THE UNIVERSITY OF BRITISH COLUMBIA Volume 43, Number 2 January 23, 19



Women In Print

Danika West examines her fine arts installation hanging in the Frederic Wood Theatre. Four five-metre silk screens juxtaposing ancient and modern images of women are part of her master's thesis in theatre design. February 6, 7, and 8 mark Arts Fest, an annual showcase of student talent in theatre, film, music, visual arts and literary events.

Cohen biography puts author in the spotlight cess to unpublished materials, journals,

by Gavin Wilson

Leaders come to **UBC for APEC '97** by Gavin Wilson

Staff writer

UBC will once again play host to world leaders when the Asia Pacific Economic Co-operation meeting. APEC '97, is held here Nov. 25.

Prime Minister Jean Chretien announced that UBC would be the meeting site prior to his departure for Asia with the Team Canada economic trade mission.

The APEC Economic Leaders' Meeting, which brings together representatives of 18 Pacific Rim economies, will be held in the Great Hall of the Museum of Anthropology and leaders will attend a lunch at Norman MacKenzie House hosted by Chretien.

The meeting caps Canada's Year of Asia Pacific (CYAP), an initiative to promote increased business relations, youth involvement and cultural exchanges to broaden understanding within the Asia Pacific region.

"The APEC leaders' summit and other events associated with Canada's Year of Asia Pacific will highlight UBC's extensive links with Asia and its position as one of North America's premier academic institutions in Asia-Pacific affairs," said UBC President David Strangway. "The resources and expertise UBC can provide will strengthen and complement Vancouver's emerging position as a gateway to the Asia-Pacific.

Canada is a founding member of APEC. which was formed in 1989 as the principal intergovernmental vehicle for economic co-operation in the Asia-Pacific region, especially in areas such as human resources development, telecommunications, energy, the environment, transportation and tourism.

Hosting the APEC Economic Leaders' Meeting illustrates UBC's central role in Canada's Year of Asia Pacific.

Last month, the Asia Pacific Parliamentary Forum was held in Vancouver, bringing together legislators from more than 20 Pacific Rim nations.

Strangway joined the prime minister and the rest of Team Canada on a trade mission to Thailand, South Korea and the Philippines earlier this month.

In October, UBC and SFU students who are members of AIESEC, a French acronym for an international student organization, will hold a youth APEC in Vancouver.

They plan to set up student job exchanges and hold seminars and workshops that bring together government. business and student representatives to discuss Asia-Pacific economic issues.

Other UBC-related events that will fall under the rubric of Canada's Year of Asia Pacific include art shows and exhibitions, conferences, meetings, scholarly seminars, and other academic events related to the Asia Pacific.

Chris Brown, a senior official with the Dept. of Foreign Affairs, is serving on an executive interchange with UBC to provide liaison and co-ordination on a range of Asia-Pacific issues, including the univer-See APEC Page 2

Future classes benefit from students' giving

Class Act

As students in most of UBC's faculties were kicking off their annual Class Act Appeal Jan. 20, students in the Faculty of Pharmaceutical Sciences were counting their donations.

sity's Annual Fund campaign, is an opportunity for students to contribute toward a goal they establish for their faculty, whether it's the purchase of computer equipment, the es-

tablishment of a student endowment or | in time for final papers. improvements to student lounge facilities. Fourth-year pharmacy students Danielle Nicholas and Greg Shepherd got a jump on the annual campaign this year and brought

in donations from 69 per cent of their classmates before they started internships at the beginning of the term. Pharmacy students contributed close to \$11,000.

Agricultural Sciences students also got The Class Act Appeal, part of the univer- | a jump on the campaign with an eye to

having something they can benefit from before the end of the term. With a matching donation from the faculty dean's office, the students plan to have a computer and scanner in place

While participation rates vary among

Staff writer

Leonard Cohen, the poet, novelist and songwriter's first words were, "Let's have lunch."

It wasn't surprising, considering Nadel had arrived in Cohen's Los Angeles home with B.C. smoked salmon, Montreal smoked meat and a bottle of Chateau La Tour '84.

Nadel knew Cohen preferred the '82, but at \$300 a bottle, he could be forgiven for economizing. The effort paid off, anyway. Cohen said he would co-operate with Nadel in writing his biography.

"I was very fortunate. He gave me ac-

letters and song lyrics," says Nadel, who interviewed Cohen 18 times and visited When English Prof. Ira Nadel met | old haunts in Montreal, New York, Nash-

ville and the Greek island of Hydra.

> Writing Various Positions: A Life of Leonard Cohen, was one thing; Nadel wasn't fully prepared for what followed. Although he has been a book critic for CBC Radio for many years, Nadel had never himself been swept up into the world of the trade book.

"I learned a great deal," he says. "I have a lot of respect for trade publishers, but they treat

Nadel books as if they were commodities like umbrellas or chairs." First there was the book tour — an See AUTHOR Page 2

faculties, the Faculty of Dentistry has boasted 100 per cent participation for three consecutive years.

Inside	
Latin Lives	3
You can't keep a good language down, even when it's dead	
Meal Makers	3
Food for thought: Food Services asks customers for feedback	
Stage Change	9
The Dorothy Somerset Studio prepares to play to its last audience	
Wings of Steel	12
Feature: They may be small, but when they fly, they really hum	



Letters Institute's tack questioned

Editor.

I wish to correct misinformation about the Institute for Advanced Study at Princeton contained in the article describing the Peter Wall Institute for Advanced Studies in UBC Reports (Dec. 12). Contrary to what is stated, the Princeton Institute does not "focus primarily on the hard sciences with little presence in the social sciences and humanities." In fact, the Institute for Advanced Study at Princeton consists of four separate schools: Historical Studies, Mathematics, Natural Sciences and Social Science. Each school has its own permanent faculty of distinguished professors and emeritii and each year selects by competition a number of visiting members who are usually appointed for one year and supported by fellowships. What results is a stimulating international company of nearly 200 scholars drawn from every continent, ranging in age from 25 to 70, and embracing the broadest imaginable spectrum of intellectual interest. Having been privileged

LETTERS POLICY

UBC Reports welcomes letters to the editor on topics relevant to the university community. Letters must be signed and include an address and phone number for verification. Please limit letters, which may be edited for length, style and clarity, to 300 words. Deadline is 10 days before publication date. Submit letters in person or by mail to the UBC Public Affairs Office, 310 - 6251 Cecil Green Park Road, Vancouver B.C., V6T 1Z1, by fax to 822-2684 or by e-mail to janet.ansell@ubc.ca.

to experience the intellectual excitement of membership in the Princeton Institute, I can recommend it as the ideal target for the aspirations of those engaged in setting up the Peter Wall Institute for Advanced Studies at UBC.

Unfortunately, if the first major thematic research project is typical of what we may expect in the future, UBC's version of an Institute for Advanced Studies offers scant prospect of winning the worldwide recognition "as the pre-eminent institute focused on basic research linking all fields of enquiry" that its director seeks. The narrowly utilitarian thrust of the topics selected by the crisis points group for their endeavours promises no escape from the confining limits of our own time and place. What true depth of understanding of "crisis points" in human affairs can be gained when there is no historian to provide the perspective of past experience, no philosopher to define the moral

and ethical conflicts that crises invariably provoke, no student of literature, art or music to show how the human spirit responds creatively to crisis and nobody speaking another language from another culture to offer a different view on "crisis points?"

Clearly we must look to the other initiatives mentioned in the article "to build a new type of creative environment" for UBC's Institute — "the three world-class scholars" perhaps, brought in to discuss ideas amongst themselves and generate a "global interactive discussion" on the World Wide Web. Their ruminations. I fear, are no more likely to endow distinction on the Institute than the presence of three tenors guarantees world-class status for the city that entertains them.

Prof. James Russell **Classical**, Near Eastern and Religious Studies

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.



Wax - it

Histology Services

Phone

Providing Plastic and Wax sections for the research community

Author

Continued from Page 1

endless series of readings in mall bookstores raising his voice over the eruptions of steam from nearby espresso machines. And then there were the media appearances.

Something bothered Nadel about the CNN interviewer. His professional manner was belied by his appearance. He looked as if he had just come from the gym.

Nadel asked how much of the 20-minute interview would be aired. The interviewer shrugged. "About 40 seconds," he said. Just enough for a shot of the book cover and a sound bite from the author.

Another leg of the tour took Nadel to Beverly Hills High School, where he was interviewed in a state-of-the-art studio by the former librarian of Beverly Hills. His cable TV show reaches 1.3 million viewers.

Nadel was then whisked to another interview shot in the living room of the host's Beverly

APEC

Continued from Page 1

sity's extensive involvement in both APEC and CYAP. UBC's CYAP co-ordinator is Alison Speer, manager of Government Relations. UBC's co-ordinator for APEC is Eilis Courtney of the Ceremonies Office. "No other university in Canada has the breadth and depth of relations with Asia that UBC has," Brown said. "From anthropology to zoology, every department and faculty at this institution has an active program or is actively seeking to add one in the Asia Pacific region. UBC also has extensive linkages with universities in every Asian country." As well as its strengths in traditional academic disciplines, UBC has links with Asian-related business and cultural associations and offers study and exchange programs and full-time study opportunities for Asian students.

Hills home. In her living room she had interviewed the likes of Toni Morrison. Norman Mailer and Gore Vidal. Neil Simon ambled in through her kitchen as Nadel was preparing to leave.

"You meet all kinds of amazing people walking through the kitchens of Beverly Hills," Nadel says.

Other interviewers were so fanatical about Cohen that they'd not only read Nadel's book from cover to cover, but gave him lists of questions and errors they'd found.

This cult surrounding Cohen could lead to problems, as it did with some reviewers, Nadel says, "because my view of Leonard Cohen doesn't match their view of Leonard Cohen."

Although generally pleased with the book's reception and the tremendous amount of publicity it's received both in Canada and the United States, Nadel

feels that some do not understand the nature of biography. As the author of Biography: Fiction, Fact and Form, Nadel has given

the genre a great deal of thought. "A biography is not a life; it is a narrative. It has a narrator, a

constructed beginning, heroes, anti-heroes and a strong sense of audience. It is not literary criticism and not the place to discuss themes and metaphors in Beautiful Losers," Nadel says.

"A biography should tell you who a person is, rather than what they've accomplished."

One of the reasons Nadel wrote Various Positions was to clarify the myths and reality surrounding the 62-year-old Cohen. A respected figure in Canadian literature - he declined the Governor General's award for poetry in 1969 Cohen later rose to international fame as a recording artist.



George Spurr RT, RLAT(R)

(604) 856-7370 gibbowax@uniserve.com

Kevin Gibbon ART FIBMS

Berkowitz & Associates Consulting Inc.

Statistical Consulting

· research design · data analysis · sampling · forecasting Jonathan Berkowitz, Ph.D

4160 Staulo Crescent, Vancouver, B.C., V6N 3S2 Office: (604) 263-1508 Fax: (604) 263-1708

Edwin J Vanity, vanity, all is That's any fun at all i	4524 W	est 11th Avenue, ph or by appointme	• ·
Financial, Retirement Income, Estate Planning	Term Deposits, RRSP/RRIF's Competitive rates with leading financial institutions.	Mutual Funds licenced through Ascot Financial Services Ltd.	Annuities, Life and Disability Income Insurance
		REPORTS	

UBC Reports is published twice monthly (monthly in

Looking for general information at UBC?

Don't know who to call?

Call the UBC Information Line.

UBC-INFO (822 - 4636)

M-F, 8:30 a.m. to 4:30 p.m.

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.

UBC Reports can be found on the World Wide Web at http://www.ubc.ca under News, Events and Attractions.

