His first job during the off-season was to meet with the players in an effort to find out what went wrong. Feedback was what he was after, and opening the lines of communication was essential.

"It was a snowball effect," said Coflin. "As the losses piled up, the team's confidence level plummeted and frustration began to set in."

"As the season progressed, it was almost as though they expected to

lose," he added.

Coflin said the players dealt with last season's crushing setback well over the summer months and came into training camp with a positive attitude.

So far, the T-Birds have been struggling to win as many as they lose, but Coflin says it's not because of a lack

of effort.

"We lost nine players off last year's team, many of them front-line performers," said Coflin. "That means, on any given night, we'll ice a team with eight or nine first-year players. That's a high level of inexperience for any hockey club to have to contend with."

At the same time, Coflin said, second, third and fourth-string players have been forced to fill the void. He said they've done so with a level of enthusiasm and confidence that

only, as the university conducts a national search for a permanent head coach. Still, it's no secret that he wants the position full time and he's working hard to lay the foundation for a nationally competitive team.

"It starts with raising the awareness of UBC's hockey program throughout the province and across the country," said Coflin. "This university, both on an academic and athletic level, has a lot to offer. It's my responsibility to let people know that."

Coflin singled out forwards Charles Cooper of Quathias Cove, B.C. and Darrel Kwiatkowski of Prince George for the way they stepped in when given the opportunity to play on a regular basis.

"We almost have to overachieve to be successful," said Coflin. "A lot of teams may be more talented than we are, but we can be successful if we continue to stress an unselfish, team-oriented approach."

Coflin is faced with the reality that no matter how successful the T-Birds are this season, he might not be back behind the bench next season.

Coflin, who played with the Thunderbirds from 1981-1986, has been given the job for this season

Photo by Media Services



Coach Mike Coflin brings a youthful enthusiasm to the job.

# UBC students run P.E. classes for U Hill kids

By ABE HEFTER

Physical Education Associate Professor Alex Carre calls it a "micro instructional lab." University Hill Elementary School students would probably call it a really neat gym class.

What it is, is an opportunity for grade six and seven students from University Hill Elementary School in Point Grey to sample a complete range of physical activities under the watchful eye of UBC physical education students.

This year, 134 UBC students, who took the instruction and coaching program as part of their Bachelor of Physical Education degree,

taught more than 60 University Hill students at UBC. "The lab lets UBC students develop specific instructional skills in physical education and apply theoretical principles in a practical setting," said Carre, who teaches in the instruction and coaching program. "It also allows up to 70 U. Hill students to take advantage of the instructional opportunity and the physical activity program that's been offered to them each year."

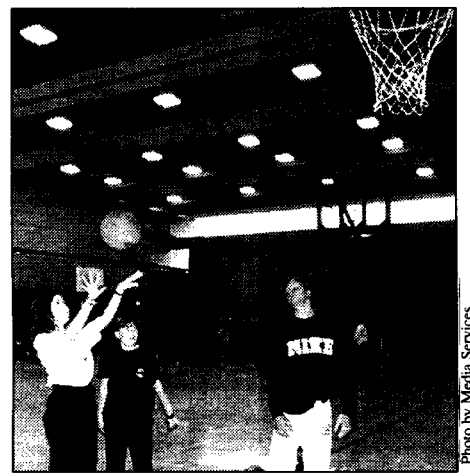
The one-hour visits, twice a week for 12 weeks, let the elementary school kids select from offerings that include dance, co-operative games, basketball, volleyball and badminton. With the UBC students acting as instructors, 10 physical activities can be taught at once.

Carre said most of the UBC students who take the instruction and coaching program go on to a variety of instructional roles in community centres, fitness organizations and the school system.

It's a valuable learning experience, for both the older and the younger students, he said. The program has been running for 14 years.

"We work very closely with the teachers at University Hill to make sure we are maintaining a quality physical activity program, emphasizing enjoyment, safety and motor skill development," said Carre.

"The feedback from both sides has been tremendous and is just another example of UBC's involvement with the community."



U Hill kids shoot some hoops.

# Asthma causes studied in new 4-year project

By CONNIE FILLETTI

Deaths due to asthma are on the rise, despite increasing understanding of the disease and a wider range of effective treatments.

But a new four-year study by UBC researcher Dr. Tony Bai may help determine what causes the centuries-old lung disease that has been steadily regaining a foothold throughout the western world for the past two decades.

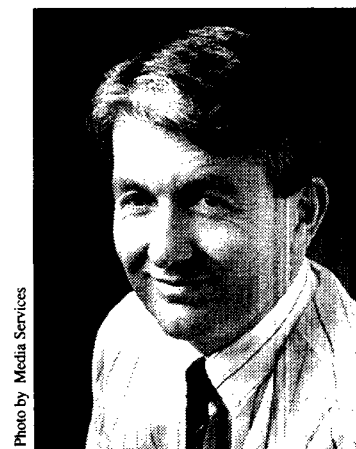
"Our laboratory is examining the role of viruses and substances derived from nerve disorders as elements in the development of asthma," said Bai, an assistant professor of Medicine based at UBC's Pulmonary Research Laboratory.

By examining frozen lung tissue removed from patients who have died from asthma and other obstructive airway diseases, such as chronic bronchitis and emphysema, Bai and coworkers will try to detect the presence of viral products which may alter the lungs, making them asthmatic.

The Pulmonary Research Lab, headquartered at St. Paul's Hospital, is the only one in the world with a sizeable collection of frozen lung tissue from asthmatic patients and one of a small number of labs, worldwide, with the facilities and experience to study such tissues in depth.

Bai will also study the nerves surrounding the airways for more clues.

"These nerves release chemicals such as neuropeptides which make the airway smooth muscle contract," he said. "The peptides also produce



Dr. Tony Bai

mucous and cause blood components to be released into the airways. It would be helpful for us to know how much peptide the lungs are producing."

"Asthma attacks can be triggered by a variety of things, including dust, fumes, humidity, exercise and diet — especially food additives and preservatives found in many foods."

Asthma affects more than one million Canadians of all ages and five per cent of the adult population in British Columbia.

Bai described asthma as often being a night-time condition characterized by coughing, shortness of breath, wheezing and chest tightening. Symptoms may also occur during the day.

"Everyone's airways get smaller

at night," Bai explained. "In the asthmatic person, the airways are always narrow and inflamed, so they get critically smaller at night."

