

UBC Reports

The University of British Columbia
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Photo by Media Services

Secretary of State Gerry Weiner was on hand to give the university \$2-million to help establish the Rick Hansen National Fellow program. Hansen (left) and Weiner spoke at a media conference.

Ottawa gives \$2 million for Hansen Fellow plan

By GAVIN WILSON

The federal government has given UBC a \$2-million grant to establish a new program promoting the interests of people with disabilities, especially as they relate to post-secondary education.

Endowment funding for the Rick Hansen National Fellow program was presented to President Strangway by Secretary of State Gerry Weiner Nov. 2.

Hansen himself has been named by the university's Board of Governors as the first recipient of the fellow, Strangway announced.

"This program will work to ensure that people with disabilities, whether they are students, staff, faculty or visitors, are given equal opportunity to benefit from all the university has to offer," Strangway said.

"The federal government is pleased to help launch this important initiative," said Weiner. "Removing obstacles which prevent people with disabilities from participating as full citizens is a priority concern. We look forward to seeing the benefits of this initiative in the coming years."

Hansen said he has found UBC to be very receptive to new ideas for increasing access for disabled people.

"I think we are taking a leadership role in the area of disabilities," he said.

In his new position, Hansen will be closely linked to the activities of the proposed UBC Disability Centre. Plans call for the self-funded centre to be in interim operation by June, 1990 and fully operational by September, 1991. The centre will be located in the proposed Student Services building, to be built next to Brock Hall.

The Fellow will also reach out into the community to promote education, awareness and research. The position is expected to be a model for other post-secondary institutions, both nationally and internationally.

The university has also agreed to raise funds for an endowment to the

Disability Centre which will match the federal grant for the Hansen fellow and to continue to finance existing programs which help to support people with disabilities.

Hansen joined UBC in March for a two-year appointment as a special consultant to the president to help the university develop better programs and services for people on campus with disabilities.

A UBC graduate, Hansen was the first disabled student to enrol in the School of Physical Education in 1976. He was awarded an honorary degree by the university 11 years later after raising \$20-million for spinal cord research, rehabilitation, wheelchair sport and recreation and ongoing awareness in a round-the-world wheelchair odyssey.

UBC Reports publishing schedule

UBC Reports will publish two more editions in 1989, on Nov. 30 and Dec. 14.

Publication in the New Year will resume with the Jan. 11 edition and continue on the usual biweekly schedule.

Deadline for the Calendar for the Jan. 11 edition is noon, Jan. 3, 1990. Deadline for advertising is 4 p.m., Jan. 2.

Enrolment highest in history

By PAULA MARTIN

Enrolment at UBC for 1989-90 has hit its highest level ever and admissions applications have risen significantly over previous years, figures compiled by the Registrar's Office show.

UBC's winter session enrolment is up by 2.2 per cent or 612 students over last year, said Registrar Richard Spencer.

"This is the largest enrolment we've ever had," said Spencer of the 28,461 students now studying at UBC. "It was partly by design because we did set out to take in more graduate students and slightly more undergraduates."

About three-quarters of the 28,461 are full-time students and the rest are classified as part-time—those who take less than 80 per cent of a full program.

Undergraduate admissions applications went up seven per cent over last year and 30 per cent over 1987, Spencer said.

"When you look at an institution like UBC, which has an enrolment limit, that's one statistic that tells you to what extent there is interest in studying here."

The university's two largest faculties, Arts and Science, enrolled slightly more than their quotas of 1500 and 1300 new students in first year.

The Faculty of Agricultural Sciences saw a 40 per cent increase in first year students—up to 61 from 44—while Forestry Faculty enrolment went up by 10 per cent in first year. These are the only faculties with no enrolment quota in place.

Enrolment in the Faculty of Applied Science's first year Engineering program went up by 16 per cent and met the quota of 450 students for the first time in a number of years, Spencer noted.

"It certainly indicates a trend. Engineering is an example of a professional program that is really cyclical in terms of demand."

The Applied Science Faculty's School of Nursing saw a 35 per cent increase in first year enrolment, largely due to the incorporation of VGH's nursing program into the UBC program.

Enrolment in the Faculty of Graduate Studies went up by 200 students, or just under five per cent. The number of graduate students for this year stands at 4,408.

The Faculty of Commerce and Business Administration enrolled 420 students in the first year of its program, 20 more than last year.

Enrolment in the faculties of Dentistry, Education, Law, Medicine and Pharmaceutical Sciences saw virtually no change.

The increase in part-time enrolment outstripped the increase in full-time enrolment this year. Full-time enrolment grew by just under 200 students, while part-time enrolment increased by 416 students.

"Historically, UBC has been a 'full-time' university," said Gaylea Wong, associate registrar.

"The university is now placing more emphasis on the part-time student and looking at what possible barriers these students might face."



Spencer

Reorganization set for UBC Press

By PAULA MARTIN

UBC Press will undergo major organizational changes after a review committee concluded that it is in a state of crisis.

"Members of the committee wish to draw attention to the overwhelming evidence that the University Press is in crisis," their report stated.

The President's Committee to Review the UBC Press was asked to look into its operation and management, recommend an appropriate mandate for UBC Press over the next decade, and recommend an appropriate management strategy for supporting the scholarly journals it publishes—Pacific Affairs, B.C. Studies and Canadian Literature.

In its report, the committee noted that UBC Press produced too few publications for the number of staff, needed improved sales promotion, had deficient financial administration and operated with little direction from, or accountability to, the university.

The committee identified two op-

tions for UBC Press: cease operations within a year or revitalize it with changes in personnel. The committee urged the university to follow the second option.

"In general, we agree with the committee's recommendation," said K.D. Srivastava, Vice-president, Student and Academic Services.

"Professor Bernard Sheehan of the University of Calgary has been hired as a consultant to develop a new mandate for UBC Press and recommend an appropriate organizational structure for it."

Srivastava added he and Sheehan will be consulting with UBC faculty and staff about the future of UBC Press.

The committee noted that UBC Press lacks a management and policy-making board such as the publishing board of Harvard University Press. It should have, committee members said, a policy and editorial committee to oversee policy formation, financial well being and general editorial direction.

See UNIVERSITY on Page 3

INSIDE

RED TIDE: Two UBC scientists are working on a method of quickly identifying red tide, a potentially fatal shellfish poison. Page 2.

DISNEY CONNECTION: RSI Research, which designed and built mechanical spiders for a Walt Disney movie, has opened a branch on campus. Page 6.