Managing Editor: Paula Martin (paula.martin@ubc.ca) Editor/Production: Janet Ansell (janet.ansell@ubc.ca) Contributors: Connie Bagshaw (connie.bagshaw@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.

Arts, Science careers focus of talks, forums

Career opportunities and job search methods for UBC Arts and Science graduates are being offered through two separate programs sponsored by the UBC Alumni Association.

Beyond the BA, a forum held during Arts Week, Jan. 27-31, aims to convey the kind of information and life skills not provided in the classroom.

On Jan. 27, executive search consultant Casey Forrest of Pinton, Forrest and Madden Group Inc. will discuss who hires Arts graduates, what makes for an effective resumé and the most common interview questions.

At the Jan. 28 forum, Katie Brown, of Dale Carnegie Training Systems, gives pointers on how to make a good first impression. Geoff Curzon of UBC Career Services offers advice on how to target your job search on Jan. 30.

On Jan. 31, four UBC Arts graduates will discuss how they used their degrees in Psychology, English and French as springboards to successful careers.

Beyond the BA is sponsored by the UBC

Alumni Association, the Faculty of Arts and the Arts Undergraduate Society. The event is free of charge and, despite its focus on Arts undergraduates, is open to anyone at UBC. All Beyond the BA events will be held from

12:30 to 1:30 p.m. in the SUB Auditorium. Your Career in Science is a program co-sponsored by the Alumni Association, the Dept. of Medical Genetics, the Genetics Graduate Program and the Dept. of Biochemistry and Molecular Biology. Two presentations are designed to give students in PhD programs an understanding of business practices and culture.

The career skills presentation on Jan. 28 features Haig Farris, past chair of the BC Science Council, Elaine Weiss of Inex Pharmaceutical Corp. and Blair Grabinsky, manager of UBC Career Services. On Feb. 11, Julian Davies, head of UBC's Dept. of Microbiology and Immunology, will lead a panel discussing the business of science.

Both presentations will be held in Wesbrook 201 from 4 to 5:30 p.m.

Food for thought Food Services

Food Services Patrons influence

food outlet changes A recent survey suggests that faculty and staff are generally satisfied with the

food and service provided by UBC Food Services, while concerns about variety and value are more predominant among students on campus.

The two-part study, conducted by the Farrell Research Group Ltd., follows changes recommended by consultants Ernst and Young to improve the financial forecast for the university's food operations.

In August 1996, the Ernst and Young report suggested that the university close Pacific Spirit Place, a 950-seat cafeteria-style outlet in the Student Union Building.

An advisory committee comprising UBC students, faculty, staff and administrators has been established to find alternative ways of operating the site.

Committee members are: Terry Sumner, chair, vice-president, Administration and Finance: Lisa Castle, Human Resources: Tony Fogarassy, Office of the Associate Vice-President, Academic and Legal Affairs; Dr. John Gilbert, Health Sciences; Tara Ivanochko, Board of Governors; Paula Martin, Public Affairs; Bernie Peets, Alma Mater Society; Jacquie Rice, Financial Services; Mary Risebrough, Housing and Conferences; Judy Vaz, Food Services: Gordon Barefoot, Ernst and Young; and a student to be nominated by the AMS.

The committee will establish a project charter, develop criteria for selection of proposals, choose the best proposed use of the site, monitor project timelines and provide guidance and advice on the scope of the changes. The committee will also issue a request for proposals to include Pacific Spirit Place, the central commissary and possibly other Food Services' units.

The Ernst and Young report also recommended discontinuation of table service at Trekkers Restaurant in favour of expanding its take-out operation.

"The market research tells us that Trekkers is quite popular, particularly with faculty and staff, and that there is a need for that type of service on campus," said Judy Vaz, acting director of Food Services. "The operation has been reviewed and will most likely continue to offer table service during the academic year, and self-service in the summer months."

Vaz said that the study was undertaken in an effort to understand the needs of present and future customers, and to examine ways of enhancing communications with the campus community about food services and how they're delivered.

Results of the research firm's focus group interviews with faculty, staff and



Home, Not-So-Sweet Home

Calling attention to what the Alma Mater Society calls a lack of housing options, fourth-year political science student Carolyn Granholm sits in a "shanty town" of cardboard boxes. Students built the structure on SUB plaza and slept in it overnight to draw attention to their campaign. The AMS wants the provincial and local governments to address the issue of affordable student housing and legalize secondary suites.

Demand for "dead" language still alive

by Gavin Wilson

Staff writer

Latin, as everyone knows, is a dead language.

Or is it?

The language of Julius Caesar, Ovid and Virgil spread far and wide during the Roman Empire, and later thrived as a lingua franca for international scholarship, diplomacy and commerce in medieval Europe.

But reports of its demise in the modern world are greatly exaggerated, says Anthony Barrett, head of the Dept. of Classical, Near Eastern and Religious Studies, who points out that Latin still survives in pockets all over the world.

For example, a short-wave radio station in Finland broadcasts the news in Latin, and the Internet has a Latin-speakers' group where any topic can be discussed, as long as it is in Latin. Recently, protesting students in Belgrade sent a worldwide appeal in Latin over the Internet, seeking moral support for their cause. In the central African country of Malawi, former president Hastings Banda was so keen on the classics he started special Latin classes in his nation's schools. senior class, three are of Asian heritage. Another sign of the continued relevance of the language is the number of calls the department receives from members of the public seeking translation, both to and from Latin.

"We must get a call every other day on average," says Barrett. Faculty members provide the translation as a public service, although they will ask for a small donation to a student scholarship fund if it requires more time.

The requests range from translations of old British legal documents to how to say Happy Christmas in Latin. Others want Latin inscriptions for tombstones.

The department does a brisk trade in Latin mottoes. It seems that when a new club or society is formed one of the first orders of business is acquiring a Latin motto. Barrett did one for a group of plane crash survivors who founded a society. "Usually, they want a snappy motto, but request that it say a great deal. A school in Fort Nelson told us they wanted a motto that said: 'We believe in education and have faith in the North." But they wanted it said in three words!" Of course, UBC has its own Latin motto, "Tuum Est," meaning "It is yours." It is a quote from the poet Horace who was thanking the Muse for his gift of verse. Some Latin speakers foresee a day when Latin is more widely spoken, much as Hebrew, which was used only for religious purposes for 1,700 years, was revived as the official language of modern Israel. But Barrett is sceptical. "I don't see it myself. Hebrew has a political, spiritual and religious motivation that doesn't exist in Latin. We see our mission as more limited but still important. We're committed to ensuring that future generations of students retain this vital part of our intellectual heritage."

students last October indicate that students perceive a lack of variety in healthier food choices, want more value for their money, find food packaged in plastic wrap and styrofoam unappealing as well as environmentally unfriendly and associate Food Services with institutional images.

Food Services has since introduced new menu items that offer wholesome alternatives at reasonable prices and packaging options are being assessed. Vaz said.

While the report determined that faculty and staff found the variety, quantity, quality and price of food available at Food Services' 12 retail outlets satisfactory, they agreed, with students, that crowding and confusion about hours of operation were significant problems facing the department.

Vaz said that communication through campus media, on-site advertising, consistency of hours and the establishment of a home page on the World Wide Web will help minimize confusion about retail outlet hours.

"Addressing concerns about crowding, especially during the lunch period, remains challenging," she said.

The report indicates that the loss of the Faculty Club is a contributing factor and that a "quiet place" is clearly needed.

Vaz urged members of the campus community to share their ideas and concerns by completing suggestion cards available at all Food Services retail outlets, or by calling the department at 822-3663.

Results of phase two of the study, surveying more in-depth demographics, eating and spending habits and food preferences of customers are expected later this month.

Food Services' web page can be found at www.foodserv.ubc.ca.

And, of course, Latin is taught in universities around the world, including UBC.

"It is a subject which encourages an almost fanatical following," Barrett says.

First-year Latin is so popular that his department, which also offers courses in Greek, Hebrew and classical Arabic, had to restrict enrolment to a quota of 100 students.

Barrett notes that not all Latin students are, as some might suspect, of European background. In fact, the classes are very diverse. Of the five students in Barrett's

Calendar

January 26 through February 8

Sunday, Jan. 26

Green College Performing Arts Group

Wintertime Singing Around The Fire. Green College, 8pm. Call 822-6067.

Monday, Jan. 27

Modern European Studies Colloquium Series

Wagner's Music And The Question Of Antisemitism. Karl Zaenker, Germanic Studies. Buchanan penthouse, 3:30-5pm. Call 822-5969.

Mechanical Engineering Seminar

Real World Emissions For Motor Vehicles. Steve Rogak. CEME 1204, 3:30-4:30pm. Refreshments. Call 822-3904.

Applied Mathematics Colloquium

The Two-Separate Paths Problem. Tali Eilam, post doctoral student, Commerce. CSCI 301, 3:30pm. Call 822-4584.

Biochemistry and Molecular Biology Discussion Group

Seminar

Site-Specific Substitution Studies Of Residues At The Active Site Of B-Galactosidase (E.Coli) That Bind The Transition State. Dr. Gene Huber, U of Calgary. IRC#4, 3:45pm. Refreshments at 3:30pm. Call 822-3178.

World History Speaker Series Lecture

Modes Of Imperialism In Latin America In The 19th And 20th Centuries. Prof. Alan Knight, St. Antony's College, Oxford U. Buchanan A-202, 12:30-1:30pm. Call 822-2561.

Zoology Comparative **Physiology** Seminar

Muscle Mechanics In Swimming Fish. Bob Shadwick, UC-San Diego. BioSciences 2449, 4:30pm. Refreshments. Call 822-4228.

Tuesday, Jan. 28

Animal Science Seminar Series

Effect Of Enzyme And Mild Hydrothermal Treatment On The Nutritive Value Of Canola Meal For Dairy Cattle. Suzanne Gill, graduate student. Macmillan 158, 12:30pm. Refreshments. Call 822-4593.

Humanists' Society Lecture Free Speech On The Internet: Principles And Controversy. Ri-Rosenberg. Computer

World History Speaker Series Seminar

Cárdenas In Historical Perspective. Buchanan Tower 1206/07, 4:30-6pm. Reception to follow in Buchanan Penthouse. Call 822-5184/822-2561.

Green College Speaker Series Right-Wing Politics And Feminism In Canada And The United States. Lisa Young, post doctoral student. Political Science. Green College, 5:30pm. Reception in Graham House 4:45-5:30pm. Call 822-6067.

Green College/Theatre, Film and Creative Writing

A Fireside Chat With Roy Surette, theatre director. Green College, 8pm. Call 822-6067.

Wednesday, Jan. 29

Orthopedics Grand Rounds Review Of Cases: Division Of Trauma Morbidity And Mortality Rounds. Dr. H.M. Broekhuyse, Orthopedic Trauma. Vancouver Hospital/HSC Eye Care Centre auditorium, 7am. Call 875-4646.

Faculty Financial Planning Lecture Series

UBC Faculty Pension Operations And Benefits. Stan Hamilton and Marcelle Sprecher, Faculty Pension Plan. Angus 104, 12:30 1:20pm. Call 822-1433.

Your UBC Forum

Process For Handling Appeals And Complaints. Maria Klawe, VP Student/Academic Services, moderator. SUB conversation pit, 12:30-2pm. Call 822-6799.

Noon Hour Concert

Jeffrey Snedeker, natural horn; Marilyn Wilbanks, fortepiano; Martin Hackleman and Dawn Havlett, horns, Music Recital Hall, 12:30pm. \$3 at the door. Call 822 5574

Ecology/Biodiversity Research Seminar

Ecological Hypotheses And Permutation Tests: Putting Things In Order. Marie-Josee Fortin, U Sherbrooke. Family/Nutritional Sciences 60, 4:30pm. Refreshments Hut B-8, 4:10pm. Call 822-3957.