Bai cautioned that asthma can develop at any point in life, although it usually strikes between ages 3 and 50.

"All of us are susceptible. Prolonged chest colds, wheezy bronchitis or repeated chest infections may be asthma," he said.

"The lungs inhale 7.5 litres of fresh air every minute. They have a moist, delicate surface the size of a tennis court, and a lot of potential to react to things they don't like," Bai added.

Asthma attacks can be triggered by a variety of things, including dust, fumes, humidity, exercise and diet — especially food additives and preservatives found in many foods.

Asthma specialists frequently see patients with occupationally induced asthma, particularly mill workers and people working with hard paints. He said that 50 per cent of the labor force which develops work-related asthma remains asthmatic, even if a new occupation is undertaken.

Aspirin may also lead to an asthma attack, and although it is uncommon,

Bai feels people should be advised of this potential culprit.

Despite being a long way away from the prevailing attitude among psychiatrists in the 1930s who said asthma was psychosomatic, it is true that asthma worsens with stress.

However, repeated inhalation of house dust, animal danders, pollens and spores and viral infections remain the most common reasons for asthma flareups.

Bai attributes the increase in asthma deaths to inappropriate treatment, in particular, over-reliance on drugs such as ventolin which relieve symptoms but do not treat the airways inflammation, and to a lack of

patient and health care worker education. As a result, many don't seek proper treatment for their symptoms.

"Some asthmatics get to the point where every airway is plugged and they literally die of asphyxiation. Patients with asthma need to change behavioral patterns so that they recognize early symptoms of attacks and have a simple action plan so that appropriate self-management occurs."

There is no cure for asthma but symptoms, which range from moderate to disabling, can be controlled and some people seem to have remissions, Bai said.

The study is being funded by the B.C. Health Research Foundation.

Reach readers all over campus and across the West Side Advertise in

UBC Reports

Deadline for paid advertisements for the December 12 issue is noon, December 3.

For information, phone 822-3131

To place an ad, phone 822-6163

# Scholar renews Shakespeare by visiting the past

By CHARLES KER

Modern texts of Shakespeare represent theatre for the page, not the stage.

So sayest Neil Freeman, the newest member of UBC's Department of Theatre and Film.

An aficionado of the Bard, Freeman is out to change the way actors perform Shakespeare: not so much how they act his plays, but rather, how they initially read his lines from the printed page.

"Shakespeare has been terribly watered down in the modern scripts," said Freeman. "His plays now are more literature than portraits of human beings in conflict and action."

The bearded actor, director and professor has spent 17 years trying to remedy the situation by revisiting, not revising, Shakespeare's tragedies, comedies and histories.

Since 1974, he has painstakingly cross-referenced every line of modern text with the original 17th century folios. So far, he has reproduced 16 easy-to-read scripts which remain faithful to the originals, but also contain comprehensive footnotes relating to modern-

day changes.

However, his expertise in text analysis is just a small part of what Freeman brings to the department.

Not one to be pigeonholed, he has directed hundreds of Canadian, European and American plays, musicals, children's productions and British classics.

Formerly a professor and associate dean in York University's Theatre Department, Freeman has acted for television, radio and theatre.

He got the drama bug in the late 60s after completing an MA in Industrial Sociology at Nottingham University in England. He directed the only stage version of Judgement of Nuremberg and was hooked.

A graduate of the Bristol Old Vic Theatre School, Freeman laments the fact that actors today aren't as adept as their 18th century predecessors at performing in front of large audiences. Instead, they are being groomed more for TV and small theatre.

In the case of William Shakespeare's plays, this is precisely the reason why Freeman advo-

cates a return to original texts.

A glimpse of Act II, Scene II in Romeo and Juliet, the "audiovisual feast" Freeman has just finished directing at Frederic Wood Theatre, proves his point.

It's the balcony scene, and Romeo has just caught sight of Juliet when he says, "It is my lady, O it is my Love, O that she knew she were," (a 16 syllable line).

The accompanying footnote in Freeman's folio text refers to the modern version as a "poetically polite two lines with pause," (10 syllables plus six syllables). According to Freeman, the line should be full of passion, not politeness.

"The boy's charged," he says. "He isn't going to pause even though the modern text suggests he does."

Freeman goes on to cite a handful of other examples where tinkering with text and punctuation have resulted in passages losing their meaning and characters getting changed.

Today, artistic directors in theatres across Canada and the United States use Freeman's

folio scripts because audiences seem to understand them better than the doctored versions.

Freeman left York after 20 years because he believes UBC's acting division is in an enviable position vis-a-vis other theatre departments in North America.

Hired to teach acting and directing, he is the first of three crucial replacements in the division. Two more follow later this year in voice and movement.

With these appointments, Freeman says UBC will have a chance to adapt its curriculum to meet the difficult challenges of training directors and actors for both theatre as well as television and film. In the process, the division hopes to expand its already established links with the rest of campus.

In a profession full of uncertainty, Freeman considers himself exceedingly fortunate. After 25 years pursuing a "paid hobby", he hasn't been out of work for more than three weeks.

So what is there left for him to do? "Well, I haven't appeared on Broadway, yet."

## Persian poet focus of cultural festival

A festival of Persian culture comes to the Asian Centre auditorium Friday, Nov. 29.

Held from 12:30 to 6 p.m., the event marks the 850th anniversary of the 12th century Persian poet, Nizami. UNESCO has named 1991 the year of Nizami and Mozart.

Highlights of the festival include: an exhibition of contemporary Persian art, books and musical instruments; presentations by the University Singers and Vancouver's Vivaldi Chamber Choir; and lectures on the rise of Persian culture and the works of Nizami. A buffet of traditional Persian food will also be served for lunch.

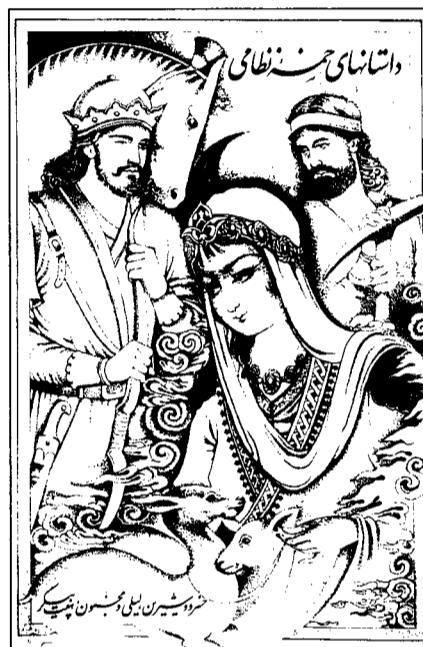
The event is being sponsored by the Roudaki

Cultural Foundation in co-operation with the Institute of Asian Research and the Department of Religious Studies.