SAD STRIKES: Seasonal Affective Disorder (SAD) usually strikes in winter causing severe depression in about five per cent of Canadians. Page 8

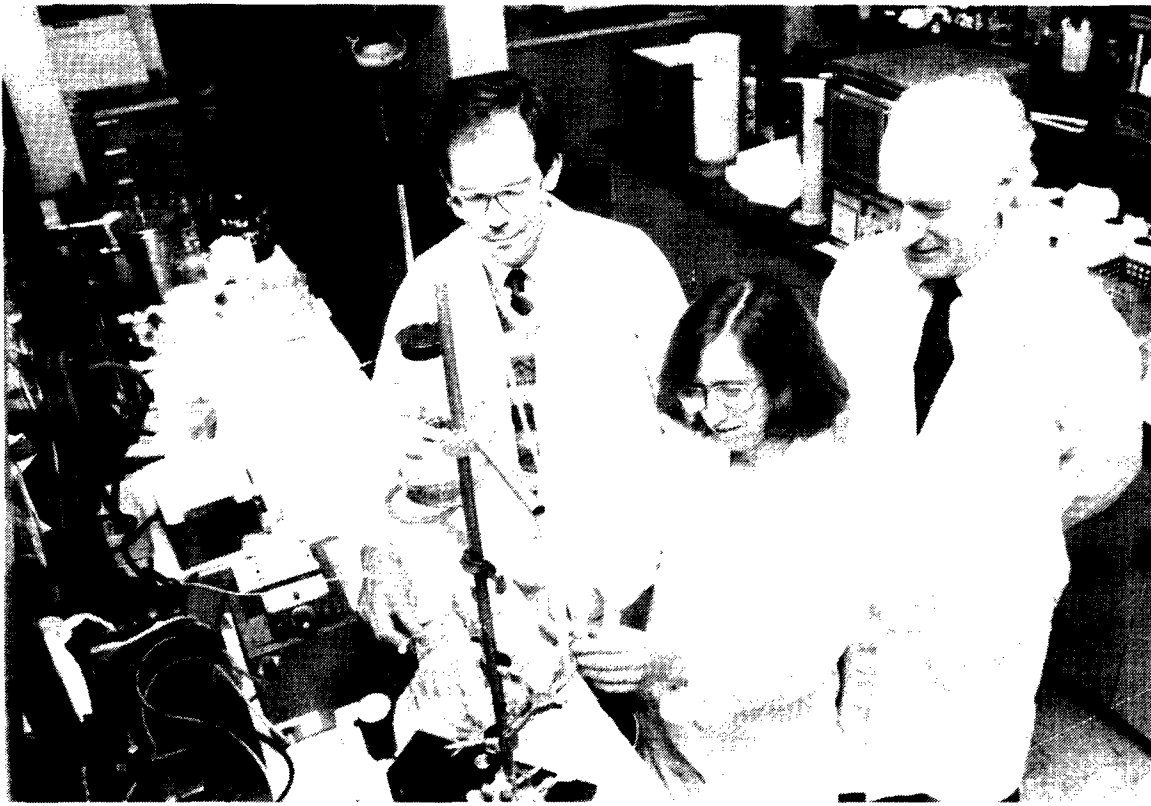


Photo by Media Services

UBC Food Science Department researchers David Kitts (left) Donna Smith and Phil Townsley examine shellfish exposed to red tide.

Kit to detect deadly red tide is studied

By PAULA MARTIN

Two UBC food scientists are working on a quick, reliable method to detect a deadly form of food poisoning — paralytic shellfish poisoning — in coastal waters.

PSP, also known as red tide, can turn clams, mussels, oysters and scallops into deadly fare for people who eat shellfish contaminated with the nerve toxin. It may bring on numbness, nausea and paralysis of the neuromuscular system within a short period of time and is sometimes fatal.

There is no antidote for PSP.

"It's a serious problem from a public health point of view and it's an equally serious problem from an economic point of view," said David Kitts, who teaches food toxicology in the Food Science Department.

"We have a problem on the West Coast with sporadic, unpredictable out-

breaks of red tide and this has resulted in approximately 70 per cent of our coastal areas being permanently closed to shellfish harvesting."

Kitts and colleague Phil Townsley, who teaches industrial microbiology, are working in collaboration with Helix Biotech Corp., a UBC spinoff company, to develop a kit that would enable producers to detect PSP in shellfish on the spot.

Red tide, which takes its name from the organism that sometimes gives the water a reddish tinge, isn't always visible in coastal waters. Contaminated shellfish do not exhibit any toxic signs and cannot be distinguished from non-toxic shellfish.

Much of B.C.'s coastline is permanently closed because there is no rapid and efficient method of constantly monitoring the water, Townsley said,

adding that although signs are posted warning of red tide, people do not always see them.

"We are trying to develop a test kit that is reliable, economical and easy to use in the field," he added.

The kit would mean that producers, and even tourists who dig up shellfish, could promptly assess whether it posed a danger to them.

Shellfish harvests are checked by government inspectors. If PSP is suspected, the shellfish are tested at provincial labs. If those tests are positive, samples are sent to Ottawa for confirmation, a time-consuming and labor intensive process.

Kitts said they are not trying to replace the standard testing method, but are trying to come up with a quicker, easier screening method that could be confirmed by the standard tests.

Hongkong Bank donates \$1 million for Chair in Asian Commerce

BY CONNIE FILLETTI

The Hongkong Bank has pledged \$1-million for a Chair in Asian Commerce as part of The UBC Campaign, A World of Opportunity.

The endowment will enable UBC to attract an outstanding academic of international stature to fill the position.

"This exceptionally generous joint donation will enable the Faculty of Commerce to significantly extend teaching and research initiatives relating to the Asia Pacific," said Peter Lusztig, dean of UBC's Faculty of Commerce and Business Administration.

James Cleave, president and chief executive officer of the Hongkong Bank of Canada, who received both his BComm and MSc from UBC, said Canada will be looking to the university to produce future business leaders in the area of Asian commerce.

"Growing trade and investment activity between Asia and Canada underlines the importance of business education which is sensitive to cross-cultural

issues," Cleave said. "The endowment recognizes UBC's pre-eminent position in providing international business training and is consistent with the Hongkong Bank group's focus on education worldwide."

UBC President David Strangway expressed his appreciation to the Hongkong Bank for its contribution to the campaign.

"The Hongkong Bank's generous endowment draws us a step closer to ensuring that UBC will move into the 1990s as a leading North American university. Our ability to prepare tomorrow's business and community leaders today increases with each pledge of support and encouragement from the private sector," said Strangway.

The provincial government will match the \$1-million donation from the Hongkong Bank. These funds and related UBC funds will establish a chair for a Director of the Institute of Asian Research and create the Hongkong Bank Book Fund. This fund will allow the

purchase of books and periodicals on Asian commerce.

The UBC Campaign, A World of Opportunity, is the largest fundraising campaign in Canada.

Mahon wins art prize

A UBC Fine Arts graduate student has won a major international award that puts him in the company of artists such as Jasper Johns and Robert Rauschenberg.

Patrick Mahon, a first-year Master's student who specializes in printmaking and drawing, recently won the City of Ljubljana Award, one of the top three awards presented during the 18th International Biennial of Graphic Art in Ljubljana, Yugoslavia.

Mahon will have a retrospective exhibition of his work at the Museum of Modern Art in Ljubljana in 1991 during the next biennial.

Letters to the editor

Stewart article applauded by readers

Editor:

Thank you for your printing of the brief back-page essay by Walter Stewart in the Nov. 2 issue of UBC Reports. It reasserts a role for the university that I thought had been forgotten in the latter-day rush to show that our institution can build you a better mousetrap! (For only twice the price).

Congratulations,

Peter Vaughan
Physiology Department

Editor:

I greatly enjoyed reading Walter Stewart's article in the UBC Reports of Nov. 2. The article was not only articulate and witty, but also very courageous in its ideas. A number of us of the Science Undergraduate Society council would like to commend the UBC Reports for publishing an article which seems to be self-critical of the university system. Keep up the good work.