First Nations Discussion Circle

Marilyn Dumont, Poet And Author Of "A Really Good Brown Girl. Green College, 5pm. Call 822-6067.

Respiratory Research Seminar

Control Of Breathing In Hypometabolic States. Bill Milsom, Zoology. Vancouver Hospital/HSC, 2775 Heather St., 3rd floor conference room, 5-6pm. Call 875-5653.

Coast First Nations Customary Practice. Charles Menzies, Anthropology and Sociology. Green College, 12pm. Call 822-6067.

Arts Week '97

Arts Week '97 Hosts Its Poetry And Short Story Competition. Bookstore, 12:30-2:30pm. Limited seating. Call 822-2665.

Science First! Lecture Series

Herpes Simplex Virus Entry Into Host Cells: The Secret Handshake. Dr. Frank Tufaro, Microbiology and Immunology. IRC#6, 12:30-2:30pm. Discussion and refreshments to follow. Call 822-5552.

Human Kinetics Seminar

Rick Hansen And UBC: Past. Present And Future. Rick Hansen. director, Rick Hansen Institute. IRC#1, 12:30-1:30pm. Call 822-3913.

Earth and Ocean Sciences Seminar

Seismic Imaging Of Massive Sulphide Deposits. Andy Calvert, Ecole Polytechnique. GeoSciences 330A, 12:30pm. Call 822-3466/ 822-2267

Joan Carlisle-Irving Lecture Series

A Thousand Monster Opinions: The Coffee House And Print Culture In Restoration London. Joseph Monteyne, PhD candidate, Fine Arts. Lasserre 102, 12:30pm. Call 822-2757

Concert

UBC Chamber Orchestra. Tawnya Popoff, viola soloist, Jesse Read, conductor. Music Recital Hall, 12:30pm. Call 822-3113.

Philosophy Colloquium

The Difference Between Deleuze's Difference And Derrida's Difference. Bruce Baugh, visiting professor. Buchanan D-202, 1-2:30pm. Call 822-3292.

Environmental Engineering Seminar

Environmental Issues In B.C. Vicky Husband, Sierra Club. CEME 1215, 3:30-4:30pm. Refreshments. Call 822-2637.

Physics and Astronomy Colloquium

Gravity, General Relativity. Don Page, U of Alberta. Hebb, 4pm. Refreshments at 3:45pm. Call 822-3853.

Leon and Thea Koerner Colloquium

Biological And Relational Aspects Of Attention Deficit Hyperactivity Disorder In Children. Stephen P. Hinshaw, Psychology, U of California, Berkeley. Kenny 1210, 4pm. Call 822-6771.

netics. Wesbrook 201, 4:30pm. Refreshments at 4:15pm. Call 822-8764.

Law and Society Lecture

Racialized Legal History. Constance Backhouse, Law, U of Western Ontario; Louis A. Knafla, History. U of Calgary, moderator. Green College, 7:30pm. Call 822-6067.

Friday, Jan. 31

Grand Rounds

Mitochondrial Diseases - What Are They And How Do We Diagnose Them? Dr. Derek Applegarth, Dr. Lorne Clarke, Pediatrics and Medical Genetics. GF Strong auditorium, 9am. Call 875-2307.

Health Care and **Epidemiology Rounds**

Asleep In The Fast Lane: Public Health Aspects Of Sleeplessness. Stanley Coren, director, Human Neuropsychology and Perception Laboratory. Mather 253, 9-10am. Call 822-2772

Law and Society

Developmental Conference Various speakers. Green College, 9am-6pm. \$50 (waived for UBC faculty and students). Call 822-6525.

Occupational Hygiene Program Seminar

Assessment Of Occupational Hearing Requirements. Stanley Forshaw, P.Eng. Vancouver Hosp/ HSC, Koerner Pavilion G-279, 12:30-1:30pm. Call 822-9595.

Pharmaceutical Sciences Seminar

Cardiac Lipoprotein Lipase During Diabetes And Hypertension. Dr. Brian Rodrigues. Cunningham 160, 12:30-1:30pm. Call 822-4645.

Mathematics Colloquium

Renormalization And 3-Manifolds That Fiber Over The Circle. Curt McMullen, U of California-Berkeley. Mathematics 104. 3:30pm. Refreshments in Math Annex, room 1115 at 3:15pm. Call 822-2666.

Chemical Engineering Weekly Seminar

Factors Limiting The Enzymatic Hydrolysis Of Cellulose. Paul Thomas, graduate student, Chemical Engineering. Chemical Engineering 206, 3:30pm. Call 822-3238.

Linguistics Colloquium

On Ways Of Expressing Scope: Distributivity In St'at'imcets (Lillooet Salish). Hamida Demirdache, Linguistics, and Lisa Matthewson, SFU Linguistics. Buchanan penthouse, 3:30pm. Refreshments. Call 822

U BC REPORT

Theoretical Chemistry Seminar

Growth And Melting Simulations Of The Leonard-Jones Crystal Liquid Interface. R. Moss, Chemistry. Chemistry D-402 centre block, 4pm. Call 822-3266.

Concert

UBC Chamber Orchestra. Tawnya Popoff, viola soloist. Jesse Read, conductor. Music Recital Hall. 8pm. Call 822-3113.

Saturday, Feb. 1

Student Leadership Conference

Various Speakers. Atrium Inn, 2889 E. Hastings, 9am-6pm. \$30 includes lunch and reception. Register at SUB 100D. Call 822 9268.

Vancouver Institute Lecture Democracy In Peril. Mike Harcourt. IRC#2, 8:15pm. Call

822-3131.

Monday, Feb. 3

Mechanical Engineering Seminar

Challenges And Rewards In The Development Of Contaminated Water Recycling Technology. Tom Bower, Comprehensive Water Management Ltd. CEME 1204, 3:30-4:30pm. Refreshments. Call 822-3904

Modern European Studies Colloquium

Regionalism And National Identity: The Case Of Spain. Arsenio Pacheco, Hispanic and Italian Studies. Buchanan Penthouse, 3:30-5:00pm. Call 822-5969.

BMB Discussion Group Seminar

Integrin Signalling Regulates Tissue-Specific Gene Expression In Mammary Epithelial Cells. Dr. Calvin Řoskelley, Anatomy. IRC#4, 3:45pm. Refreshments at 3:30pm. Call 822-3178.

Zoology Comparative

Physiology Seminar

Leatherback Turtles. Frank

Paladino, Indiana-Purdue U.

Biosciences 2449, 4:30pm. Re-

Faculty Women's Club

Meeting

China, Hong Kong, And The

Transfer. Sandra Wilking, Asia

Pacific Foundation. Cecil Green

Park House main floor, 10am.

Of

Behavioural Biology

freshments. Call 822-4228.

Tuesday, Feb. 4

Science. Buchanan D-205, 12:30pm. Call 739-9822.

Multimedia Seminar

WebCT (WWW Course Tools) For On-Line Courses. Murray Goldberg, Computer Science; Bob Kubicek, Bonita Bray, History; David Sanderson, Human Kinetics; Patrick O'Brien, UCFV. Hebb, 2:30-4pm. Call 822-1851/ 822-3062.

Statistics Seminar

But Is It Statistics? A Decade Of Definitions. Jonathan Berkowitz, Statistical Consultant. CSCI 301 4-5:30pm. Refreshments. Call 822-0570.

Graduate and Faculty Christian Forum Seminar

Is Christianity True? Prof. Hugo Meynell, Religious Studies, U Calgary. Buchanan penthouse, 4:15pm. Refreshments at 4pm. Call 822-3112.

Cultural and Media Studies Interdisciplinary Group

Citizenship, Democracy And Globalization. Mark Poster, History, U of California—Irvine. Green College, 8pm. Call 822-6067

19th Century Studies

'In,' Not 'Of Post-colonial Studies In Asia. Joshua Mostow, Asian Studies. Green College, 8pm. Call 822-6067

Thursday, Jan. 30

Anthropology and Sociology Creating A Critical Health Technology Assessment: The Case Of The "Triple Test." Patricia Lee and Ken Bassett. ANSO 205, 12-1pm. Call 822-2878.

Law and Society Lunchtime Seminar

Euro-Canadian Fishing Law And Social Transformations In North **BMB** Discussion Group Seminar

RNA-Protein Interactions In The Regulation Of Coronavirus RNA-Dependent RNA. Dr. Michael M.C. Lai. Molecular Microbiology and Immunology, U of Southern California. IRC#6, 4:15pm. Refreshments at 4pm. Call 822-3178.

Green College/CPSE Seminar

Issues In First Nations Post-Secondarv Education. Grace Mirehouse, president, Assoc. Aboriginal Post-Secondary Institutes (BC): Sharilyn Calliou, director, T"skel Studies; Dawn Morrison, Native Education Centre. Green College, 4:30-6:30pm. Call 822-2593/822-6067.

Genetics Graduate Program Seminar

Characterization Of SaBR, A Novel Cell Surface Protein Involved In Lymphocyte Activation, Tracy Sexton, PhD candidate, Medical Ge-

Call 224-4419. 5594.

CALENDAR POLICY AND DEADLINES

The UBC Reports Calendar lists university-related or university-sponsored events on campus and off campus within the Lower Mainland.

Calendar items must be submitted on forms available from the UBC Public Affairs Office, 310-6251 Cecil Green Park Road, Vancouver B.C., V6T 1Z1. Phone: 822-3131. Fax: 822-2684. An electronic form is available on the UBC Reports Web page at http://www.ubc.ca under 'News.' Please limit to 35 words. Submissions for the Calendar's Notices section may be limited due to space.

Deadline for the February 6 issue of UBC Reports which covers the period February 9 to February 22-is noon, January 28.

ArtsFest '97:

Artistry in Percussion

UBC Jazz Ensemble. Jack

Duncan, Cuban/African

drums. Sal Ferreras, Latin

percussion. Fred Stride, direc-

tor. Music Recital Hall, 8pm.

Engineering and

Architecture Continuing

Education Course

How To Read Blueprints And

Increase Your Knowledge Of

Construction Drawings. Robert

Salikan. CEME, 9am-5pm.

Vancouver Institute

Lecture

David Adams Richards, novel-

ist. IRC#2, 8:15pm. Call 822-

\$140. Call 822-1884.

3131.

Call 822-3113.

Calendar

January 26 through February 8

Animal Science Seminar Series

Metabolism Adjustments To Stress In Fish. M. Vijayan. Macmillan 158, 12:30pm. Refreshments. Call 822-4593.

Botany Department Seminar

Chemical Ecology And Photochemistry Of Thiarubrine Antibiotics. Jon Page, PhD candidate, Botany. BioSciences 2000, 12:30-1:30pm. Call 822-2133.

Centre for Chinese Research Seminar

Recent Developments In The Chinese PLA. Jing-dong Yuan, post doctoral student, Institute of International Relations. CK Choi 129, 12:30-2:30pm. Call 822-2629.

Lectures in Modern Chemistry

Superlattice Reactants: A Kinetically Controlled Approach To New Solid State Compounds With Designed Structure. Prof. David Johnson, U of Oregon. Chemistry 250, south wing, Ipm. Refreshments at 12:40pm. Call 822-3266.

Centre for Applied Ethics Colloquium

Computer Simulations In Business Ethics. Chris MacDonald, PhD candidate, Philosophy. Angus 415, 4-6pm. Call 822-5139.

Green College Speaker Series

The Carceral Vision: Literary Theory And Cultural Studies. Graham Good, English. Green College, 5:30pm. Reception in Graham House, 4:45-5:30pm. Call 822-6067.