A priority of the university's A World of Opportunity Campaign, the Institute for Asian Research is committed to establishing a Centre for Arabic and Islamic Studies. The \$4 million initiative will establish two academic chairs, an endowment and also provide a building for the centre.

The institute also has plans to establish similar centres for Japanese, Chinese, Korean, South Asian and Southeast Asian Studies.

For more information about the festival call Professor Hanna Kassis at 822-6523.



## Kania's BA finally bestowed

Continued from Page 1

my degree was coming along. I've been asking each one the same thing since. No one would do anything about it until David Strangway."

Strangway enlisted the help of Dean of Arts Patricia Marchak to clarify Kania's academic standing. Her investigation concluded that Kania had indeed earned his degree.

"Under the 1926 rules and a Senate motion of that period, Kania should have been given the degree," Marchak said. "I'm pleased we can finally do this properly."

"I've been fighting on behalf of all students, not just myself," Kania says. "You deserve the recognition if you can make the grade."

## Forum

# A tribute to the victims of the Montreal Massacre

By FLORENCE LEDWITZ-RIGBY

*Florence Ledwitz-Rigby is the Advisor to the President on Women and Gender Relations.*

On Dec. 6 we are forced to confront one of the darker aspects of our society in memory of the 14 victims of the Montreal Massacre. I hope that everyone will join me in a personal moment of silence, remembering the lives of Genevieve Bergeron, Helene Colgan, Nathalie Croteau, Barbara Daigneault, Anne-Marie Edward, Maud Haviernick, Barbara Klueznick, Maryse Laganier, Maryse LeClair, Anne-Marie Lemay, Sonia Pelletier, Michele Richard, Annie St.-Arneault and Annie Turcotte: women, aged 21 to 31, who possessed talent, promise and hopes for the future.

Whenever we try to encourage young women to think broadly of their potential and how they can join in the fabric of society, we must consider the message that such a tragedy conveys. While we might be tempted to blame the tragedy on a man with a deranged mind, whose biochemical balance was distorted, the direction the acting out of this derangement took is the result of attitudes of our society.

The image of women as victims to be blamed for their own victimization is rampant. A recent political cartoon in the Province, depicting the fashion for women of the 90s as a coffin, is typical of this attitude. Resentment of equity employment measures by men who fear that women can only be given equal opportunity to the detriment of men, is another example.

In memory of the 14 women slaughtered in Montreal on Dec. 6, 1989, we each need to examine our own attitudes and the messages we give, either by our silence or compliance with activities that denigrate women. We need to ask how each of us can take an active role in providing a positive environment for everyone to live and work in. We need to examine our own prejudices that may make it difficult for anyone who is different from us, whether by sex, race, religion, or physical disability, to feel safe and free to thrive in a society that values individuals for their unique talents and capacities.

As an institution, UBC is currently confronting these issues. Attempts to improve physical safety include a program to increase campus lighting, expansion of shuttle bus services, walk home programs and installation of telephones in areas where individuals work at night. The University Health and Safety Committee has included women's safety as an issue to be dealt

with by department and building committees. I have formed a President's Advisory Committee on Women's Safety to take a broad look at all aspects of university life that impinge on safety. This committee will deal with psychological safety, as well as physical safety.

The challenge is how to change attitudes of people who think that the victimization of individuals who are different from themselves is acceptable or even funny. Workshops, seminars and ethics courses initiated by the Sexual Harassment Office, the Women Students' Office and the faculties of Engineering and Medicine have all been steps in the right direction. If all faculty members who have the imagination to see how such issues relate to their disciplines could incorporate a discussion of interpersonal ethics into even a few minutes of their curriculum, we would be much further along.

Certainly, every university instructor and supervisor must question whether anything they say or do in class, or on the job, could encourage another Marc Lepine to think his actions were appropriate, or to discourage anyone from thinking that they are valued as students, employees or members of the human race.

On Dec. 6, 1991, the University of British Columbia will officially remember the lives and hopes of the women of Montreal. Wreaths



Florence Ledwitz-Rigby

will be placed on campus by the Women Students' Office, flags will fly at half staff and the carillon will play. Individuals who wish to express their concern over the issues of the day are encouraged to wear a simple white ribbon on their lapels. Ribbons will be available at the Women Students' Office and the University Bookstore. This is a day for men and women to join in remembrance and in a vow to change society so that such events will only be history.



**December 1-  
December 14**

**PMS Research Study**

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

**Dermatology Acne Study**

Volunteers between 14-35 years with moderate facial acne needed for 4 visits during a three month period. Honorarium paid. Call Sherry at 874-8138.

**Sun-Damaged Skin Study**



Participants needed between ages of 35-70 for 9 visits over 36 weeks. Not to have retinoids for the past year. Honorarium paid. Call Sherry in Dermatology at 874-8138.

**Eczema Study**

Volunteers 12 years of age or older needed for 4 visits over a three week period. Honorarium paid. Call Sherry in Dermatology at 874-8138.

**Surplus Equipment Recycling Facility**

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

**Student Volunteers**

Find an interesting and challenging volunteer job with Volunteer Connections, UBC Placement Services, Brock 307. Call 822-9268.

**Narcotics Anonymous Meetings**

Every Tuesday (including holidays) from 12:30-2pm, University Hospital, UBC Site, Room M311 (through Lab Medicine from Main Entrance). Call 873-1018 (24-hour Help Line).

**Fitness Appraisal**



Administered by Physical Education and Recreation through the John M. Buchanan Fitness and Research Centre. Students \$25, others \$30. Call 822-4356.

**Faculty/Staff Badminton Club**

Fridays from 6:30-9:30pm in Gym A of the Robert Osborne Centre. Cost is \$15 plus library card. Call Bernard at 822-6809 or 731-9966.

**Nitobe Garden**

Open Mon.-Fri. from 10am-3pm; closed week-ends. Free admission. Call 822-6038.