Ari Giligson
SUS President

Open Letter to President Strangway:

The Graduate Student Society of UBC would like to applaud the latest decision by the Board of Governors

which allows the President to withdraw UBC's fee collection services from any university society publishing discriminatory, prejudiced or harassing material. This will go a long way in controlling hate literature that has sometimes appeared in campus publications and in ensuring a harassment-free publication environment for everyone on campus.

In Canada, we pride ourselves on our ability to live, think, and publish freely without fear of retribution from powerful tyrants. However, we are and should be, constrained both by law and by social pressure from publishing material that advocates hate or violence against others.

This Board of Governors' decision allows disciplinary action based on your determination of what constitutes harassment. Obviously, this broad-based power raises strong concerns about the potential for arbitrary censorship. As advocates for freedom of expression we do not want to see an abuse of this power; power that could be used for oppression. However, we have every confidence that you, the president of this university, will act on this prerogative judiciously with decorum, prudence and wisdom.

Suzanne Young, Director
External Affairs
UBC Graduate Student Society

UBC REPORTS ADVERTISING DEADLINES

EDITION

DEADLINE 4 p.m.

Nov. 30
Dec. 14
Jan. 11
Jan. 25
Feb. 8
Feb. 22
March 8
March 22
April 5
April 19

Nov. 20
Dec. 4
Jan. 3 (noon)
Jan. 15
Jan. 29
Feb. 12
Feb. 26
March 12
March 26
April 9

For more information, or to place an ad, phone 228-4775.

Dickens of the Mounted

Library helps Nicol

By GAVIN WILSON

Humorist Eric Nicol's association with UBC goes back many years, but his most recent return to campus has become one of the most fruitful.

The UBC library and its staff — long familiar to the author as a student and teacher — play a central role in his latest book, *Dickens of the Mounted*.

This tongue-in-cheek novel looks at Canada's wild west through the eyes of Charles Dickens' ne'er-do-well son, Francis, who served as a member of the North-West Mounted Police from 1874 to 1886.

On his picaresque journey through the West, Dickens stumbles through a series of misadventures, meeting Sitting Bull, Louis Riel and Gabriel Dumont and accidentally inventing the Musical Ride.

The *Globe and Mail* says, "Nicol has rarely been in finer form, and his japey is often inspired."

Francis Dickens did exist, and he was a Mountie. (There is an entry in the *Canadian Encyclopedia* that describes his undistinguished career.) But that is merely the starting point for Nicol's lampoon.

Nicol claims to have stumbled across the long-lost manuscripts in a collection of personal papers bequeathed to the UBC archives many years ago. University librarians such as manuscripts curator George Brandak are given credit with helping him unearth this alleged literary find.

The book works hard at maintaining the credibility of the hoax. The letters are accompanied by scholarly footnotes



Author and humorist Eric Nicol discusses the alleged letters of Francis Dickens, son of Charles Dickens, with UBC library manuscripts curator George Brandak.

and appendices that corroborate, correct and expand on their contents.

Brandak and others at the library did help Nicol research the book. The three-time Stephen Leacock award winner and UBC alumnus (MA, 1948) spent many hours in the library doing the research needed to give his account of frontier life the ring of authenticity.

In his preface, Nicol acknowledges Brandak, Charles Forbes, Colbeck Librarian in Special Collections, and Basil

Stuart-Stubbs, Director of the School of Library, Archival and Information Studies.

The book first gained prominence last spring, when the *Globe and Mail* used excerpts from the letters as an April Fools' Day hoax.

Brandak appeared in a photo that accompanied the article, poring over the letters with a straight-faced Nicol.

Dickens of the Mounted is published by McClelland and Stewart.

Dumont's computer research aids pulp and paper industry

By JO MOSS

UBC Professor Guy Dumont had never seen a paper making machine before he arrived in Canada, 10 years ago, to work for the Pulp and Paper Research Institute of Canada (PAPRICAN).

"At the time I knew absolutely nothing about pulp and paper," Dumont recalls.

But Dumont was a leading researcher in adaptive control—the use of computers to monitor and adjust automated industry processes. He had developed and implemented one of the first successful industrial applications in the world of adaptive control software, a self-tuning kiln regulator for Tioxide S.A., a French company that produces paint pigments.

Now a well-established means of controlling processing in the chemical industry, adaptive control is the technology which promises to give Canada's pulp and paper sector the edge over competitors. Closer control of pulp processes in Canadian mills can reduce production costs and yield a higher quality specialized product to meet global market demands, Dumont said.

With this goal in sight, UBC recently established a new joint industry-university research chair appointing Dumont, a PAPRICAN researcher, as senior chair holder.

The PAPRICAN/NSERC Industrial Chair in Process Control is supported by a grant of \$546,000 over five years

from the Natural Sciences and Engineering Research Council (NSERC) for staff, equipment and operating funds. PAPRICAN has committed \$330,000.

(A non-profit research and educational organization with ties to UBC's Pulp and Paper Centre, PAPRICAN carries out research on behalf of Canada's pulp and paper industry. Its Vancouver laboratory is located on campus at Discovery Park.)

A junior research chair in the Department of Chemical Engineering will be filled at a later date.

Adaptive control systems have the ability to modify controls according to the changing behavior of the pulp process. They evaluate how the characteristics of the process change over time and try to predict the next few control moves while implementing the current one.

"Chemical processes are unpredictable. All kinds of things happen that we can't predict," Dumont explained. "The idea is to make a control system smart enough to realize the dynamics of the system and accordingly adjust the parameters so you always get an optimal response."

It's comparable to playing a chess game where the opponent has a strat-



Dumont

egy, but the moves are unknown.

Adaptive control can improve pulp processing in areas such as raw materials, where the variable mix and grade of species has a tremendous impact on the behavior of the pulp process. Woodchips are purchased directly from the mills to make paper, but pulp and paper companies have no control over the type or quantity of tree species they use.

"One of the things we are looking at is whether it is possible to have an indication of the species content in the raw material before it goes into the process," Dumont said.

University press is important

Continued from Page 1

The committee's report noted that a good university press is important in the academic world in portraying a university as a centre of scholarly excellence.

UBC Press has published several good books over the past two decades, but has never achieved the quality it should have, the committee members noted.

The review committee members were: N.E. Wagner, chairman of the board, Alberta Natural Gas Company Ltd. (chairman), Dean Peter Lusztig of the Faculty of Commerce and Business Administration, Professor Mark Zacher, director of the Institute of International Relations, Professor E.G. Hauptmann of the Department of Mechanical Engineering, and Professor Paul Stanwood of the English Department.

1915 - 1990



ANNIVERSARY

Student events launch 75th

By JUDY McLARTY

UBC's students will launch the university's 75th anniversary in 1990 with a series of special events on January 10, 11 and 12. An Alma Mater Society committee chaired by Eric Ommundsen will manage the events, which will include: the re-creation of the Great Trek UBC archival photo; a competition for students featuring the theme '75'; the ceremonial uncorking of a giant 75th anniversary champagne bottle; ribbon cuttings, speeches and more.

All UBC students, faculty and staff can participate in the group photo. By the way, the photographer will have to be up - way up - to take the shot because Eric and his committee hope to attract up to 7500 people to participate in the photo on MacInnes Field. Watch for more details from Eric's committee.

From January 17 through February 3 Freddy Wood Theatre and the UBC School of Music will co-present *Sweeney Todd - The Demon Barber of Fleet Street - A Musical Thriller*.