Wednesday, Feb. 5

Orthopedics and

Anaesthesia Grand Rounds Hypotensive Epidural Anaesthesia For Lower Extremity Surgery. Dr. Ken Turnbull, Anaesthesia. Dr. Nigel Sharrock. Vancouver Hospital/HSC, Eye Care Centre auditorium, 7am. Call 875-4646.

Staedtler Day '97

Up To 60% Savings On Staedtler Writing Instruments. Art, Drafting And Office Supplies. Bookstore, 9am-5pm. Call 822-2665.

Faculty Financial Planning Lecture

UBC Faculty Pension Investments. Rob Heinkel and Christine McLeod, Faculty Pen-

The Interdisciplinary Seminar

Being Interdisciplinary. Ken MacCrimmon, Commerce and Business Administration. Green College, 5pm. Call 822-6067.

Thursday, Feb. 6

Board of Governors Meeting

The open session begins at 8am. Fifteen tickets are available on a firstcome, first-served basis on application to the Board Secretary at least 24 hours before each meeting. Old Administration Building, Board and Senate room. Call 822-2127.

Anthropology and Sociology **Colloquium Series**

Pictures Worth More Than A Thousand Words: Magazines And Discourses Of Feminity. Dawn Currie and Becki Ross with Shawna Murphy and Jessica Ulrich. ANSO 205, 12-1pm. Call 822-2878.

Earth and Ocean Sciences Seminar

Hydrothermal Fluid Flow And Mineral Zonation In Skarns Associated With Magmatic Systems. Larry Meinert, Washington State U. GeoSciences 330A, 12:30pm. Call 822-3466/822-2267.

ArtsFest '97:

Artistry in Percussion

UBC Symphonic Wind Ensemble. Martin Berinbaum, director. Old Auditorium, 12:30pm. Call 822-3113.

Physics and Astronomy Colloquium

Physics Of Batteries. Sylvia Wessel, Dynamotive Technologies Corp. Hebb, 4pm. Refreshments in Hebb lobby at 3:45pm. Call 822-3853.

Canadian Studies Workshop

A Lecture On Canadian Poet bp Nichol. Dean Shirley Neuman, Arts. Green College, 7:30pm. Call 822-6067.

Concert

Distinguished Artists. Anton Kuerti, piano recital. Music Re-cital Hall 8pm. \$19, adult. \$10, student/senior. Call 822-5574.

Friday, Feb. 7

Pediatrics Grand Rounds

New Advances In Pediatric HIV Disease. Dr. Jack Forbes. GF Strong auditorium, 9am. Call 875-2307.

Health Care and

Epidemiology Rounds Mortality Patterns In Persons With Developmental Disabilities: Community Vs. Institutional Care. Dr. David Strauss, U of California-Riverside. Mather 253, 9-10am. + Call 822-2772

Mathematics Colloquium

Dr. Andre Longtin, U of Ottawa. Mathematics 104, 3:30pm. Re-freshments in Math Annex 1115, 3:15:pm. Call 822-2666.

Theoretical Chemistry Seminar

Analysis Of Time Correlation Functions For Mixed Quantum-Classical Systems. Liam McWhirter, Chemistry. Chemistry D-402 centre block, 4pm. Call 822-3266.

UBC Environmental Law Conference

Corporations And The Environment. Various speakers including: Paul Watson, Sea Shepherd Society and Owens Wiwa, Nigerian Ogoni Activist. Continues Feb. 8. Curtis. Registration Friday, 6pm; Saturday, 8am. \$15 includes lunch on Saturday. Call 822-2880.

Notices

Volleyball

Faculty, Staff and Grad Student Volleyball Group. Every Monday and Wednesday, Osborne Centre, Gym A. 12:30-1:30pm. No fees. Drop-ins and regular attendees welcome for friendly competitive games. Call 822-4479 or e-mail: kdcs@unixg.ubc.ca.

Fun and Fitness

UBC Community Sport Services offers adult ballet, gymnastics and ice hockey classes for beginners. No experience is necessary. For more information call 822-3688.

Morris and Helen Belkin Art **Gallery Exhibition**

Exhibition by Vancouver artist Mina Totino, Jan. 10-March 1, 1997. Gallery hours Tuesday -Friday, 10am-5pm; Saturday, 12-5pm. 1825 Main Mall. Call 822-

Surplus Equipment **Recycling Facility**

Weekly sales of furniture, computers, scientific etc. held every Wednesday, noon-5pm. SERF, Task Force Building, 2352 Health Sciences Mall. Call 822-2582 for information.

Faculty Development

Would you like to talk with an experienced faculty member, one on one, about your teaching concerns? Call the Centre for Faculty Development and Instructional Services at 822-0828 and ask for the Teaching Support Group.

Psoriasis Laser Study

sion of Dermatology is seeking 9199.

ArtsFest '97: **Artistry in Percussion**

Trichy Sankaran, mrdangam. Music Recital Hall, 8pm. Adults \$15. Seniors/students \$8. Call 822-5574.

Saturday, Feb. 8

ArtsFest '97: **Artistry in Percussion**

John Rudolph, percussion, Salvador Ferreras, percussion. Music Recital Hall, 2pm. Call 822-3113.

ArtsFest '97: Artistry in Percussion Workshop With Trichy Sankaran,

mrdangam. Music Recital Hall, 3:30pm. Call 822-3113.



volunteers with psoriasis. We are

testing a potential new laser

therapy for psoriasis. Volunteers

who complete the treatments and

follow-up visits will receive a sti-pend. Please call 875-5254.

Garden Hours

Botanical Garden and the Shop-

in-the-Garden, 10am-5pm daily.

Call 822-9666 (gardens), 822-4529

(shop). Nitobe Memorial Garden

open 10am-2:30pm weekdays

Parents with Babies

Have you ever wondered how ba-

bies learn to talk? Help us find out!

We are looking for parents with

babies between one and 24 months

of age to participate in language

development studies. If you are

interested in bringing your baby

for a one-hour visit, please call Dr.

Janet Werker's Infant Studies Cen-

tre, Dept. of Psychology, 822-6408

Diabetes 1997 Conference

Interprofessional continuing edu-

cation conference will take place

Friday, April 4 and Saturday, April

professionals interested and in-

volved in diabetic care. For fur-

Parent Care Project

Daughters/daughters-in-lawwho

are caring for a parent in a care

facility are needed for a counsel-

ling psychology study on the chal-

lenges women face in parent care.

Involves individual interviews/

ther information call 822-2626.

5, 1997 in Vancouver for all health

Diabetic.

Young

(ask for Dawn).

The

only.

Feeling Stressed at Work?

Lower Mainland Clerical Workers: Explore your Coping Skills! Psychologists at UBC are seeking female volunteers to participate in a research study on clerical workers' stress. The aim of this project is to understand how female clerical workers respond to work-related stress, from day to day over the course of three months. The information from the questionnaires will be kept confidential and anonymous. A summary of the group results will be provided at the completion of the study. If you would be willing to participate in this study. or if you have any questions, please call Kamaljit Sidhu or Marlene Barber at 822-9199.

UBC Food Services

Celebrate Chinese New Year at Yum Yum's and other Food Service Locations. Watch for "Cookiegrams" for your Valentines in February. Last day to place your order is Feb. 12. Call 822-3663.



sion Plan. Angus 104, 12:30-1:20pm. Call 822-1433.

Noon Hour Concert

Henri-Paul Sicsic, piano. Music Recital Hall, 12:30pm. \$3 at the door. Call 822-5574

Ecology and Biodiversity Research Seminar

Sexual Selection And Speciation In The Threespine Stickleback. Jeff McKinnon, post doctoral student, Zoology. Family/Nutritional Sciences 60, 4:30pm. Refreshments in Hut B-8, 4:10pm. Call 822-3957.

Respiratory Research Seminar

Asthma And Asthma-Like Disorders Associated With Machining Fluid Aerosol Exposures. Dr. Susan Kennedy, Health Care and Epidemiology. Vancouver Hospital/HSC. 2775 Heather St., 3rd floor conference room, 5-6pm. Call 875-5653.

Occupational Hygiene Program Seminar

Occupational And Environmental Health Associated With Contaminated Site Remediation. Susan Eyre, Dillon Consulting Ltd. Vancouver Hosp/HSC, Koerner Pavil-ion G-279, 12:30-1:30pm. Call 822-9595.

ArtsFest '97: **Artistry in Percussion**

UBC Percussion Ensemble. John Rudolph, Sal Ferreras, directors. Music Recital Hall, 12:30pm. Call 822-3113.

Nursing Research Colloquium

Yes, No. Maybe So — New Approaches To Assessing Clients Decisional Conflict And Providing Decision Support. Assoc. Prof. Annette O'Connor, U of Ottawa. Vancouver Hospital/HSC Koerner Pavilion G-279, 2:30-4pm. Call 822-7453.

Volunteer Vancouver

Volunteer Recognition

Awards

Call for nominations

Nominations of one or more individuals, groups or companies are requested in the following four categories

- The Volunteer Vancouver Award
- The Leaders of Tomorrow Award
- The Community Service Awards
- The Caring Companies Award

Information and nomination forms available from Volunteer Vancouver at 301-3102 Main St, 875-9144 or fax 875-0710

Nomination Deadline: Feb. 7

Volunteer Recognition Awards Dinner: April 22

at the Waterfront Centre Hotel

Award categories for significant contributions to the university and the community include:

- Lifetime Achievement Award
- Alumni Award of Distinction
- Outstanding Young Alumnus Award
- Blythe Eagles Volunteer Service Award
- Outstanding Student Award
- Honorary Alumnus Award
- Faculty Citation Award

Deadline: March 14

For more information, call Leslie Konantz at 822-0616

UBC

A



THE UNIVERSITY OF BRITISH COLUMBIA

Draft Revision of Policy #85 Scholarly Integrity

THE UNIVERSITY OF BRITISH COLUMBIA

January 23, 1997

Dear Colleagues.

Published here are several new draft policies for your review.

The revision to our current policy on commercial enterprises on campus is intended to ensure that the university retains the right to establish rules and regulations for commercial enterprises that operate on campus through a lease or license agreement.

The new policy on formal investigations is intended to provide guidance to university officials who commission ad hoc investigations of situations or incidents at UBC.

The new policy on threatening behaviour has been drafted because of several serious incidents of life-threatening behavior over the past few years. We believe that we need to have appropriate mechanisms for response to threatening behaviour established and available to all members of the campus community.

The revision to our scholarly integrity policy is the second you will have seen in a short period. We originally consulted about the changes you will note in italics. Further suggestions have been received from the Tri-Council (SSHRC, NSERC and MRC) about our policy, and these have been incorporated in this re-draft, underlined. Grant-holders and those who supervise and/or collaborate with others in research should note these changes in particular.

Please pass on any comments or suggestions to Vice Provost Libby Nason.

Sincerely yours,

David W. Strangway President

Approved: January 1995

RESPONSIBLE VICE PRESIDENT Vice President Academic & Provost Vice President Research

Preamble

The University recognizes that teaching, research, scholarship and creative activity are most likely to flourish in a climate of academic freedom. Since the conditions for proper teaching, research, scholarship and creative activity are quite different depending upon the discipline, individual investigators are expected to assume direct responsibility for the intellectual and ethical quality of their work.

The university community has always recognized the necessity for maintaining the highest ethical standards in the conduct of scholarly activities. The University of British Columbia has developed this policy to communicate expectations, increase awareness of integrity issues, and encourage scholars (be they stucountability and responsibility.