**Advertise in UBC Reports**

**Deadline for paid advertisements for the December 12 issue is noon, December 3.**

**For information, phone 822-3131**

**To place an ad, phone 822-6163**

**- NOTICE -  
CALENDAR POLICY**

The Calendar is becoming increasingly popular. Because of space limitations, we are not able to include every item submitted. In order to be as fair as possible, the number of items for each faculty/dept. is now limited to four per issue.

**Urban woes studied**

By CHARLES KER

Close to 70 per cent of the world's population increase this decade will be in urban areas. Already, Third World cities are bursting.

By the year 2000, urban planners predict 23 world cities will have populations of more than 10 million, with 17 of these megacities in developing countries.

Trends in global urbanization will be among the topics discussed next month at a workshop sponsored by UBC's Centre for Human Settlements (CHS).

Aprodicio Laquian, director of the centre, said major international donor agencies plan to use the UBC workshop to introduce their spending plans for the rest of the decade.

"They have written strategies as to where they would like the money to go," said Laquian. "This is a chance for us and our network to find out where the developments will be."

The World Bank, UN Development Program, International Development Research Centre and the Canadian International Development Agency are

scheduled to give submissions at the Asian Centre Dec. 10-12.

Urban planning experts from Indonesia, China and Thailand, and faculty associates from UBC and other universities, will also be on hand to scrutinize the various strategies.

World Bank officials have talked about spending \$3.5 billion annually on urban projects by 1993 and \$5 billion by 1995. But Laquian says a more strategic and programmed approach to financing is the key to combatting the spiralling problems of urban poverty.

The Centre for Human Settlements was established in 1976 following the UN Conference on Human Settlements (Habitat) in Vancouver.

CIDA launched a Centre of Excellence at the CHS in 1990 with a \$6.2-million grant over 5 years. It will support human resource and institutional development in partnership with universities in China, Thailand and Indonesia.

Those requiring more information on the December seminars can call Nora Brandstadter at 822-8213.

**Lens & Shutter**

AND

**Polaroid®**

**INVITE YOU TO  
THE UBC INSTANT IMAGING  
PRODUCT FAIR**

**THURSDAY, DECEMBER 5  
10:00 AM - 4:00 PM**

**UBC MEDIA SERVICES ROOM 379  
LIBRARY PROCESSING CENTRE - 2206 EAST MALL BY HEALTH SCIENCE CENTRE**

- Free Polaroid Video Tape
- Door Prizes
- Product Demonstrations & New Products
- Refreshments

For further information: 736-0711

**SEE AND HEAR ABOUT:**

- POLAROID INSTANT SLIDE SYSTEM
- CLOSE UP CAMERAS
- MP4 COPY STAND FOR 35mm & INSTANT PHOTOGRAPHY UP TO 34X
- OVERHEAD PROJECTORS
- VIVITAR INSTANT SLIDE PRINTER
- INSTANT TRANSPARENCIES
- OTHER WONDERFUL INNOVATIONS

**GOOD FOR**

**1**

**ENTRY**

**IN SPECIAL  
EARLY BIRD DRAW**

**MUST BE IN DRAW BOX BY 2 PM  
TO WIN A \$100 POLAROID PRODUCT**

**CUT OUT AND BRING WITH YOU  
THURSDAY, DECEMBER 5**

NAME: \_\_\_\_\_

PHONE: \_\_\_\_\_

# T-Bird grid star beats the odds

By ABE HEFTER

In the winter of 1986, Vince Danielsen, a promising 15-year-old athlete, had two things on his mind: football and basketball.

Danielsen, a grade 10 student at Vancouver College, had just celebrated a junior varsity football championship and was looking forward to the coming basketball season.

But by the time Christmas arrived, Danielsen had only one thing on his mind.

Living.

It was on a cold, grey December day that Danielsen discovered a lump in his throat. At first, it was diagnosed as a virus, but the lump persisted. A biopsy was eventually performed and doctors discovered Danielsen had non-hodgkins lymphoma: a very rare form of cancer that was moving swiftly through his body.

They gave him a 50-50 chance of survival.

That was five years ago. Today, Danielsen is quarterback of the UBC Thunderbirds, and a third-year physical education student with a

warm smile and an easy-going manner that belies his brush with death.

"At the time of diagnosis, I was like any other high-school athlete — worried about getting through each game, one play at a time," Danielsen said, reflecting. "Then, all of a sud-



den, I was concerned about getting through life, one chemotherapy session at a time."

Danielsen said he went through four months of chemotherapy after the growth was removed. He was told that the first six months after therapy would be the most critical in determining the treatment's success. Six months later, his body was cancer-free.

"I'm down to one checkup a year," he said. "I got a clean bill of health following my most recent one, last month. At this point, I don't think the cancer will reappear."

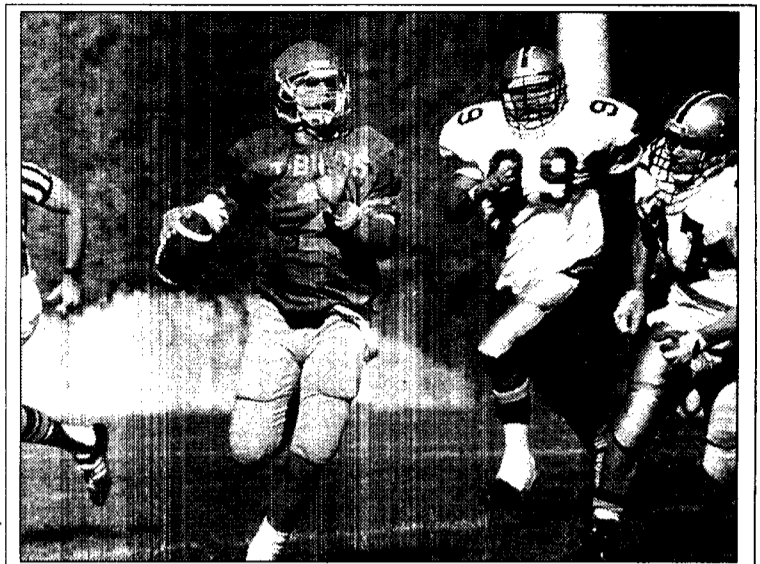
Danielsen's bout with the disease has left him with a new perspective on life. He looks at himself as a walking, breathing example of how research dollars can help cure an often-fatal disease.