On March 3 watch for the university's 24-page Community Report *It's Yours* featuring an Open House preview section, delivered with The Vancouver Sun.

OPEN HOUSE

Open House, chaired by Dean Jim Richards, vice-chaired by UBC law grad Peig McTague and staffed by Erin Redden will be the first major event of the year-long celebrations from March 9-11. Most regular classes scheduled for Friday March 9, 1990 will be cancelled.

The highlights will include Law Mock Trials, panning for gold and a Rock Bazaar at the Geology Museum, night viewing at the Observatory, a simulated earthquake by the Faculty of Applied Science, Great Moments in Science re-enacted by the Science Faculty, a Sportsfest on MacInnes Field, entertainment and demonstrations at the Asian Centre, lectures and performers at the Museum of Anthropology, tours of the Botanical Gardens and more.

A Kid's World, featuring a Lost Child Program is planned. Street entertainers, evening programming, increased food, transportation and information services, and special site animation, such as horse and buggy rides, will create a festive atmosphere.

On March 17 Intramurals will host the annual UBC Triathlon. Also in March the traditional Storm the Wall event will be held.

DISCOVER SUMMER AT UBC

Discover Summer at UBC, chaired by David Vogt and staffed by Donna Hunter, is designed to open the campus to the community and visitors to B.C. during the summer months of May through August, 1990.

Attractions include: Pacific Coast Music Festival, May 11 & 12 - a multi-faceted music festival involving Concert Band, Jazz Band, Concert Choir, Vocal Jazz and Jazz Combos drawing together over 3000 music students from throughout B.C. - Contact: (Michael Grice.) An enhanced Summer Campus Tour Program, May through August - Contact: Judy McLarty. Spring & Summer Sports Programs, April through August - Contact: Rochelle Kazakoff. Summer Sounds, July 3 - August 10 - showcasing the musicians of Vancouver, many of whom are graduates of the UBC School of Music through free daily noon hour concerts - Contact: Michael Grice. Music For A Summer's Evening, July 3 - August 10 - an evening series of chamber music concerts featuring leading Vancouver classical musicians - Contact: Michael Grice. World's Longest Yard Sale/Surplus Equipment Recycling Fair, July 28-29 - a unique event that is fun yet provides information on environmental concerns and recycling, featuring the sale and auction of surplus equipment by campus groups - Contact: Vincent Grant or Norm Watt. UBC's Alice in Wonderland Corporate Croquet Festival, August 10, 11, 12 - a three day croquet tournament in honour of UBC's 75th Anniversary and in recognition of the 125th Anniversary of Lewis Carroll's Alice in Wonderland - Contact: Norm Watt. Summer Stock Theatre, May through August - Contact: Bob Eberle. Applied Ethics Conference, June 6 to 9. Board of Trade Governor's Banquet in honour of UBC's 75th and SFU's 25th anniversaries, June 14. Children's Theatre programs, June through August (Tues., Thurs. and Sats.) - Contact: Bob Eberle. B.C. Special Olympics in July; and also in July there will be a gathering of International Male Choirs on the campus.

Watch for more details from Eric's committee.

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75TH ANNIVERSARY/HOMECOMING WEEK

Watch for 75th Anniversary/ Homecoming Week and 1990 Campus Projects calendar details in the next issue of UBC Reports.

Watch for this column in every issue of UBC Reports. We'll keep you posted on all 75th Anniversary developments. Cheers!

Calendar

November 19 –
December 2

SUNDAY, NOV. 19

**Asian Centre
Painting Exhibition**
Ends today. A Sino-Australian Artworks exhibition and "200 Kangaroos". Yao Di Xiong, artist and executive member, The Australian Association of Chinese Artists. Free admission. Asian Centre Auditorium 10am-4pm. Call 228-2746.

Musical Performance
Traditional Indonesian music. Kyai Madu Sari. Students \$1.50, Adults \$3. Museum of Anthropology Great Hall at 2:30pm. Call 228-5087.

Faculty Club German Brunch
Specialties from the Black Forest prepared by the club's chef. Adults, \$14 each. Children under 10, \$7.50. Reservations recommended. Main Dining Room, 11am - 1pm. Call 228-3803.

Medical Symposium
For Doctors and Health Care Professionals. Jewish Medical Ethics. Noted local physicians discuss current issues in Medical Ethics. BC Club, Expo Site. Registration at 5pm. Concluding remarks, 8:30pm. Call 266-1313.

MONDAY, NOV. 20

Pathology Lecture
Advances in Pathology: Amyloid. Dr. Jerold Last, U of California, Davis. Taylor/Fidler Lecture Theatre, Laurel Street Pavilion 1, VGH from 9 to 10am. Call 875-4577.

Mechanical Engineering Seminar
Stresses at the Tip of a Crack: Quing Wu, M.A.Sc. student. Automatic Model Structure Determination for Adaptive Control: Anat Kotzev, Ph.D. student. Chem. Eng. 1202 at 3:30pm. Call 228-4350.

Health Promotion Seminar
Health Unit Profile. Lynne Blair, Manager, Community Health Strategies, Community & Family Health, Ministry of Health. Mather 253 from 4-5:30 pm. Call 228-2258.

Astronomy Seminar
Age Old Questions Concerning the Galaxy's Halo and Disk. Dr. John Norris, Mount Stromlo Observatory, Australia. Geophysics & Astronomy 260 at 4pm. Coffee from 3:30. Call 228-4134.

Biochemistry Seminar
The Mouse MDR Gene Family: Cloning, Characterization and Functional Analysis of Individual Members. Dr. Philippe Gros, Biochemistry, McGill University. IRC4 at 3:45pm. Call 228-3027.

Fine Arts Photography Lecture
The Other Side of Venus: Erotic Photograph and Aesthetic Avatar. Abigail Solomon-Godeau. Lasserre 104 from 12:30-1:30pm. Call 228-2757.

Applied Math Seminar
Numerical Computation of Invariant Manifolds. Dr. Robert D. Russell, Math,



Peter Richards, director of the UBC-Indonesia Project, sits with a pre-Muslim, pre-Christian Animist figure on display at the Asian Centre until the end of November.

Photo by Media Services

CALENDAR DEADLINES

For events in the period Dec. 3 to Dec. 16 notices must be submitted on proper Calendar forms no later than **noon on Wednesday, Nov. 22 to the Community Relations Office, 6328 Memorial Rd., Room 207, Old Administration Building.** For more information call 228-3131. Notices exceeding 35 words may be edited.

SFU. Math 229 at 3:45pm. Call 228-4584.

Social Work Continuing Ed
The Effects of Separation and Divorce Lecture Series: "The Future of the Family." Dr. David Freeman, Social Work, UBC. School of Soc. Work Lecture Room B from 7-10pm. Call 228-2576.

TUESDAY, NOV. 21

Creative Writing Poetry Reading
Kim Morrissey, author of Batoche and Nancy Mattson, author of Maria Breaks her Silence. Free Admission. Buchanan Penthouse at 12:30pm. Call 228-2712.

Anthropology Discussion
Ownership and Stewardship, Royal B.C. Museum and the Frank's Family Dance Screen. Alan Hoover and Richard Inglis, Ethnology Division, Royal B.C. Museum. Students \$1.50, adults \$3. MOA Theatre Gallery at 7:30pm. Call 228-5087.