UBC holds scholars responsible for scholarly and scientific rigour and integrity in teaching and research, in obtaining, recording and analyzing data and in presenting, reporting and publishing results, through such means as:

- evaluating the work of students in a fair manner;
- giving appropriate recognition, including authorship, to those who have made an intellectual contribution to the contents of the publication, and only those people; using unpublished work of other researchers and scholars only with permission and with due acknowledgement; and using archival material in accordance with the rules of the archives;
- obtaining the permission of the author before using new information, concepts or data originally obtained through access to confidential manuscripts or applications for funds for

UBC investigates allegations of scholarly misconduct in a timely, impartial and accountable manner and takes appropriate action, including any necessary steps to preserve evidence, when it finds that scholarly misconduct has occurred.

Procedure Summary

In order to maintain integrity in teaching, research, scholarship and creative activity and to avoid misconduct, members involved in teaching, research, scholarship and professional/creative activity shall in particular:

- evaluate the work of students fairly;
- recognize and acknowledge the intellectual contribution of others;
- not use new information obtained through access to confidential manuscripts or applications seen as a result of peer review;
- use scholarly and scientific rigour in obtaining, recording and analyzing data and in reporting results;
- ensure that authors of published work include all and only those who have intellectually contributed;
- maintain integrity in using research funds.

Acts of scholarly misconduct may be committed with varying degrees of deliberateness. It is recognized that the borderline between scholarly incompetence, carelessness and negligence, on the one hand, and intentional dishonesty, on the other, may be very narrow. The result is objectionable in any case, even if different degrees of discipline are appropriate.

Careful supervision of new members of faculty and staff by their supervisors and department heads is in the best interest of the institution, the supervisor, the trainee and the scholarly/scientific community. The complexity of scholarly and scientific methods, the necessity for caution in interpreting possibly ambiguous data, the need for advanced analysis, and the variety of protocols for reporting research data all require an active role for the supervisor in the guidance of new investigators.

Principal and co-investigators who have failed to exercise reasonable care in directing and supervising researchers who have committed academic misconduct share in the blame and should be disciplined accordingly.

A factor in many cases of alleged scholarly/scientific misconduct has been the absence of a complete set of verifiable data. The retention by the University of accurately recorded and retrievable results is of utmost importance. Wherever possible, all primary data should be recorded in clear, adequate, original and chronological form. In scientific departments, a record of the primary data must be maintained in the laboratory and cannot be removed. Original data for a given study should be retained in the unit of origin for at least five years after the work is published or otherwise presented (if the form of the data permits this, and if assurances have not been given that data would be destroyed to assure anonymity). Supervisors and collaborators should have unrestricted access to all data and products of their collaborative research. Entitlement to ownership of primary data, software, and other products of research can vary according to the circumstances under which research is conducted. A shared understanding about ownership should be reached among collaborators, especially between supervisors and their graduate students, before research is undertaken.

All authors listed should have been involved in the research. Each is expected to have made a significant intellectual or practical contribution, understand the significance of the conclusions, and be able to share responsibility for the content and reliability of the reported data. All authors listed should have seen and approved a manuscript before submission. The concept of "honorary authorship" is unacceptable. There should be guidelines developed and discussed within each unit regarding conditions of authorship for research trainees. These guidelines should be discussed with the trainees before the research is begun or they become involved in it.

Research conditions for all involved in a research team should be outlined in a letter from the principal investigator before team members become engaged. Sample letters to colleagues, post doctoral fellows and graduate students about such issues as compensation, supervision, authorship, records of data, ownership and/or use of data, publication rights, and commercialization, are available from Research Services. The Faculty of Graduate Studies sends notices about this requirement to all accepted for graduate studies and their supervisors at the time of admission. These notices and a copy of the letter from the supervisor to the graduate student detailing the terms above are filed in the student file in Graduate Studies.

A gradual diffusion of responsibility for multi-authored or collaborative studies could lead to the publication of papers for which no single author is prepared to take full responsibility. Two safeguards in the publication of accurate reports are the active participation of each co-author in verifying that part of a manuscript that falls within his/her specialty area and the designation of one author who takes responsibility through reasonable care for the validity of the entire manuscript.

Formal procedures for the investigation of allegations of scholarly misconduct are essential to assure the protection of the rights of all those involved in the case until the basis of the allegations can be examined and a resolution of the problem can be determined.

Detailed Procedures

Source of Allegation(s)

The initial report of suspected misconduct may come from various sources within or without the University. For example, the allegation may come from an individual member of faculty or staff, a student, a member of the general public, a media report, a group of individuals, *an anonymous source*, a granting source or from a University administrator.

dents or members of faculty and staff) to assume personal responsibility.

Purpose

- to promote scholarly integrity among scholars, in order to maintain and enhance the value of impartiality that universities offer society;
- to proscribe activities which breach generally acceptable standards of scholarly conduct;
- to provide a process for dealing with allegations of scholarly misconduct quickly.

Policy

UBC is responsible for developing awareness among all students and members of faculty and staff involved in teaching and scholarly activities of the need for the highest standards of integrity, acresearch or training that may have been seen as a result of processes such as peer review;

- conforming to UBC standard requirements for working with humans, animals, biohazards, radioisotopes and affecting the environment;
- using research funds in accordance with the terms and conditions under which those funds were received;
- revealing to the University, journals, sponsors, funding agencies or those requesting opinions, any conflict of interest, financial or other, that might influence their decisions on whether the individual should be asked to review manuscripts or applications, test products or be permitted to undertake work sponsored from outside sources. (See Policy #97, Conflict of Interest.)

Initial Disposition of Allegations

Allegations of scholarly misconduct received by members of the University community, including administrators, are forwarded to the Vice President Research. The Vice President Research is the central point of contact for receiving allegations, as he/she is normally sufficiently at arm's length so as to be viewed as impartial and free of personal conflicts of interest. If the Vice President Research feels it would be inappropriate to receive a particular complaint for whatever reason, he/she may refer the complaint to the Provost.

Authority of the Vice President Research and the Provost

The Vice President Research and the Prov-



THE UNIVERSITY OF BRITISH COLUMBIA

Draft Revision of Policy #85 — Scholarly Integrity (cont.)

ost both have the authority: to close down and declare "off limits" facilities used for research; to protect the administration of University and outside funds involved in the research; to obtain and retain relevant documentation (eg lab notes, computer disks, hard drives, proof of credentials) related to an investigation; to request that members of the university community appear before an investigative committee and answer its questions or supply materials to it.

Allegations Referred to the Vice President Research or the Provost

The Vice President Research or the Provost may choose to refer the matter back to the unit or to dismiss the allegation. If in the judgement of the Vice President Research or the Provost the allegations have sufficient substance to warrant investigation, he/she informs the student(s) and/or employee(s) named in the allegation, in writing. The written notice summarizes the allegation in sufficient detail to allow the individual(s) concerned an opportunity to respond. Responses received are forwarded to the investigative committee if established.

Appointment of Investigating Committee

The Vice President Research or the Provost appoints an Investigative Committee consisting of three experienced members, one external to UBC, and all at arms length from both the person(s) alleging misconduct and the person(s) alleged to have misconducted themselves. The terms of reference of the Investigative Committee are to determine if scholarly misconduct has occurred, and if so, its extent and seriousness. The Committee elects one of its members as Chair.

As this is an internal investigative process, proceedings are conducted in private and persons alleged to have misconducted themselves are not entitled to representation by legal counsel when they meet with the Investigative Committee.

In cases of collaborative research involving other institutions, it may be desirable to conduct either parallel investigations, or a joint investigation, with appropriate changes to the procedures outlined below. Whichever method is chosen, UBC will cooperate fully with other institutions.

Investigation within Sixty Days

Due to the sensitive nature of allegations of scholarly misconduct, the inquiry by the Investigative Committee should be completed and a draft report prepared within sixty days of the initial written notification to the respondent(s). In complex cases a full report may not be possible in this time frame, but some assessment must be prepared within three months. interest on the part of those involved in the inquiry, including both those accused and those making the allegations.

It may seek impartial expert opinions, as necessary and appropriate, to ensure the investigation is thorough and authoritative.

In the investigation process, the persons alleged to have engaged in misconduct have the right to know all allegations against them and the right to respond fully.

Review of Draft Report

The involved individual, any collaborators or supervisor related to the investigation are given reasonable opportunity to review and comment on the draft report.

Findings and Recommendations of the Investigative Committee

The Investigative Committee, upon reviewing all the elements in the case, will report on its finding of whether or not scholarly misconduct occurred, and, if so, its extent and seriousness. If the allegations are proven on a balance of probabilities, the Investigative Committee shall also make recommendations in its report on the need to:

- withdraw all pending relevant publications;
- notify editors of publications in which the involved research was reported;
- redefine the status of the involved individuals;
- ensure that the units involved are informed about appropriate practices for promoting the proper conduct of research;
- inform any outside funding agency of the results of the inquiry and of actions to be taken;
- recommend any disciplinary action to be taken.

If the allegations are not substantiated, the Committee may make recommendations in its report on the need for remedies.

The Report

The report is addressed to the Vice President Research or Provost, whichever commissioned the investigation, and details the full allegation(s), the investigative steps taken by the committee, including the individuals with whom it communicated and what their evidence was, its findings and any disciplinary or remedial action it is recommending. Recognizing that the report is a public document under British Columbia's Freedom of Information and Protection of Privacy legislation, individual identifiers are removed from the final version of the report and are maintained in a separate schedule that is unit within 75 days of commissioning the report. For students, the Administrative Head of Unit with authority to receive and act on the Committee's report is the President; for members of staff, it is the Director or Head of Department; for members of faculty, the authority may be either the President or the Dean/Head, depending on the nature of the discipline contemplated. (The Agreement on Conditions of Appointment states that only the President may discipline a faculty member by dismissal or suspension without pay.) The individual receiving the Committee's report consults with the President, the Provost, the Vice President Research, the Dean, and if appropriate the Head of Department, about its report. In cases where scholarly misconduct is judged to have occurred, the Provost, the Vice President Research, the Dean, the Head and the President will discuss appropriate action based on the nature and seriousness of the misconduct.

Decision about Discipline/Remedies

The appropriate head of administrative unit communicates to the parties involved in a timely manner regarding the decision reached in the case in general, and to the parties affected by decisions on discipline/remedies about the outcome particular to them.

Appeal of Discipline

Discipline imposed for scholarly misconduct may be appealed:

- By Faculty members in the Bargaining Unit: through the grievance procedure outlined in Section 21 of the Agreement on the Framework for Collective Bargaining with the Faculty Association or Section 10 of the Agreement on Conditions of Appointment.
- By Staff Members in Unions: through the grievance procedure established in the relevant collective agreements.
- By Management and Professional Staff: through the grievance procedure established in the Framework Agreement (yet to be negotiated).
- By Employees not covered above: directly to the President in writing.
- By Students: through the Senate Committee on Student Appeals on Student Discipline.

Protection of Reputation

When no scholarly misconduct is found, every effort will be made by the Vice President Research and the Provost to protect the reputation of the individual named from undue harm, as well as the reputation of the University. The Vice President Research, Provost, Dean and Head may consult about any remedial steps that need to be taken in the circumstances.

Education

In order to disseminate information about issues this policy is intended to address, the Vice President Research and the Provost publish annually a report summarizing the facts of cases of scholarly misconduct and their disposition. A copy of this report is forwarded to the granting councils.

The Vice President Academic & Provost arranges for training and development about various aspects of scholarly integrity for faculty, staff and students, and reports annually on this activity to the University Community.

Cross-References

See also, Policy # 87 - Research, Policy #88 - Patents and Licensing, Policy # 97 - Conflict of Interest, Statement on Academic Freedom in UBC Calendar.