"I feel I have a responsibility to let people know that research works," said Danielsen. "I try to do that by working to raise funds for cancer research, through public appearances and appeals through the media."

"But I'm nobody special. Thousands of people have beaten cancer. I just want to get the word out that happy endings do exist."

On the football field, Danielsen says there isn't a defensive lineman alive who can take him down with the same devastating effects that chemotherapy did. Nothing that he goes through in a game can compare to what he went through in the cancer ward—not the pressure, not the pain.

"I've overcome a huge obstacle and it's helped build my confidence," said Danielsen. "I worked hard to beat cancer and I know I can work just as hard to make myself a success in football, both in practice and on game day."



Danielsen leads the attack against the Manitoba Bisons in 1990

This was Danielsen's first full season as starting quarterback with the Thunderbirds, a season filled with the ups and downs that accompany a team struggling to stay above the .500 mark.

The ups came early in the campaign, when the club opened with two straight wins. What followed were a

fistful of one-point losses, games which Danielsen admits the Thunderbirds could have won.

"Winning is everything," said Danielsen. "But I know I can face the pressure that comes with it."

"I've already beaten back the biggest obstacle I'll probably ever face in my life."

## Forestry research day a first

By ABE HEFTER

Forestry related research at UBC will be showcased on December 3 when the Faculty of Forestry hosts its first forestry research day.

The public, along with government agencies, industry, and other academic institutions, have been invited to learn more about campus-wide forestry related research initiatives through a series of lectures and poster presentations.

"The Faculty of Forestry research day is our invitation to the community to come out and learn about the responsible and responsive ways UBC is dealing with the management of our forests," said Forestry Dean Clark Binkley.

"It's an exciting, new venture that is being held in conjunction with the Schaffer Lecture," he added.

The topic of this year's Schaffer

Lecture is Challenges in Canadian Forestry Research, given by Peter Morand, president of the Natural Sciences and Engineering Research Council.

Following the lecture, the public is invited to attend three research talks scheduled to be given by Professor Jack Saddler of the Department of Forest Harvesting and Wood Science, Cindy Prescott of the Department of Forest Sciences and Assistant Professor Valerie LeMay of the Department of Forest Resources Management.

LeMay will discuss the research she has done on determining how tree shapes change over time.

"By changing such things as spacing, we can effectively change the shape of a tree's stem, or bole," she said.

"If we want tall, straight trees for

telephone poles, how do we go about growing trees that end up tall and straight? We plan to find that out through research projects like this one, which is funded by the B.C. Science Council."

LeMay said the open house will give UBC researchers an opportunity to exchange ideas with the larger research community.

In addition to the Schaffer Lecture and the three research talks, the public is invited to inspect more than 25 poster presentations representing examples of the forestry related research being done at UBC.

The poster displays will be staffed by researchers, who will be available to answer questions.

For more information, please call co-ordinator Sue Watts at the Faculty of Forestry, 822-6316.

## Profit in pine oil?

By GAVIN WILSON

UBC researchers have discovered that a pulp and paper byproduct has properties that could lead to commercial use as a natural insecticide.

The research, led by Plant Science Associate Professor Murray Isman and Botany Professor Neil Towers, could provide another marketable product for the B.C. forest industry, while serving as an alternative to chemical pesticides.

Isman, Towers and post-doctoral researchers Terry Jarvis and Youngshou Xie are investigating the properties of tall oil, a residue that remains after lodgepole pine trees are pulped. "Tall" is Swedish for pine.

Both Isman and Towers have dedicated much of their careers to the search for natural sources of insecticides. This is the first time that either has explored the potential of the lodgepole pine, one of the most common tree species in B.C.'s central interior.

"We've both travelled to far corners of the globe, from deserts to tropical forests, looking for natural sources. But here is something right under our noses that could have great potential," said Isman.

Their research involved breaking down the oil into its constituent parts and then determining which are its chemically-active components.

At first it was believed that tall oil pitch held promise as an anti-feedant, a substance that inhibits insects from eating plants. But Isman and Tower's research has shown that it is not the pitch, but the de-pitched oil, and specifically the resin acids, that actually contain anti-feedant properties.

Research on campus was conducted using the variegated cutworm, a caterpillar that is a pest for a wide variety of crops, including vegetables, flowers, fruit tree and conifer seedlings.

The tests showed a pronounced anti-feedant effect. Cutworms shunned food containing small amounts of the de-pitched oil. There was also evidence of some toxicity, important for commercial applications.

In the forest industry, 86 per cent of a tree is used for lumber, 12 per cent is pulped and the remaining two per cent is resinous material that must be either refined and used in some way, stored, or disposed of by burning.

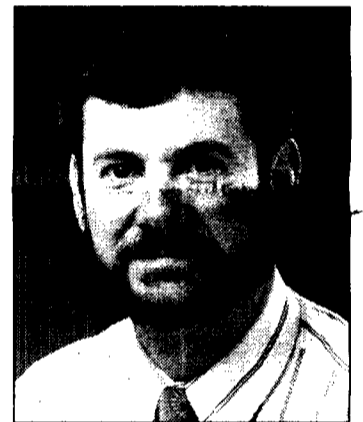
For Northwood Pulp and Timber Ltd. and B.C. Chemicals Ltd., the companies that initiated the tall oil research, this could be a chance to make a high-value product from what is now the under-utilized part of the tree.

"This is certainly a novel use for this material. B.C. Chemicals is looking for value-added products for the forest industry," said company president Hugh Norman. "We're excited by these developments."

Commercial application is still some time off, Isman said. A year from now the researchers will have a better feel for the ultimate potential of the tall oil extract.

Upcoming research will focus on the resin acids to discover the chemically-active ingredients within these compounds. As well, tests will be conducted on a different insect species.

The research is funded by B.C. Chemicals, with matching grants from the Natural Sciences and Engineering Research Council and Forestry Canada, for a total of \$69,000 a year for two years.



Murray Isman

## Campus campaign building steam

By ABE HEFTER

UBC's Statistics Department is proof positive that good things come in small packages — certainly when it comes to UBC's campus campaign.

The latest figures show that members of the department have contributed \$4,200 to the university's campus fund-raising campaign.

"I'm delighted with our department's participation in the campus campaign," said Professor John Petkau, department head.

Campus Campaign Chair Dennis Pavlich echoed Petkau's sentiments.