Epidemiology Seminar
Sexual Assault Tracking Study; Who's at Risk? Dr. Carol Herbert, Head, Family Practice. IRC 4th floor boardroom from 12:30-1:30pm. Call 228-2258.

Geography Colloquium
Geographies of Risk: Approaches to the Problem of Hazard Identification and the Context of Disaster. Dr. K. Hewitt, Wilfrid Laurier U. Geography 200 at 3:30pm. Call 228-6959.

Botany Seminar
Life in the Slow Lane: A Three Year Study of Growth in Douglas Fir Seedlings. Dr. Jack Maze, Botany, UBC. BioSciences 2000 at 12:30pm. Call 228-2133.

Pharmaceutical Sciences Seminar
Stereoselective HPLC Analysis, Pharmacokinetics, Tissue Distribution and

Pharmacodynamics of Mexiletine Enantiomers. Linus Igwemezie, candidate. IRC #3 from 12:30-1:30pm. Call 228-4889.

Modern Chemistry Seminar
The Chemistry of Protein Isoprenylation: A Newly Discovered Post-Translational Modification of Proteins in Human Cells. Dr. Michael Gelb, Chemistry, U of Washington. Chemistry B250 at 1pm. Refreshments at 12:40pm. Call 228-3266.

Statistics Seminar
Subset Regression Time Series. Dr. Z.G. Chen, Inst. Applied Mathematics, Chinese Academy of Sciences, Beijing. Ponderosa Annex C-102 at 4pm. Call 228-3167.

Tai Chi Group
Introduction to Basic. Sam Masich, Coordinator. Twelve lessons, \$45. Faculty Club Ballroom from 7:45-8:45am. Call Colleen Garbee at 228-4693.

Amnesty International Forum
Human Rights in China. Raymond Chan, TRIUMF; Dr. Michael Duke, Rene Goldman, and Alan Loo of Asian Studies. SUB Auditorium at 7:30pm. Call 228-4087.

WEDNESDAY, NOV. 22

AMS Lecture
Carmanah. Free admission. SUB Auditorium at 12:30pm. Call 228-2050.

Ecology/Resource Ecology Seminar
Intruder Pressure and Territorial Defence in Northern Harriers. Ethan Temeles, UBC. BioSciences 2449 at 4:30pm. Call 228-2731.

Social/Educational Studies
Childhoods Revisited Series. Ukrainian-Canadian Childhoods with Hannah Polowy, Educ. Psychology; George Brandak, Manuscripts, UBC Library; Bill

Maciejko, graduate student. Scarfe 2415, 4th floor office wing from 12:30-2pm. Call 228-6013.

Economics Theory Workshop
Cartel Unity Over the Business Cycle: Strength in Weakness. Mukesh Eswaran, UBC. Host, Prof. J. Weymark. Brock Hall 351 from 4-5:30pm. Call 228-2876.

CAIS Open Meeting
Cdn Assoc. for Information Science. Developing a Graphical User Interface for Library Use. John Campbell and Lynn Copeland, Systems, UBC Library. Sedgewick Library conference room at 4pm. Call 228-2499.

Microbiology Seminar
Aspects of Intracellular Parasitism. Dr. F. Nano, Biochem/Microbiology, U of Vic. Westbrook 201 at 12:30pm. Call 228-6648.

Chemistry Lecture
Marine Natural Products Chemistry. Dr. D.J. Faulkner, Scripps Inst. of Oceanography, Calif. Chemistry D225 at 11:30am. Call 228-3266.

Noon-Hour Concert
Rosdale Duo. Tickets \$2 at the door. Music Recital Hall at 12:30pm. Call 228-3113.

Pharmacology Seminar
Effect of Drugs on Body Venous Tone. Dr. Catherine C.Y. Pang, Assoc. prof., Pharm. and Therapeutics, UBC. IRC #3 from 11:30am-12:30pm. Call 228-2575.

Graduate Student Society
Female Grad Student Support Network. Combining Family Relationships and Graduate Studies: Is It Possible? Dr. Jane Gaskell, Social/Ed Studies, UBC. Grad Student Centre Garden Room at 12:30 pm. Call 228-3203.

Music Faculty Recital
Brian G'Froerer, french horn; Robert Rogers, piano. Free admission. Music Recital Hall at 8pm. Call 228-3113.

THURSDAY, NOV. 23

Koerner Memorial Lecture
Right Wing Authoritarianism. Dr. B. Altemeyer, Psychology, U of Manitoba, Kenny 2510 at 4pm. Call 228-6518.

English Colloquia Presentation
Pineroticism and the Problem Play: Mrs. Tanqueray, Mrs. Ebbsmith, and Mrs. Pat. Dr. J. Kaplan. Buchanan Penthouse at 3:30pm.

Economics Seminar
The Role of Adjustment Costs in the Dynamic Demand for Part-time and Full-time Labour at the Industry Level. Jane Friesen, SFU. Host, Prof. Harry Paarsch. Brock Hall 351 from 4-5:30pm. Call 228-2876.

Psychiatry Lecture
Principles and Provisions of the B.C. Mental Health Act. Dr. Chris Schenk, Chief Resident, University Hospital, UBC Site. Detwiller Pavilion 2NA/B from 8-9am. Call 228-7325.

History Colloquium
Eva d'Angeley: Purging the Streets of Vice (prostitution in Victorian and Edwardian London). Professor James Winter, History, UBC. Buchanan Tower 1207 at 1pm. Call 228-5161/9445. Copies of the paper will be available.

Tai Chi Group
Introduction to Basic. Sam Masich, Coordinator. Twelve lessons, \$45. Faculty Club Ballroom from 7:45-8:45am. Call Colleen Garbee at 228-4693.

Community/Regional Planning Lecture
A Search for the Secrets of the City. Guest speaker, Ray Spaxman, former director of the Vancouver Planning Dept. Lasserre 105 at 12:30pm. Call 228-3276.

University Singers
James Fankhauser, director. Free admission. Music Recital Hall at 12:30 pm. Call 228-3113.

UBC Wind Ensemble
Martin Berinbaum, Director. Free admission. Music Recital Hall at 8pm. Call 228-3113.

Biotechnology Lab Seminar
Bacteria/Yeast Mating. Dr. Jack Heinemann, U of Oregon. IRC #5 at 4pm. Call 228-6968.

Psychology Colloquium
The Closed and Compartmentalized Mind of the Right-Wing Authoritarian. Dr. Robert Altemeyer, U of Manitoba. Kenny 2510 at 4pm. Call 228-2755.

FRIDAY, NOV. 24

Medical Genetics Seminar
Molecular Basis of Hypertriglyceridemia. Dr. Michael Hayden, Med. Gen., UBC. University Hospital, Shaughnessy Site, D308, at 2:15pm. Call 228-5311.

Chemical Engineering Seminar
Gasification Research in Japan and Canada. Dr. Paul Watkinson, Chem. Eng., UBC. Chem. Eng. 206 at 3:30pm. Call 228-3238.

Economics Seminar
Methods of Proportional Representation. Aarund Hylland, Oslo and U of Calif., Davis. Host: Prof. J. Weymark. Brock Hall 351 from 4 to 5:30 pm. Call 228-2876.

Graduate Student Society
Jazz and Blues with the Peter Huron Trio. Free admission. Everyone welcome. Grad Student Centre Fireside Lounge from 7pm. Call 228-3203.