Definitions

Scholarly misconduct, interpreted in light of practices that are appropriate within scholarly communities, includes:

- plagiarism;
- fabrication or falsification of research data;
- conflict of scholarly interest, such as suppressing the publication of the work of another scholar;
- the unfair evaluation of a student's work;
- failure to obtain approvals for research involving animal and human subjects, biohazards, radioisotopes, environmental effects, or to conduct such research in accordance with the protocols prescibed;
- other practices that deviate significantly from those which are acceptable as appropriate within scholarly communities;
- specific definitions or clarifications adopted by a Faculty of any matter in the points above and any other matter specifically defined by a Faculty as misconduct in scholarly activity, in order to ensure proper recognition of the standards appropriate to the scholarly communities within that Faculty, taking into account Codes of Professional Conduct where applicable; but
- "misconduct" does not include any matter involving only an honest difference of opinion, mistake or an honest error of judgment.

Scholarly Activity includes all activity that were it to be undertaken by a faculty member would be appropriate for inclusion on a curriculum vitae or in an Annual Report to the Head as teaching, scholarship, research or other creative/ professional activity.

Considerations for the Investigative Committee

The Committee aims to review all scholarly activity with which the individual has been involved during the period of time considered pertinent in relation to the allegation, including any abstracts, papers or other methods of scholarly communication. A special audit of accounts may also be performed on the sponsored research accounts of the involved individual(s). *Individuals may be required to prove credentials*.

The Committee has the right to see any University documents and question any students or members of faculty and staff during its investigation.

The Committee ensures that it is cognizant of all real or apparent conflicts of

not publicly accessible.

Materials from the Investigation

The Chair of the Committee keeps copies of all materials, records and notes of interviews with individuals involved that in a secure and confidential manner and hands them over to the Vice President Research or the Provost along with the Committee's report. The report and related records are kept for a period of six years. All requests for access to records will be handled in accordance with the provisions of the B.C. Freedom of Information and Protection of Privacy Act.

Report to the Appropriate Administrative Head of Unit within 75 days

The Vice President Research or the Provost forwards the investigative report to the appropriate administrative head of

Report to Granting Councils

Where misconduct is found to have occurred, the investigative report and decision regarding discipline/remedies will be forwarded within thirty days of the decision of the administrative head of unit to any granting council that has funded the research.

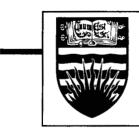
Good Faith

In all proceedings and subsequent to a final decision, the University will undertake to assure that those making an allegation in good faith and without demonstrably malicious intent are protected from reprisals or harassment. False allegations made purposefully will give lead to discipline for the individual making the allegation by the University. *Falsification* means alteration, selective omission or misrepresentation of research data or citations.

Fabrication means inventing or forging of research data or citations.

Plagiarism means representing the thoughts, writings or inventions of another as one's own.

Principal Investigator means the person who has ultimate responsibility for a research project. In the case of a project funded by an external or internal grant, normally the holder of the grant. In the case of a project that is not funded, the initiator of the project. The principal investigator is usually the supervisor of the research team (which may include other faculty members) and is usually a faculty member.



THE UNIVERSITY OF BRITISH COLUMBIA

POLICY ON RESPONSE TO THREATENING BEHAVIOUR Draft

RESPONSIBLE: All Vice Presidents

PURPOSE:

UBC strives to provide an environment in which all individuals can work and study without threat to personal safety. This policy outlines UBC's response when an emergency situation, caused by a direct or indirect threat, to personal safety or violence towards any member of the University community, occurs. It also deals with situations that are not emergencies, but in which personal safety is a concern. It gives the Personal Security Coordinator the authority to organize an effective response to incidents and cases. It ensures that senior administrators are kept appropriately informed of developments in every case.

POLICY:

Members of the University Community who are faced with an urgent situation involving threatening or violent conduct, where there is reasonable belief that the safety of persons may be threatened, should contact the police immediately. This includes such situations as threats, threatening letters and bomb threats. The University will take steps to remove immediately from campus a person who exhibits violent or threatening behavior. Individuals may be suspended from the University and barred from the campus on a continuing basis for violent or threatening behavior. The University will pursue appropriate legal and disciplinary measures in such cases. In addition, UBC coordinates responses to non-emergency situations involving personal security through the Personal Security Coordinator.

PROCEDURES:

1. Emergency Situations

When anyone on campus believes a personal security emergency exists, the following procedure is used:

Individual(s) threatened

a) The first priority is your safety and that of the people around you. Lives take precedence over property.

Whenever possible, get to a safe location and alert those around you.

- b) Dial 911 to contact the police. Provide your location and complete details of the situation.
- c) Dial 822-xxxx to contact the Personal Security Coordinator.

Personal Security Coordinator

The Personal Security Coordinator ensures that a trained delegate is always available to respond to the emergency phone number when she/he is not available.

- a) Check whether the individual who was exhibiting threatening/violent behavior was removed by RCMP.
- b) Acts as liaison between the RCMP and UBC, and on behalf of the President takes any steps that may be lawfully taken to deal with the emergency, including but not limited to:
 - order the exclusion of all or (i) specified persons from all or any part of the campus;
- (ii) order the closing of all or any part of the campus or of all or anypart of the building;
- (iii) order the cessation or curtailment of any University activity.
- c) Once the emergency is defused, convene the Case Team if necessary. If team action is not required, refer the matter as appropriate.
- d) Ensure follow-up on any steps decided by the Case Team, including contacting outside authorities, consulting those affected and keeping them informed of developments in the case, and arranging for any other special measures to protect members of the University Community.
- e) Maintain records of the case.
- f) Convene de-briefing sessions and ensure that lessons learned are

integrated into protocols and procedures, and conveyed to the President and Vice Presidents.

The Case Team

The Case Team is chaired by the Personal Security Coordinator and composed of individuals selected to be oncall for this purpose who have been oriented by the Personal Security Coordinator. Case Team membership is:

- · Personal Security Coordinator delegates
- the Director of Campus Security
- a representative from Legal Affairs
- a psychologist trained in dealing with violent/threatening people
- a representative from Human Resources (for staff)
- a representative from the Registrar's Office (for students)
- a representative from the Provost's Office (for faculty)

This group will be augmented as needed by individuals selected for responsibility for faculty, staff and students in the area under threat or other key functions where applicable, such as:

- the Administrative Head of Unit
- the Dean
- Housing and Conferences
- a representative from University Relations
- a representative from Student Health/Counselling Services/ Women Students'Office
- a representative of the Union, AAPS or Faculty Association
- a representative from the RCMP University detachment
- an expert in critical stress debriefing
- and other units as needed.

Those who are requested to participate as members of the team accord such requests the highest priority.

The Case Team formulates a recommendation for the President regarding a continuing exclusion from campus if required. If a traumatic incident has occured, the Case Team ensures that any members of the community affected are referred for support, and where appropriate, contacts internal providers of counselling services or the external supplier of the Employee and Family Assistance Plan to arrange for criticial incident stress debriefing services.

2. Non-Emergency Situations

Students and members of faculty and staff who come into contact with individuals on campus who are obviously distressed or who exhibit aggressive behavior that does not in itself constitute an emergency situation, may also consult the Personal Security Coordinator. This includes receiving bomb threats or threatening letters. Experience has shown that an individual in such a state often interacts with more than one department; it is therefore important that the Personal Security Coordinator be informed so that she/ he can share the information offer appropriate assistance. This may assist in the prevention of emergency situations in the future.

3. General

The Personal Security Coordinator publishes an annual report describing the general nature of situations dealt with under this policy, to help the University Community gain general awareness of appropriate responses.

The Personal Security Coordinator initiates educational programs to raise awareness about appropriate responses to emergencies.

DEFINITIONS:

A Personal Security Emergency exists when a reasonable person believes that there is an imminent risk to personal safety and that there is a need for immediate intervention.



THE UNIVERSITY OF BRITISH COLUMBIA

Draft Revision of Policy #98 — **Commercial Enterprises on Campus**

oval is the extent to which a commen

The prime consideration for granting ap- | between the commercial enterprise and | **DEFINITIONS**: the University is prepared, detailing all

PURPOSE:

To ensure that commercial enterprises on campus conduct their businesses in ways that promote and reinforce the objectives of the University.

POLICY:

Commercial undertakings on the University Campus are permitted only with the prior written approval of the Vice President responsible for the area/function in which the commercial undertaking is to take place and through a provision in the lease agreement between UBC and an organization such as the Alma Mater Society or Discovery Parks Inc.

Commercial activities of short duration, including the making of films and the staging of events such as rock concerts, also require the prior written approval of the Vice President responsible for the area/function.

cial enterprise promotes and reinforces the objectives of the University.

All leases, licenses or other agreements that permit commercial enterprises to operate on campus incorporate the condition that the products and services offered meet the needs for products and services of students, staff, faculty and residents at optimum value, with minimal impact on the environment, and with the application of ethical and efficient procedures.

In addition, any party operating a commercial enterprise on the campus is required to comply with all rules and regulations that the University may establish from time to time.

PROCEDURES:

When a commercial enterprise is authorized to operate on the University Campus, a lease, license or agreement arrangements, including time period covered, the insurance required and financial terms.

The Vice President of the area affected ensures that use of the University Campus by any tenant, its agents, customers, employees, invitees, and/or licensees accords with the policies and procedures of the University, in an environment that promotes and reinforces the objectives of the University.

Changes in University rules and regulations affecting commercial enterprises are communicated in writing.

Rules and regulations established for commercial enterprises may not be applicable to those with agreements effective prior to the approval date of this policy; however, all renewals of such agreements will incorporate terms as described above.

University Campus means all locations where the University conducts its teaching, research and service operations.

Commercial enterprise means any commercially oriented business or organization.

Ethical procedures refers to those conducted with the highest level of integrity. in full compliance with the law, as well as the relevant policies of the University.

Minimum impact on the environment describes activities that promote the reduction, reuse and recycling of materials and equipment; reduce thte use of materials toxic to the environment: and standardize common supplies and equipment where possible.

Optimum value means the delivery of the right goods and/or services to the right place, at the right time, and at the right price, with a minimum impact on the environment.



THE UNIVERSITY OF BRITISH COLUMBIA POLICY ON FORMAL INVESTIGATIONS Draft

RESPONSIBLE: All Vice Presidents

PURPOSE: To provide guidance to University officials who commission formal investigations of situations or incidents at UBC.

POLICY:

University officials who consider there to be a need to investigate a situation or incident for which there is no existing policy at UBC seek advice on the terms of reference for the investigation and the appropriate level and nature of the investigation. For situations/incidents involving students and members of faculty. Legal Affairs in the President's Office is consulted. For situations/incidents involving members of staff, the Department of Human Resources is consulted. In all cases, the administrative head of unit keeps the appropriate dean and vice president informed of investigative activity contemplated or undertaken.

Legal Affairs/Human Resources will provide advice and written guidelines as required to heads seeking such advice.

PROCEDURES:

Legal Affairs in the President's Office and the Department of Human Resources provide written guidelines that address issues common to most investigations as well as those identified as uniquely appropriate to the situation. Considerations include:

- single investigator or more than one person
- internal/external investigators
- to whom does the investigator report
- what is to be investigated substance checklist method
- clear and practically doable terms of reference, with advice on fair process, onus, standard of proof and evidence issues

- opportunity for mediation (can the investigation be suspended partway through?)
- access to people personal interviews confidentiality
- access to information
- timing "report out" date; interim progress reports
- resources available to them legal, secretarial, administrative
- format of report sections, use of individuals' names in body of report, recommendation section, release of report to affected persons
- disposition of notes and other documents collected as part of the investigation
- level of thoroughness needed examination, re-examination, a person's right to know all charges against him/

her, characterization of the facts within the report as confirmed or not

- is the end result a recommendation, finding, decision? to whom should it be addressed?
- opportunity for response
- should the report be considered by a committee or individual, nominated by the President or person commissioning the report, to suggest an appropriate course of action before implementation?
- if there is a fee involved, or other compensatory arrangement (such as teaching release), this should be worked out and included in the terms of reference if possible.