"With less than a dozen full-time regular faculty members in the Statistics Department, their contribution reflects an excellent participation rate," he said.

Petkau said the department's goal is to raise a minimum of \$35,000 overall to maintain its specific endowment fund.

"Our endowment fund is designed to enhance the department's academic programs at both the graduate and

undergraduate levels," he said. "Ideally, the fund might allow us to supplement the level of support available to some of our graduate students."

UBC's A World of Opportunity campaign has raised \$200 million to date — \$110 million from individual and corporate donors, and \$90 million in matching funds from the provincial government.

During the next year, the university is seeking \$30 million more in contributions from a wide range of prospective donors, including the campus community.

The president, vice-presidents, associate vice-presidents and deans have contributed just over \$200,000 so far.

The 1991 annual solicitation has resulted in pledges totalling approximately \$80,000 from faculty and staff.

Prior to that, the university received a number of unsolicited gifts from campus individuals.

"In addition to contributing to

projects not yet fully funded, employees may also contribute to projects created by various campus units," said Pavlich.

These initiatives include the Statistics Fund for Excellence within the Faculty of Science, and the Library's Collection Enrichment Fund, as well as the Institute of Asian Research and the seminar series for sustainable development research in the Faculty of Graduate Studies.

"I'm pleased with the overall progress of the campus campaign," said Pavlich. "After a slow start, the departmental projects seem to be coming together nicely. I'm hopeful that the participation rate will increase," he added.

"To date, we have received only 104 replies from faculty and staff, a disappointing number," said Pavlich.

"Although, overall, our campus campaign is in line with what has happened at other Canadian universities, I'm convinced we can do as well, or better."

## People

# Magrega appointed to Vocational Commission

**Dennis Magrega**, research co-ordinator in UBC's Disability Resource Centre, has been appointed one of two Canadian representatives to the Vocational Commission of Rehabilitation International.



Magrega

Rehabilitation International is a worldwide federation of 120 organizations dedicated to promoting the prevention of disability, the rehabilitation of disabled people and the equalization of opportunities for persons with disabilities.

Magrega's role on the commission will be to represent Canadian interests in the development of international projects related to career evaluations of persons with disabilities.

**Dr. Alexander Boggie**, professor emeritus of Family Practice and former associate dean of admissions for the Faculty of Medicine, has been honored by the First Nations Health Care Professions Program (FNHCPP).

Boggie, an advocate of Native health and education, was the first chair of UBC's Health Care Committee, formed in 1987, which was

responsible for the creation of the FNHCPP a year later.

Originally launched as a three-year development project, the overall objectives of the FNHCPP were to recruit First Nations students into health care programs at UBC, and to increase the number of Native people working in the health professions.

Currently, there are 19 First Nations students enrolled in the health sciences. At the initiation of the program, no Native people were enrolled in the Faculty of Medicine, and few were registered in other health sciences faculties and schools.

Boggie was presented with a plaque and an original Ojibway painting depicting a person caught between two cultures at a luncheon held in his honor Oct. 25.

**Murray Isman**, an associate professor of Plant Science, recently received the Entomological Society of Canada's C. Gordon Hewitt Award for outstanding achievement in Canadian entomology by an individual under the age of 40.

Isman was recognized for his research, which focuses on the discovery and development of natural insecticides, his teaching abilities and his contribution to the scientific community. He is the first UBC faculty member to win the award.

Isman also recently assumed the post of presi-

dent of the Phytochemical Society of North America.

The society comprises botanists, chemists and bio-chemists who are interested in the chemistry of plants and its uses. The society has about 450 members in Canada, the United States and 15 other countries.

Civil Engineering Professor **Peter Byrne** is the winner of the 1991 Editorial Board Award for the best article published in The B.C. Professional Engineer during the previous year.

Byrne won for his co-authorship of the article "Terremoto—Geo-technical Consequences," published in the April, 1991 issue of the magazine.

Byrne specializes in seismic response and liquefaction aspects of earthquake engineering and has co-authored about 40 technical publications in this area. He was co-chairman of the recent Task Force on Earthquake Design in the Fraser Delta and has acted as a consultant to B.C. Hydro and geotechnical consulting firms.

Byrne's co-author was professional engineer Nigel Skermer.



Byrne

**Dr. A. Douglas Courtemanche** has been appointed president-elect of the Royal College of Physicians and Surgeons of Canada (RCPSC).

The college accredits Canadian specialty training programs, judges the acceptability of training taken outside Canada and conducts the certifying examinations. It also assists its 26,000 members through continuing medical education.

Courtemanche joined UBC's Faculty of Medicine in 1962. He was program director of the Division of Plastic Surgery from 1972 to 1988, and became head of the division in 1977.

He has served as associate dean of postgraduate education for the past three years.

He is a former president of the Canadian Society of Plastic Surgeons and was elected a fellow of the American Association of Plastic Surgeons in 1986.

Courtemanche has been involved with the Royal College of Physicians and Surgeons of Canada for the past two decades, and has served as both chair and member of numerous college committees. His two-year term begins in September, 1992.

### 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

## Classified

Classified advertising can be purchased from Community Relations. Phone 822-6163. Ads placed by faculty, staff and students cost \$12.84 for 7 lines/issue (\$1.81 for each additional word). Off-campus advertisers are charged \$14.98 for 7 lines/issue (\$2.14 for each additional word). (All prices include G.S.T.) Tuesday, December 3 at noon is the deadline for the next issue of UBC Reports which appears on Thursday, December 12. Deadline for the following edition on January 9 is noon Monday, December 30. All ads must be paid in advance in cash, by cheque or internal requisition.

### For Rent

FURNISHED STUDIO APARTMENT in the West End. January 1—June 30, 1992. \$475 plus utilities. Highrise building. References. 682-5445

### Services

DO IT RIGHT! Statistical and methodological consultation; data analysis; data base management; sampling techniques; questionnaire design, development, and administration. Over 15 years of research and consulting experience in the social sciences and related fields. 689-7164.

### Miscellaneous

SINGLES NETWORK. Science Connection is a North America-wide singles network for science professionals and others interested in science or natural history. For info write: Science Connection Inc., P.O. Box 389, Port Dover, Ontario, NOA 1N0

Neil Hartling, Outfitter and Guide, invites you to an evening of image and sound. Nahanni—River of Gold and Tatshenshini—Ice Age River. Robson Square, Judge White Theatre, Tuesday, December 3, 7:30 p.m., Admission \$2.00 at the door.