See CALENDAR on Page 5

UBC Reports is the faculty and staff newspaper of the University of British Columbia. It is published every second Thursday by the UBC Community Relations Office, 6328 Memorial Rd., Vancouver, B.C., V6T 1W5. Telephone 228-3131. Advertising inquiries: 228-4775. Director: Margaret Nevin Editor-in-Chief: Don Whiteley Editor: Howard Fluxgold Contributors: Connie Filletti, Paula Martin, Jo Moss, and Gavin Wilson.

Calendar

November 19 -
December 2

Faculty Club Seafood Festival
Seafood Buffet. Reservations recommended. Faculty Club Main Dining Room from 5:30-8:30pm. Call 228-3803.

UBC Contemporary Players
Geoffrey Michaels and Stephen Chatman, directors. Free admission. Music Recital Hall at 12:30pm. Call 228-3113.

University Singers
James Fankhauser, director. Free admission. Music Recital Hall at 8pm. Call 228-3113.

Ophthalmology Clinical Day
Symposium on Intraocular Lens Materials, Cataract Technique and Astigmatism Control in Cataract Surgery. Dr. J.R. Shepherd, and Dr. W.A. Lyle, U of Utah. Comox Street Auditorium of St. Paul's Hospital from 8:30am-3:45pm. Call 875-4555 local 6127.

BiotechLab/Terry Fox Foundation Seminar
Leukocyte-common Antigen Tyrosine Phosphatase Family and its Potential Regulation of T-celled growth. Dr. Matt Thomas, Washington U, St. Louis. IRC #5 at 12:30pm. Call 228-6961.

SATURDAY, NOV. 25

Continuing Education Seminar
How to Succeed in the Movie Industry. Mark Litwak, US entertainment attorney. \$115(\$195 with Sunday seminar) lunch and material included. Carr Hall Conference Room from 9am-4pm. Call 222-5261.

SUNDAY, NOV. 26

Continuing Education Seminar
New Trends in Marketing and Distributing Independent Films. Mark Litwak, US entertainment attorney. \$115 (\$195 with Saturday seminar). Carr Hall Conference room, from 9am-4pm. Call 222-5261.

Faculty Club German Brunch
Black Forest specialties prepared by the Fac. Club chef. Adults \$14 ea. Children under 10, \$7.50. Reservations recommended. Main Dining Room from 11am-1pm. Call 228-3803.

MONDAY, NOV. 27

Dow Lecture
Pulp Mill Simulation: A Look at Recent Applications. Professor Lou Edwards, Chemical Engineering, U of Idaho. Pulp and Paper Centre seminar rm.101 at 1:30 pm. Call 224-8560.

Astronomy Seminar
Voyager Encounter with Neptune. Dr. Torrence Johnson, Jet Propulsion Lab, Pasadena. Physics 201 at 4pm. Call 228-4134/2267.

Collegium Musicum
John Sawyer and Morna Russell, directors. Free admission. Music Recital Hall at 8pm. Call 228-3113.

Pathology - Special Lecture
Recent Advances in Pathology. Angiogenesis - A New Cartilage Derived Inhibitor. Dr. Michael J. Banda, Assoc. prof., Radiology/Radiobiology, U of Calif. San Francisco. Taylor/Fidler Lecture Theatre, Laurel Street Pavilion 1, VGH from 9-10am. Call 875-4577.

Biochemical Seminar
Coordinated Cell-Specific Expression of Steroidogenic p-450scc during Follicular Development in the Rat Ovary. Dr. Y. Orly, BioChemistry, Hebrew U of Jerusalem. Friedman 135 at 3:45pm.

Call 228-2059.

Religious Studies Colloquium
The Contribution of Alexander MacMillan to Canadian Hymnody. Prof. N. Keith Clifford. Buchanan B224 from 4:30-6pm. Call 228-6288.

TUESDAY, NOV. 28

Geography Colloquium
A Multi-function Polis in Australia: the Newest New City Proposal Another Export from Japan? Dr. D. Edgington, Geography, UBC. Geog.200 at 3:30pm. Call 228-6959.

Botany Seminar
Effect of Snow Goose Grazing on Vegetation Structure. Dr. Robert Jeffries, Botany, U of Toronto. BioSciences 2000 at 12:30pm. Call 228-2133.

Lectures in Modern Chemistry Seminar
Talking to the Media: Why They Don't Understand Chemistry. Ms. Leigh Dayton, Vancouver science writer. Chemistry B250 at 1pm. Refreshments at 12:40 pm. Call 228-3266.

Christian Forum
Graduate/Faculty Lecture and Discussion. Theology after Auschwitz: The Holocaust and Jewish-Christian Relations. Dr. John Conway, History, UBC. Buchanan Penthouse at 4:30 pm. Coffee at 4:15. Call 228-3268/3112.

Statistics Seminar
Low Tension Glaucoma-Is it related to Intraocular Pressure? Dr. Michael Schulzer, Statistics and Medicine, UBC. Ponderosa Annex C102 at 4pm. Call 228-3167.

Tai Chi Group
Introduction to Basic. Sam Masich, coordinator. Twelve lessons, \$45. Faculty Club Ballroom from 7:45-8:45am. Call Colleen Garbe 228-4693.

Session on Wine #7
Blind Tasting White Wines (General). Darren Berezarski, Wine consultant from Mark Anthony Group. Per session \$15. Faculty Club Music Room from 7-9pm. Call 228-4693.

Collegium Musicum
John Sawyer and Morna Russell, directors. Free admission. Music Recital Hall at 12:30pm. Call 228-3113.

WEDNESDAY, NOV. 29

History Lecture
The Viceroy as Entrepreneur: The Case of Count Linhares at Goa, 1629-35. Anthony Disney, History, La Trobe University, Bundoora, Victoria, Australia. Buchanan Penthouse at 4pm. Call 228-2561.

Ecology Seminar
Tundra Grazing Systems: Patterns and Processes. Bob Jeffries, U of Toronto. BioSciences 2449 at 4:30pm. Call 228-2731.

Microbiology Seminar
Molecular Analysis of a Gene Controlling Pathogenicity and Sexual Development in Ustilago Maydis. Dr. J. Kronstad, Microbiology/Biotech, UBC. Wesbrook 201 at 12:30pm. Call 228-6648.

Pharmacology Seminar
Possible Effects of Dioxin Contamination on Great Blue Herons in SW British Columbia. Dr. Gail Bellward, Pharmaceutical Sciences, UBC. IRC #3 from 11:30am-12:30pm. Call 228-2575.

Economics Seminar
Consistent Estimation of Heteroskedastic Limited Dependent Variable Models with Stephen G. Donald. Host: Prof. Harry J. Paarsch. Brock Hall 351 from 4-5:30pm. Call 228-2876.

Applied Mathematics Seminar
Engineering Applications of Computational Fluid Dynamics. Dr. Martha Salcudean, Head, Mech. Eng., UBC Math 229 at 3:45pm. Call 228-4584.

Noon-Hour Concert
Geoffrey Michaels, violin, Roger Smalley, piano. Tickets \$2 at the door. Music Recital Hall at 12:30pm. Call 228-3113.

THURSDAY, NOV. 30

CICSR Distinguished Lecture Series
Robotics and Automation. Design of Digital Tracking Controllers for Manufacturing Applications. Professor Masayoshi Tomizuka, prof. and vice-chairman Instruction, U of Calif., Berkeley. Scarfe 100, from 1-2pm. Call 228-6894.