DEFINITIONS: None



Dorothy Somerset (centre) kicks up a storm with cast members of the 1953 Blue and Gold Revue. Among her many achievements, Somerset served as the first head of the Theatre Dept. and is credited with helping to legitimize the academic study of theatrical arts at UBC.

Dorothy Somerset set the stage at UBC at the start

lady of the Vancouver Little Theatre in the 1920s when she began her association with UBC, teaching French.

A Radcliffe College graduate, Somerset had performed with the Harvard Dramatic Society, studied theatre in England, directed the annual produc-the first all-student drama society in

Dorothy Somerset was the leading | Dept. of Extension, Somerset had established an impressive list of theatre services which included a playlending library, short drama courses, a correspondence course, an evening class in playwriting and a radio series called the University Drama School.

> She had also established the department's Summer School of the Theatre the first important step in the development of drama courses on campus. The school, first held in 1938, continued until its activities merged into the Theatre Dept.'s credit courses in 1964.

Somerset's legacy lives despite studio's close by Connie Bagshaw

Staff writer

Of the hundreds of productions that have been performed in the Dorothy Somerset Studio over the past 30 years, two stand out in Ian Pratt's mind.

One was the ambitious staging of

Shakespeare's Merry Wives of Windsor as a musical; the other was an experimental piece by a New Yorkbased avant-garde troupe whose performance featured male frontal nudity. The audience included several elderly patrons in the front row.

"Flexibility is the studio's great strength," said Pratt, an associate professor of theatre who joined UBC as a part-time staff member in 1960.

As a technical assist-

ant at the Frederic Wood Theatre in 1968, Pratt helped in the actual construction of the Dorothy Somerset Studio, named for the founding head of UBC's Theatre Dept. established a decade earlier.

His memories, prompted by next month's closing of the studio as a performance space, include how a bare storage basement built onto the back of the Frederic Wood Theatre was transformed into what would become the training ground for so many of Canada's theatre elite including Brent Carver, Nicola Cavendish, Scott Hylands, Larry Lillo and Goldie Semple. "Some of the best shows I've ever seen were presented in that studio," said Bob Eberle, an assistant professor of Theatre and production manager of the Frederic Wood Theatre. "The intimacy of the space provided a true apprenticeship setting for the students working with guests, faculty and staff, and created a closeness between the actors and the audience.

A number of theatre companies were founded by UBC graduates who gained their experience at the Dorothy Somerset Studio, including Touchstone Theatre Company and the Tamahnous Theatre Workshop Society.

Although Somerset's name will not be connected to a performance venue on

campus, it will be attached to rehearsal space being proposed in phase two of the new Creative Arts Building, currently being designed. Upon closing, the studio will be converted to a costume room which Eberle described as being like a laboratory.

"Student involvement in creating costumes is significant," Eberle said. "Currently they use the trap room under the Frederic

Wood Theatre, working around equipment, props and anything else that has to come up through the stage floor for a production on the main stage. It's terrific that the theatre will also be able to reclaim that space entirely for what it is intended to be."

Eberle said that while department members lament the closure of the Dorothy Somerset Studio, they are excited about moving to the BC Tel Studio Theatre located in the new Chan Centre



Somerset

Canada - and made guest appearances with the British Guild Players.

By the time she became the first permanent staff member of UBC's fledgling Dept. of Extension in 1937, where she served as the supervisor of drama for the next 20 years, Somerset was one of Vancouver's most trained and experienced thespians.

It was at this time that she embarked on one of her greatest contributions to the theatre - making it an accepted academic discipline at the university.

By the mid-1930s, universities across North America had started to subtly shift theatre and music from the performance stage into the classroom through the back door as extracurricular studies-a method since referred to as the bootlegging of the arts

Within two years of joining the Aug. 11, 1991.

In 1951, Somerset was given the old Totem Coffee Bar to convert into a theatre for academic work in dramatics. A vear later, it opened as the first Frederic Wood Theatre - Vancouver's only legitimate theatrical venue at the time.

A few years later, when her request to the English Department curriculum committee for a poetry speaking course was denied, Somerset applied to Senate for a separate theatre department. It was approved in 1958, and Somerset was appointed as head.

Grateful of so many years of achievement and contributions to the university, UBC conferred Somerset with an honorary degree in 1965. She died on

"So many people have fond memories of their time spent at the studio. An enormous amount of learning has taken place there."

Eberle explained that because the studio was a venue for individual productions, students had the opportunity to learn and understand every aspect of staging a play, from preparing budgets to lighting design.

for the Performing Arts whic opens to the public in May.

Designed to accommodate a variety of configurations tailored to each production or event, the facility has an audience capacity ranging from 180 to 288. The Dorothy Somerset Studio has 80 seats.

"It is a massive upgrade for us," Eberle said. "Of course, as standards go up, so does the pressure."

Treated with Tango is the final production playing at the Dorothy Somerset Studio before closing its doors.

Written and directed by MFA directing student Valerie Methot, Treated with Tango runs Jan. 22 to Feb. 1, with additional performances Feb. 6 to 8 during UBC's annual Arts Fest.

Proceeds from the Jan. 23 and Feb. 8 performances of the play, inspired by Methot's loss of a close friend to AIDS, will be donated to A Loving Spoonful which provides nutritious meals to people living with the disease.

News Digest

The Law Students' Legal Advice Program (LSLAP) is operating in 25 neighbourhood clinics throughout the Lower Mainland until March 21, offering free legal advice to low-income residents.

Two hundred law student volunteers offer advice on a variety of subjects including small claims actions, landlord-tenant disputes, wills, employment issues and criminal matters. LSLAP also provides a low-cost service for people seeking uncontested divorces.

Two campus clinics are open — one is located in the Student Union Building and one in Brock Hall.

For more information about other clinic locations and hours of operation, call 822-5791.

.

The Peter Wall Institute for Advanced Studies has opened its Major Thematic Grant Program.

A grant is for a period of three years and for up to \$500,000. The institute was established to support fundamental, interdisciplinary research and creative activities which have the potential to result in significant advances to knowledge. The key criteria for the Major Thematic Grant Program, as for all activities of the institute, are that the work be exciting, innovative, and unlikely to occur without institute funding. The thematic proposals should involve basic research and should cut across disciplinary boundaries.

The project is expected to bring together a multi-disciplinary team of excellent researchers from UBC as well as distinguished international experts. The competition is conducted in two stages. The stage one deadline is March 15, 1997 and the announcement of those proposals invited to proceed to stage two will be made by April 30.

For more information, phone 822-4782, fax 822-4222, e-mail info@pwias.ubc.ca or check the institute's web site at http:// www.pwias.ubc.ca.

Acadia Mini Mart, owned and operated by UBC Food Services since 1986, will be leased through Housing and Conferences to an independent contractor as of Feb. 1. Judy Vaz, acting director of Food Services, cited a decrease in profitability for the move. The operation will continue as a mini grocery store, located in the Fairview complex. Some changes to the store's product line are planned.

Alan Donald, Ph.D. **Biostatistical Consultant**

Medicine, dentistry, biosciences, aquaculture



Classified

The classified advertising rate is \$16.50 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 6, 1997 issue of UBC Reports is noon, January 28.

Accommodation

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.

BROWN'S BY UBC B&B Comfortable and relaxing accommodation close to UBC in quiet area. Quality breakfasts, aueen-sized beds, private bath available. Satisfaction is assured for your friends or professional guests. Reasonable rates. 222-8073.

PENNY FARTHING INN 2855 West 6th. Heritage House, antiques, wood floors, original stained glass. Ten minutes UBC and downtown. Two blocks from restaurants, buses. Scrumptious full breakfasts. Entertaining cats. Views. Phones in rooms. Call (604)739-9002. E-mail:farthing@uniserve.com.

VANCOUVER APARTMENT FOR RENT. 1 bedroom, Beach Avenue by English Bay. Partial view mountains and water, near Stanley Park. Furnished. Available 7 Jan. to 30 April. \$750 include. utilities, cable. Phone 687-4008 (Vancouver), 384-7473 (Victoria) E-mail:samuelw@sfu.ca.

ONE BEDROOM CONDO ON CAMPUS. The Bristol at Hampton Place. Elegant complex with exercise room, jacuzzi, sauna, lounge and guest suites. Fireplace and in-suite washer/ dryer. Rent \$1050/month. 1 yr. lease. Available March 1/97. No pets. No smoking. References required. 949-2624 evenings.

MODERN 1 BR FURNISHED GARDEN LEVEL basement suite, near UBC and bus. Suit 1 person. Private entrance. 6 appliances. N/pets, N/S. \$888/month incl utilities. Call 224-9319.

For Sale

CO-OP APARTMENT FOR SALE. Highbury Manor, 3784 West 16 Ave. Spacious, bright and sunny 2 bedroom 1028 sq. ft. apartment



Housing Wanted

FEMALE GRADUATE STUDENT seeks affordable housing. Willing to housesit (short- or long-term) or to work for reduced rent. UEL references available. Flexible move-in date. Please phone 224-5962

VISITING FACULTY AND FAMILY from Newfoundland require a furnished, two bedroom apartment for the months of March and April. Please contact Lance Corey at 822-6980 or 224-5243 to make arrangements.

Services

UBC FACULTY MEMBERS who need independent assistance in selecting the most appropriate UBC Faculty pension or retirement options call Don Proteau, RFP or Doug Hodgins, RFP at 687-7526 for more information. Independent financial advice for faculty members since 1982.

TRAVEL - TEACH ENGLISH The Canadian Global TESOL Training Institute offers in Vancouver a 1 week (June 18-22) eve/wkend intensive course to certify you as a Teacher of English (TESOL). 1000s of overseas jobs avail. NOW. Free info pack (403)438-5704





Opening Act

Members of the media received a sneak preview on Jan. 16 of Vancouver's newest arts facility, the Chan Centre for the Performing Arts. Located by the Rose Garden at the northeast end of campus, the centre houses the 1,400-seat Chan Shun Concert Hall, the BC Tel Studio Theatre with seating capacity ranging from 180 to 288, and the Royal Bank Cinema, a 158-seat facility for film, video and slide screenings. A two-week spring festival, slated for May 11-25, will mark the official public opening of the centre.

School builds downtown ties

The School of Architecture is forging closer ties with the professional community with a little help from its friends. Friends of the School of Architecture (FOSA), a non-profit society, was founded in 1995 to support, promote and advise the school.

BUILDING OR GROUNDS TROUBLE?

Contact Plant Operations by phone, fax or e-mail to report any building or grounds *maintenance* item and request service.

Building or Groundsphone:822-2173fax:822-6969e-mail:tc@plantops.ubc.ca

Exterior Lights Onlyphone:822-2173fax:822-6969e-mail:lightsout@plantops.ubc.caplease note number of lamp standard

*please give complete details including CONTACT NAME and NUMBER



Since FOSA's inception, about \$66,000 in donations has been raised by the society. The money will be used to support activities such as memorial lectures, special courses and a new architecture students' publication.

The society may also assist the Architectural Institute of B.C. (AIBC) with the establishment of a new AIBC headquarters downtown.

School of Architecture Director Sandy Hirshen said benefits to the school from the new AIBC location include an urban design studio, a venue for lectures and exhibition space for student work and travelling shows downtown.

"Gaining a downtown presence would be a major asset to the school, and greatly increase our opportunities to work with and learn from industry," Hirshen said.