# New parking spaces, transit routes and carpooling to ease campus car crunch

By GAVIN WILSON

Juggling demands for parking at UBC, while encouraging carpooling and the use of public transit, is proving to be quite a challenge, says John Smithman, director of Parking and Security Services (PASS).

The university lost 1,200 surface parking spaces last year to new building construction. On average, each

space is used two and a half times a day, Smithman said, so this affects 3,000 motorists.

However, construction of the new west parkade, the fourth on campus, will begin next month if it receives the green light from the Board of Governors at its Nov. 27 meeting. Completion is expected in about a year.

To help pay for the new parkade, which will cost \$10 million to construct, monthly parking fees for faculty and staff were increased to \$14 on Sept. 1.

Smithman said this has resulted in some complaints, but added that UBC's rates are lower than many other Canadian universities. Parking rates at the University of Toronto—nearly \$700 per year for unreserved space, \$1,200 for reserved—are prominently displayed at PASS wickets to give UBC commuters "a sense of perspective," he said.

If commuters had to cover the full cost of parkade operations, they would pay \$1,000 in fees each year, instead of the current \$168, to help service the debt, Smithman said. Each parking space in a parkade costs \$10,000 to construct.

Smithman also said that Campus Planning and Development has hired a consultant, Carolyn Hatten, to see that parking plans are well integrated with the campus master plan.

As parking spaces are further reduced, planning will ensure that no group will be hit harder than any other, whether they are faculty, staff or students, he said.

"We care about parkers, or we wouldn't have a plan."

PASS is continuing discussions with B.C. Transit to see how bus service to campus can be improved. Next year, a new east route along 16th Avenue will be added and service on the 41st Avenue route will be doubled to every 10 minutes during peak hours.

Earlier this month, PASS and B.C. Transit conducted a traffic and transit survey, counting the number of cars and car passengers coming onto the UBC campus every day, as well as the number of transit riders. The information will be used in future planning.

PASS also provides two carpool lots for registered drivers, one between Gage Towers and the Curtis building and the other in the Health Sciences area.

Smithman added that the new PASScard system encourages informal carpooling, because the permit is transferable between vehicles, unlike the old decal system. Also, PASS has joined a carpooling program, Rideshare, sponsored by the provincial Ministry of Energy, Mines and Petroleum Resources.

Operating bugs in the new PASScard system have been traced to faulty software and are being corrected, he said.

Smithman also said \$100,000 in parking fines collected each year is used to build an endowment fund for students needing help to pay academic fees. The goal is to create a \$1-million fund by 1999.

"We don't enjoy collecting fines," Smithman said. "We try to get voluntary compliance with campus parking regulations first."

### IS YOUR BABY BETWEEN 2 & 22 MONTHS?



Join our research on infant development at U.B.C.! Just one visit to our infant play-room. Please contact Dr. Baldwin for more information: 822-8231.

Get your message across!

UBC Reports Classifieds

To place an ad phone 822-6163

# B.C. history gives residents a sense of place, perspective

By CHARLES KER

In 1857, the year before British Columbia became a crown colony, Fort Langley was the primary link between Natives and Europeans along the lower Fraser River.

The 30-year-old Hudson's Bay outpost had a mixed population of about 200 Scots, Brits, French Canadians, a handful of Hawaiians and Native peoples.

It was through the fort that Natives were introduced to trade goods such as firearms and blankets, and to farming, learning to grow potatoes and raise chickens. Seasonal work was available to Native women in the fort's salmon salteries, while Native men worked in the surrounding fields or as boatmen on the Fraser River.

Yet despite these influences, Fort Langley residents were resigned to being an island of Europeans in a sea of Natives.

All that changed with the Gold Rush of 1858.

"The worlds that ran into each other then could hardly have been more different," said Professor Cole Harris. "It was a huge collision of values and ways of life."

This dramatic clash of colonial power and Native culture is at the heart of research Harris is conducting with fellow UBC historical geographer Robert Galois.

Harris and Galois have taken up the daunting task of writing a synthesis of B.C.'s changing human geography during the 19th century.

Past research on the roots of early B.C. has been divided among a number of academic disciplines. Harris, who edited Volume I of the Historical Atlas of Canada, hopes to pull some of these different strands together and present them in a more

integrated, regional framework.

"There are some basic things that haven't been done such as figuring out where people lived and putting this information on a map," he said. "They can be central to getting the whole picture."

Fueled by a grant from the Social Sciences and Humanities Research Council, the two geographers set out in 1988 to write a book describing the province's development, from Simon Fraser's arrival in 1808 to the time of the first Dominion census in 1881. The project has since expanded into three separate books: one dealing with settlement patterns along the Fraser River, another with settlements on the Skeena River and a third with Vancouver Island.