Psychiatry Lecture
Cross Cultural Psychiatry in Refugee Camps. Dr. Wolfgang Jilek, Clinical Professor, Div. of Social and Cultural Psychiatry, UBC. Detwiller Pavilion 2NA/B from 8-9am. Call 228-7325.

Economics Seminar
Union Growth and Efficient Contracts. Denise Doiron, UBC. Host: Prof. W. Craig Riddell. Brock Hall 351 from 4-5:30pm. Call 228-2876.

Tai Chi Group
Introduction to Basic. Sam Masich, Coordinator. Twelve lessons \$45. Faculty Club Ballroom from 7:45-8:45am. Call Colleen Garbe at 228-4693.

Faculty Club End of Term Luncheon
Christmas Buffet. Per person \$14. Faculty Club Ballroom from 11:30am-1:30pm. Call 228-2708.

UBC Symphony Orchestra
Gerald Stanick, director. Free admission. Old Auditorium at 12:30pm. Call 228-3113.

Concert
Roger Smalley, piano. Music Recital Hall at 8pm. Tickets, call 228-3113.

FRIDAY, Dec. 1

AMS Lecture
Angela Davis, author and activist. IRC 2, 4, 6 at 8pm. Call 228-2050.

Chemical Engineering Seminar
Magnetic Field Effect on Free Diffusion of Saccharides Through a Porous Membrane. Virinder Atwal, graduate student, UBC. Chem.Eng. 206 at 3:30pm. Call 228-3238.

Economics Seminar
Full Insurance in the Presence of Aggregate Uncertainty. Barbara Mace, Rochester, NY. Host: Prof. James Nason. Brock Hall 351 from 4-5:30 pm. Call 228-2876.

Faculty Club End of Term Luncheon
Christmas Buffet. Per person \$14. Faculty Club Ballroom from 11:30am-1:30pm. Call 228-2708.

Faculty Club Seafood Festival
Buffet. Reservations recommended. Main Dining Room from 5:30-8:30pm. Call 228-2708.

UBC Symphony Orchestra
Gerald Stanick, director. Free admission. Old Auditorium at 8pm. Call 228-3113.

Graduate Student Society
Anything from Medieval Tunes to Beatles with Nathaniel Hurvitz. Free admission. All welcome. Grad Student Centre Fireside Lounge at 7pm. Call 228-3203.

NOTICES

THE VANCOUVER INSTITUTE

Sat. Nov. 25
Canadian Red Cross Society Lecture. Nuclear Energy, Nuclear Accidents, and Nuclear War. Dr. Robert Gale, Fac. of Medicine, U of California (Los Angeles). 8:15 p.m. in IRC #2.

Frederic Wood Theatre
She Stoops to Conquer directed by Kevin Orr. Until Sat. Nov. 25. Reservations recommended. FWT 207 or call 228-2678. Curtain, 8:00 pm.

Fine Arts Gallery
Mary Scott. Nov.22-Dec.22. Basement, Main Library. Tues.-Fri., 10 am-5pm; Saturday, noon - 5 pm.

Botanical Garden
Christmas Sale. Fresh, green wreaths, books, gardening tools. Dec. 7, 8, 9, 11 am-7 pm, 6250 Stadium Road. Call 228-3928.

Graduate Student Society
Free Film Festival. James Bond and Meryl Streep. Grad Centre Fireside Lounge, Mondays at 6:30pm. Call 228-3203.

Psychiatry Study
Volunteer men and women 19-60 years, to participate in research investigating eye function in depressed patients and control volunteers. Volunteers must not have a past history or family history of depression and would have retinal tests at the VGH/UBC Eye Care Centre. Stipend \$15. Call Dr. Lam or Arlene Tompkins at 228-7325.

Psychology Study
Non-student volunteers, aged 30-40 and living with a heterosexual partner, to keep a daily journal (average 5 min. daily) for 4 months. Participants will look for patterns in their physical and social experiences. Jessica McFarlane at 228-5121.

Back Pain Research
Volunteers needed for magnetic resonance imaging of healthy spines - men and women aged 18 - 60, non-pregnant, no pacemakers, no intracranial clips and no metal fragments in the eye. University Hospital employees excluded. Call June between 8 am and 4 pm, Monday - Thursday at 228 - 7720.

UBC Employment Equity
Faculty and staff interested to learn about the program, including the census to take place in February 1990, please contact Dr. Sharon E. Kahn, Director. Call 228-5454.

Agricurl
Late afternoon curling. Experienced curlers and those wishing to learn are welcome. At Thunderbird, Tuesdays, 5:15 - 7:15. Two terms, \$80. Call Paul Willing, 228-3560 or Alex Finlayson, 738-7698 (eve.)

Walter Gage Toastmasters
Wednesday. Public Speaking Club Meeting. Speeches and tabletops. Guests are welcome. Call Sulan at 597-8754, SUB 7:30 pm.

Psychology Study
Opinions of teenage girls and their parents on important issues surfacing in family life. Volunteers needed: 13 - 19 year old girls and one or both of their parents. Call Lori Taylor at 733-0711.

Language Exchange
Free service to match up UBC students who want to exchange their language for another. Call Yukiko Yoshida at 228-5021.

Language Bank
Free translation/interpretation services offered by International students and the community to students and non-profit organizations. Call Teresa or Nancy at 228-5021.

Sexual Harassment Office
Two advisors are available to discuss questions and concerns on the subject. They are prepared to help any member of the UBC community who is being sexually harassed to find a satisfactory resolution. Call Margaretha Hoek or Jon Shapiro at 228-6353.

Statistical Consulting and Research Laboratory
SCARL is operated by the Department of Statistics to provide statistical advice to faculty and graduate students working on research problems. Call 228-4037. Forms for appointments available in Room 210, Ponderosa Annex C.

Volunteering
To find an interesting volunteer job, get in touch with Volunteer Connections. Contact: Volunteer Connections, Student Counselling and Resources Centre, Brock Hall 200 or call 228-3811.

Lung Disease Subjects Wanted
We are seeking interstitial lung disease subjects in order to study the effect of this disorder on response to submaximal exercise. Call Frank Chung at 228-7708.

Parenting Project
Couples with children between the ages of 5 and 12 are wanted for a project studying parenting. Participation involves the mother and father discussing common childrearing problems and completing questionnaires. Call Dr. C. Johnston at 228-6771.

Teaching Kids to Share
Mothers with 2 children between 2 1/2 and 6 years of age are invited to participate in free parent - education program being evaluated in the Department of Psychology. Call Georgia Tiedemann at 228-6771.

Fitness Appraisal
Physical Education and Recreation, through the John M. Buchanan Fitness and Research Centre, is administering a physical fitness assessment program. Students \$25, others \$30. Call 228-4356.

Surplus Equipment Recycling Facility
All surplus items. Every Wednesday, noon-3 pm. Task Force Bldg. 2352 Health Sciences Mall. Call 228-2813.

Neville Scarfe Children's Garden
Visit the Neville Scarfe Children's Garden located west of the Education Building. Open all year - free. Families interested in planting, weeding and watering in the garden Call Jo-Anne Naslund at 434-1081 or 228-3767.