The Thunderbird men's and women's basketball teams take on the University of Calgary Jan. 24-25 in War Memorial Gym. The women's games start at 6:15 p.m. and the men's games start at 8 p.m. both days. The teams then travel to Victoria for two games against UVic Jan. 31 and Feb. 1, before returning to War Memorial for games against the University of Saskatchewan Feb. 7-8, also at 6:15 p.m. (women) and 8 p.m. The Thunderbird hockey team faces off against the Saskatchewan Huskies Jan. 31-Feb. 1 and against the Regina Cougars Feb. 7-8. All games take place in the Thunderbird Winter Sports Centre at 7:30 p.m. The men's and women's volleyball teams meet teams from Regina in War Memorial Gym. The women's games start at 6:15 on Jan. 31 and 8 p.m. on Feb. 1, while the men start at 8 p.m. Jan. 31 and 6:15 p.m. Feb. 1. For further information call 822-BIRD.

People

by staff writers

embers of the Psychology Dept. have won two of the three top awards presented by the Canadian Psychological Association.

Prof. **Peter Suedfeld** received the 1996 Donald O. Hebb Award for distinguished contributions to psychology as science.

Sucdfeld's wide-ranging research contributions have been influential in environmental, personality, social, health, political and forensic psychology.

Prof. **Kenneth Craig** received the 1996 Education and Training award.

One of Craig's most significant contributions in this field was his leadership in establishing an accreditation program for education and training in professional psychology in Canada.

The awards were presented at the association's annual general meeting held in Montreal.

A ssociate Professor of Language Education **Ronald Jobe** has been honoured with the 1996 Claude Aubry Award, presented by the International Board of Books for Young People, in recognition of his significant contributions to Cana-

dian children's literature. A former teacher and school librarian with the Edmonton Public School Board, Jobe pioneered the children's literature round-table movement in the late 1970s.

Formed in Edmonton 20 years ago, round tables have since been established in about 30 communities across Canada to provide opportunities for the celebration and discussion of children's books.

A member of the UBC faculty since 1978, Jobe received his BEd from the University of Alberta and both his MA and PhD from the University of Minnesota.

From 1990 to 1994, he served as the first non-European president of the International Board on Books for Young People, an organization drawing members from 62 nations.

In addition to Canadian children's literature, Jobe's research interests include multicultural children's literature, international children's literature in translation and the use of children's literature in the classroom.

• • • • •

ohn Vanderstoep has been appointed head of the Dept. of

Food Science for a three-year term. Vanderstoep received his undergraduate and graduate degrees at UBC before joining the Faculty of Agricultural Sciences in 1972.

An active member of the Canadian Institute of Food Science and Technology for many years, he served as chair of numerous committees including the planning, nominations and public policy committees, and served as the association's president in 1983-84. He is currently a board member of the Agri-Food Research Council and a member of the UBC Senate.



Vanderstoep

Vanderstoep's research interests include food toxicology and the nutritive quality of food.



BC Hydro PowerSmar Ben Christiansei Benlen Engineering Ltd C.Y. Lot C.Y. Loh and Associate John Feig Christopher Foundatio Terry Hu Concord Pacific John Kay Coopers and Lybrand DW Thomson Consultants Ltd Ron Davis The ENCON Group Gerry Epp ast and Epp Partners John Gallaghei Gallagher Brothers Contractors Ltd. Garibaldi Glass and Alumi Glastech Contracting Andrew Harmswort Graham Harmsworth Lai and Associates Ltd ienriquez and Partners Richard Henrique David Thom IBI Group Inland Glass and Aluminum Ltd. ntertech Construction Ltd. Lawrence Bicknel Jardine Rolfe Ltd. Ladner Downs Barrister Larkspur Foundation Christopher Downs Charles Bental Locke MacKinnon Domingo Gibsor Grant MacDonald Penreal Advisors Ltd. Robert Freundlich R. Freundlich Associates Ltd Reid Crowther and Partners Rheinzink Canada Ltd. Salt Lick Projects Ltd. Scott Construction Singleton Urguart Scott Barristers John Singleto Sterling Cooper and Associate Team Glass Co. Ltd. Michael Barne Toby Russell Buckwell and Partners .R. Trades Reproduction Ltd. Robert Webe Weber and Associates Architectural Consultants Inc Weiler Smith Bowers Consultants Yolles Consulting Engineers Jim Mendei

Feature

Humming to extremes

Lab explores the extraordinary lives of tiny birds

by Charles Ker

Staff writer

cartoon taped to Lee Gass' laboratory door carries the caption, "Hummingbirds on vacation."

The drawing depicts five birds flying over a house equipped with a feeder. The appending dialogue reads: "Dad, dad... There's a feeder!... Can we stop?"

Cartoonist Gary Larson, famous for taking commonly held views about animals and putting them in human context, is half right. In the case of hummingbirds, people don't know much beyond the fact that they're small, fast and have their own feeders. As for vacations, biologists know that West Coast hummingbirds migrate to Mexico each winter but do not, as Larson suggests, fly in groups. Gass says they are distinctly anti-social.

Two years ago the associate professor and his zoology students gained notoriety after a member of Parliament labeled their research a waste of taxpayer money. The MP took exception to a \$32,220 grant for a study on the behavioural energetics of hummingbirds.

When a reporter asked Gass to explain the relevance of his 30 years of research into hummingbird behaviour, he put Larson's visual world into words.

"Whatever mechanisms animals use to detect patterns in the environment and respond to them is likely to be very, very general because it is likely to be very, very old," he explained. "So these processes we're beginning to see in animals might be processes that we humans also use."

But comparisons with Larson art end there as efforts in the hummingbird laboratory are geared toward serious science.

The lab is located in an old, wooden building dwarfed on either side by the Centre for Integrated Computer Systems Research (CICSR) and the Advanced Materials and Process Engineering Laboratory (AMPEL). The location is appropriate because work done in the lab relates to that of its neighbours.

Computer experts at CICSR are trying to determine what their artificially intelligent robots need in terms of information processing and perception to perform certain tasks. Similarly, Gass and colleagues seek to understand what principles of memory and sight apply when hummingbirds are faced with new situations.

Hummingbirds are clearly engineering narvels. They routinely accelerate and decelerate at 2 Gs - three times the force that throws a car into a skid. Herein lies the human fascination with these phenomenal fliers - they're extreme. Gass' preoccupation with hummingbirds began in the late 1960s while he was studying at the University of Oregon. While resting during a mountain hike, he noticed two Rufous hummingbirds squabbling. "They both recognized a territorial boundary and both of them defended and violated it," he says. "Often they'd go up against a wall that obviously they



UBC's hummingbird lab has produced the first measurements of bird acceleration.

transform from snow to a mass of flowers and back to no flowers within eight weeks. During this time frame, hummingbirds arrive, set up their territories, gain fat for migration and move on.

What Gass observed was that as flowers blossomed and died, territory size was constantly renegotiated as the birds' fuel supply grew and dwindled.

e also noted the tremendous amount of fuel and energy required to run the average threeand-a-half gram hummingbird. Wings beating 40-80 times per second provide power for continuous acceleration and braking. No wonder energy conservation was uppermost in their tiny minds.

Gass would later discover, in a collaboration with UBC colleague Peter Hochachka, that when the hot-blooded birds first arise in the morning they burn stores of fat and within 10 minutes switch over to burning sugar for the remainder of the day. Deprive a hummingbird of food for 90 minutes and it can lose up to 15 per cent of its body weight. bution of energy in a territory and they awake with that knowledge. Our understanding at the time was that little organisms with little brains weren't supposed to be able to do that."

Gass has subsequently learned that hummingbird memory extends well beyond the meadow. He has been capturing and releasing hummingbirds for observation at UBC since 1980. Even after a year in captivity, birds released on Vancouver Island were later spotted back on the island after their Mexico migration.

he attributes that make hummingbirds great subjects for observation in the wild hold true in captivity. Hummingbirds have three primary states — sitting, hovering and flying — which makes it easier to estimate the energy costs needed for cruising speed and immediately decelerated. However, in a tunnel twice as long. they accelerated, cruised a bit and then decelerated. This was a key finding considering that hummingbirds in the wild usually travel less than a metre from flower to flower. Gass had previously assumed that any flight less than one metre was done at cruising speed.

"Lara's discovery meant we couldn't sweep acceleration under the table." says Gass.

Chatters also discovered that female hummingbirds, with their longer, broader wings, accelerate considerably faster than males — the opposite of what was previously assumed.

For her master's degree. Chatters again used complicated mathematics as well as a modified tunnel with one end raised to simulate a load — to come up with a theory of just how much energy hummingbirds expended during acceleration.

Chatters isn't the only one shaking up the hummingbird literature.

In two concurrent studies, master's student Janet Moore was able to dispel previously held beliefs that the wing and body structure of males makes them more manoeuvrable than females. Moore's evidence is in meticulously documented film footage of birds negotiating barriers in a four-metre-long tunnel and performing low-velocity turns between two feeders spaced a half-metre apart in a V formation. By transposing the film onto a computer, Moore was able to measure changes in the angle of a bird's body and wings frame by frame and demonstrate that, in fact, females turned faster.

Gass says findings by Moore and Chatters are sure to cause a splash when published later this year.

Back in the lab, Christianne Wilhelmson is the only graduate student currently conducting research. Her computer is hooked up to a series of cubicles which resemble miniature squash courts; at one end is the ever-present perch and at the other, a panel of six feeder holes above which are tiny lights which the birds use as a cue for food.

The drill appears simple but the technological ingenuity behind the scenes is not.

Wilhelmson's computer program simultaneously monitors and controls six feeder lights, a video camera and six pumps providing an exact amount of food to the appropriate feeder hole. The program also processes all information about the hummingbird actions from the time it leaves the perch, arrives at a

could see but I couldn't." Those same birds would be the focus

of Gass' PhD thesis on feeding territoriality and the basis for work currently carried out by students in the UBC lab. Gass said the mountain meadows offered an ideal setting for his initial experiments into how hummingbirds determined how much space to defend. In short mountain summers, meadows In the meadows, Gass saw that there was little margin for error; the birds used up almost exactly what the flowers in their territory produced.

"To break even energetically they had to be smart," he says. "They had to spend a lot of energy but they couldn't afford to waste any."

To understand how they distributed time and energy in foraging. Gass and a graduate student boosted nectar in patches of flowers at nightfall and watched the birds discover the feeding bonanza the next day. Amazingly, the birds immediately returned to the same enhanced patch on consecutive days.

Says Gass: "That experiment told us that when they go to bed at night, they do so with knowledge about the distrithem to survive. \sim

Perhaps their most important attribute, however, is their capacity to learn and be trained.

Lara Chatters has spent the last six years completing bachelor's and master's degrees measuring velocity and acceleration of hummingbirds. She says acceleration studies have been carried out on lions, cheetahs and locusts. but never on birds.

Over the course of her research, Chatters taught a number of hummingbirds to fly through a Plexiglas tunnel with a perch at one end and a feeder at the other. Pieces of tape were spaced 10 centimetres apart along the transparent tunnel and a mirror placed at a 45-degree angle underneath her homemade apparatus. A video camera recorded the exact position of the bird every 30th of a second during its flight.

Chatters' results were startling. In a five-metre tunnel, birds accelerated to

particular feeder and returns to the perch.

By altering the spacing between feeders and lights, Wilhelmson hopes to learn more about how birds use visual cues to find profitable feeding sites.

Gass ushers a visitor past the squash courts towards a separate holding area. Humming starts immediately as the two intruders enter the enclosure. Moments later, all is quiet as 14 Rufous hummingbirds return to their perches.

Males, Gass says, are distinguished by their trademark red throats as well as the combined whistle and hum from wings whirling in figure eights. Females just hum.

Scientists still don't know how long the birds live and know next to nothing about their breeding biology in British Columbia. Gass admits there's a lot left to learn.

"They surprise me by doing things and I can't imagine how they do them."

Gass' career and those of his students are sure to remain full of surprises.