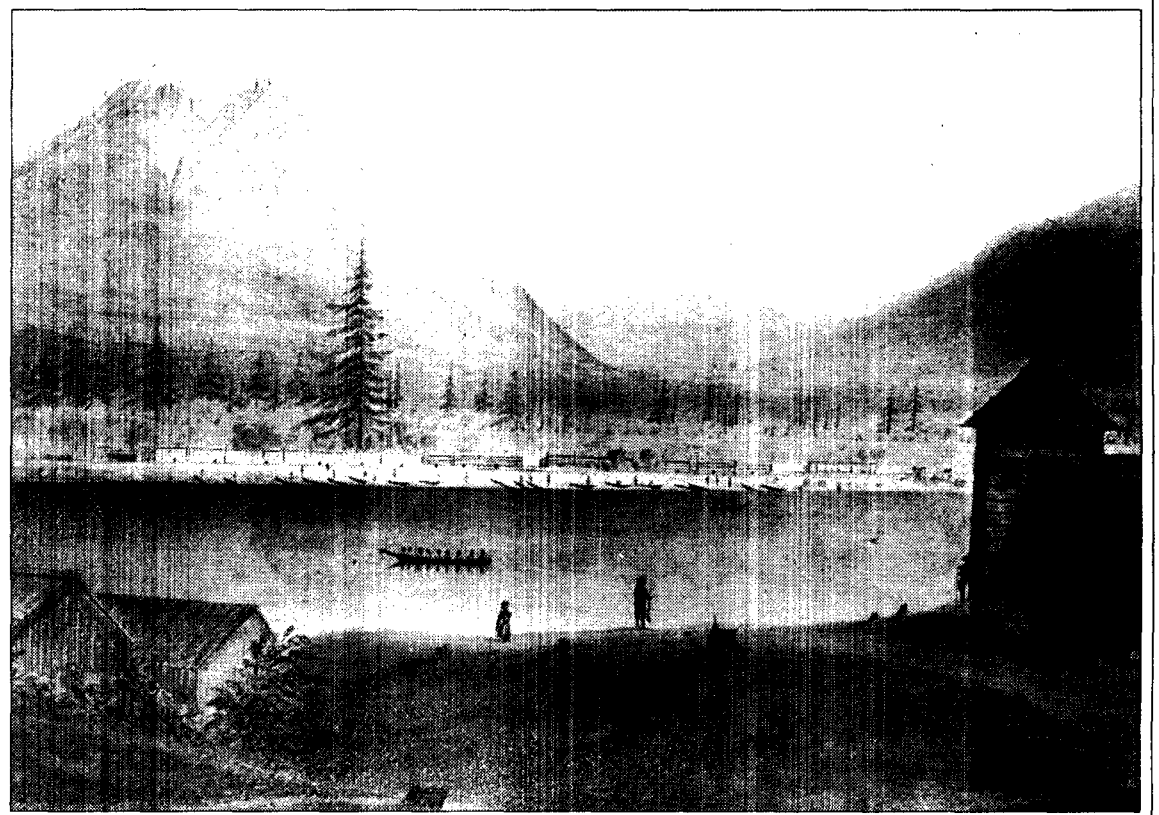
"British Columbians don't seem to know where they are in the world, what it means to live here and where this place has come from," said Harris. "The condition of living with other people from radically different backgrounds has been a way of life in this province from the beginning."

Harris and Galois have been piecing their provincial retrospective together by combing through reams of resource materials including archaeological records, Hudson's Bay Company files, CPR surveys, and journals of early traders and missionaries.

They have also transferred government records of the time onto 100 microfilm reels. They show how land was apportioned lot-by-lot, as well as demographic characteristics of particular sectors of the population.

"We can now determine the demographics of Chinese railway workers in the Fraser Canyon and the makeup of the early ranching society in the Nicola Valley," said Harris.

But it is the underlying Native



Fort Langley in 1859 — a European island in a Native sea.

presence, together with the European influx, that intrigues Harris.

Essentially, he argues, Native ways dominated life along the Fraser River until 1858 and then were quickly marginalized. The miners who poured into the new colony contributed to this, but the more decisive influence was a new regime of land ownership backed by laws, courts, jails and, if necessary, gunboats.

Natives protested, but they were not heard. By the time of the Indian Reserve Commission of 1878, the agricultural lands of the lower Fraser Valley had been allocated to whites.

By then, Harris writes, "moving seasonally as they could through land they no longer controlled, Natives were everywhere and nowhere."

In the summer of 1989, Harris and Galois presented a photographic exhibi-

tion in Lillooet, Lytton and Hope showing early patterns of Native settlement and the impact of the Gold Rush.

At the rate they are uncovering new information, a second exhibition may be warranted.

Said Harris: "The university must try to connect its scholarship to the communities that support it. Our research will give people a richer understanding of the province."

## Nurses earn long distance degrees

By CONNIE FILLETTI

As a full-time working mother of two small children, Roxanna McCrone wanted to upgrade her nursing skills but couldn't afford to quit her job at Lionsgate Hospital, hire a baby-sitter and return to school.

But McCrone was able to get a quality education that met her learning needs and her lifestyle, thanks to UBC's School of Nursing Outreach Program.

At today's Congregation ceremonies, after four years of part-time study at home, McCrone will be one of eight other students who are the first to receive a Bachelor of Science degree in Nursing (BSN), earned through distance education.

McCrone said she appreciated the flexibility of the program most of all.

"The way the program is designed respects the fact that this wasn't my whole life. It allowed me to continue working and raise my family."

Cheryl Entwistle, director of the outreach program, said that some nurses in B.C. are finding it difficult to pursue education through traditional college and university programs.

"They are scattered throughout the province in many fields of practice, and increased accessibility to nursing education is essential," she said.

Established in 1919, UBC's School of Nursing is the oldest and one of the largest in Canada. BSN degree completion by distance education began in 1988, joining scores of other distance education courses and programs UBC has offered since 1949.

The Nursing Outreach Program uses print materials and technol-

ogy to assist students with course completion. In addition, a course tutor, contacted through a toll-free number, is available to clarify course expectations, deal with concerns and

sufficient to meet today's demands. Through the commendable efforts of the provincial nursing association, provincial government, individual nurses and nurse educators,

"The opportunity to increase knowledge and skills through distance education has become a reality in nursing."

questions, and evaluate students' performance. A clinical facilitator is assigned to arrange clinical placements and make clinical visits.

"Nurses work in a complex, rapidly changing world," Entwistle said. "Yesterday's preparation, though adequate at that time, may not be

the opportunity to increase knowledge and skills through distance education has become a reality in nursing."

For more information about UBC's BSN degree completion by distance education, please call 822-7449.

## Grads win GREAT scholarships

By GAVIN WILSON

Fifty-eight UBC graduate students in science and engineering have won 1991 Science Council of British Columbia GREAT Industrial Scholarships, worth a total of \$814,891.

The GREAT (Graduate Research Engineering and Technology) scholarships are worth up to \$16,000, depending on the value of other scholarships a student has secured.

GREAT scholarships are designated to encourage collaboration among B.C. universities and off-campus companies and agencies that are performing industrial research and development.

In co-operation with the collaborating organization and supervising professors, GREAT students are expected to select a thesis topic relevant to the collaborating organization. Students are also expected to spend about one-third of their research time at the organization's facilities.

UBC's GREAT Scholarship winners include 22 students in master's programs and 36 in PhD programs. The largest number, 19, are enrolled in engineering. As well, 14 are in forestry, 12 in biology, six in agriculture, four in physics, two in geology and one in chemistry.

Since the program was established by the Science Council in the late 1970s, over 300 students have received more than \$7 million in GREAT scholarship support.



The campus United Way campaign has collected nearly \$250,000. With your support we will reach our goal of \$280,000. For more information, or to make a pledge, call Elis Courtney at 822-6192.