Botanical Garden
Open every day from 10 am - 3 pm. until mid-March. Free admission.

Nitobe Garden
Open Monday to Friday, 10 am - 3 pm until mid-March. Free admission.

Built Disney spider, RSI now on campus

By JO MOSS

The B.C. robotics firm which designed and built an army of mechanical spiders for the Walt Disney movie Runaway has established a branch on campus to foster increased collaboration with UBC researchers.

RSI Research, the research arm of Sydney-based Robotic Systems International Ltd., took up residence in the Old Poultry Products Building in September, cementing a six-year working relationship with UBC faculty and students.

The move will speed up the transfer of UBC-developed technology to industry, said Electrical Engineering Professor Peter Lawrence, a telerobotics specialist who is currently working with RSI on three robotics projects.

Commuting distance between Vancouver Island and the campus hampered collaboration because researchers and equipment were constantly going back and forth between sites.

"It was extremely difficult for us to carry out experiments," Lawrence said.

With the help of RSI, Lawrence's work will soon be applied to harvesting in the forest industry. But a lot of university-developed technology never reaches the commercial market because the last steps in the process of technology transfer, making the product commercially robust, aren't taken, said Poul Bendsen, forestry program manager for RSI Research.

That's where companies like RSI can fill an important role.

"We do the final development of the technology and act as a go-between, making industry aware that the technology is available," Bendsen explained. "We see ourselves as buffer people who can talk to both sides."

While Lawrence's robotized log loader is currently RSI's main research focus on campus, Bendsen said the firm's new location puts it in a better position to generate informal faculty and student contacts and encourage and increase information exchange.

"The dynamics of this kind of group synergy can't be underestimated," he said.

A world leader in developing underwater robotic equipment and related technology, RSI's telerobotic systems are used worldwide in hazardous and underwater environments. The company's Kodiak robotic arm aided in the recovery of the space shuttle Challenger from its crash site in the Pacific Ocean.

RSI also designs and develops robotic systems for industry and carries out research in advanced robotic control systems. The mechanical spiders the company designed and developed in three months for Runaway were 6-legged, radio-controlled walking robots which could jump and crawl.

Lawrence's robotized log loader is the thin end of a technological wedge which promises to revolutionize the forest industry. An excavator has been equip-



Photo by Media Services

Researchers Allan Hewitt (left), Poul Bendsen and Vince Uytdehaag from RSI Robotics inspect a robotized arm which converts this excavator into an easy-to-operate log loader.

ed with a modified robotic arm and computerized controls, converting it to a log loader.

The main feature of the new machine is that it's user-friendly. The operator simply moves a joystick to manipulate the robotic arm. Sophisticated programming takes over to direct the complex motions of the machine's joints.

Robotics technology can not only

improve the efficiency of the task at hand, but more important, make equipment easier to operate and remove operators from hazardous situations or sites.

Funded by NSERC and supported by MacMillan Bloedel, some telerobotics technology developed for the log loader is already licenced to RSI for application to other machinery used in the forest industry.

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Across Canada

Ottawa's spending on education declines

Figures from Statistics Canada demonstrate that in the period from 1982-83 to 1988-89, federal support of post-secondary education declined annually. In 1988-89, federal spending in support of education and training reached \$6.7-billion, or 6.7 per cent of the federal budget; post secondary education's portion of this total represented 56.6 per cent.

That portion declined from a peak of just over 60 per cent in 1984-85 to a low of 54.6 per cent in 1987-88. The major federal contributions to post-secondary programs in 1988-89 included: cash payments to the provinces and territories; university research; the Canada Student Loans Program; military officers' post-secondary education; and, post-secondary education for Native Canadians.

CIAU to test for drugs

The Canadian Interuniversity Athletic Union (CIAU) will implement a no-notice doping control program in university football, commencing in January, 1990. Student-athletes will

be tested for all International Olympic Committee (IOC) banned substances and methods.

The CIAU picked football because it is the only Canadian sport which is not doing any testing of its own. The CIAU also wanted to avoid overlap with testing now being carried out in other sports. The program's objective is to educate university athletes and coaching staffs and make them aware of the hazards and consequences of the use of IOC banned substances or methods.

Private university planned

A retiring University of Toronto mathematics professor is planning to start the first private university in Canada. David Anderson plans to base the university in Richmond Hill, just north of Toronto, to serve the 400,000 residents of the York-Simcoe region.

Anderson plans to name the institute Wolfe University after the commander of the British expedition that took Quebec in 1759.

Counselling Psychology Colloquium

PROJECT ASSESSMENT IN CHILD SEXUAL ABUSE - RESEARCH IN PROGRESS.

Dr. John Allan and Sarah Woodward

DATE: Thursday, November 30, 1989
TIME: 12:30 p.m.
PLACE: Room 102, 5780 Toronto Road, UBC.

For information call: 228-5259

CLASSIFIED

Classified advertising can be purchased from Media Services. Phone 228-4775. Ads placed by faculty and staff cost \$6 per insertion for 35 words. Others are charged \$7. Monday, Nov. 20 at 4 p.m. is the deadline for the next issue of UBC Reports which appears on Thursday, Nov. 30. Deadline for the next edition on Dec. 14 is 4 p.m. Dec. 4. All ads must be paid in advance in cash, by cheque or internal requisition.

For sale

XMAS IN HAWAII! Vancouver - Honolulu rtm. December 14 - 29, \$600 Cdn. Daytime, 228-6555, evening 922-3502.

Services

DIABETES AND EXERCISE STUDY: Males, 20-49 years old, who require insulin and are not currently exercising regularly, are invited to participate in a 12 week exercise program. Call Dr. Linda McCargar at 228-4045.

Employment

EMPLOYMENT PART-TIME: One of our purposes is to provide opportunities for retired professors and recent graduates of graduate programs to teach one or two courses. Subject matters: Arts (social sciences and humanities); Education (language teachers, early childhood education teachers); and Commerce (basic courses). We have a full range of Montessori materials; interactive laserdisk technology; and modern access to UBC etc. libraries. Some UBC-transfer courses. Contact persons: Lael Whitehead MA (Arts); Marianne Lulman MEd, ECE or Leyla Davoudian PhD, Education; Raymond Rodgers PhD, Commerce (acting); Doug Tomilson MEd, computing/technology, 685-9380. UNIVERSITY COLLEGE VANCOUVER (New Summits). 548 Beatty, V6B 2L3.

VICTORIA REAL ESTATE: Experienced, knowledgeable realtor with faculty references will answer all queries and send information on retirement or investment properties. No cost or obligation. Call collect (604) 595-3200. Lois Dutton, RE/MAX Ports West, Victoria, B.C.

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People

Griffith elected AAACE president

William Griffith, a professor in the Department of Administrative, Adult and Higher Education, was named President Elect of the American Association for Adult and Continuing Education at the association's recent annual conference in New Jersey.



Griffith

Griffith is the first Canadian university professor to be elected president of the organization in its 63-year history.

The AAACE is a broad-based professional organization with about 3,500 members, most in the U.S. It includes adult education professors as well as leading administrators and scholars of adult and continuing education from a wide variety of institutions.

Griffith, who is currently on study leave from UBC, has been a vice-president of the AAACE

and has served as chairman of the adult education professors group within the association.

The Ontario Institute for Studies in Education has named a pair of UBC faculty members as Fellows of the Institute for 1989.

Education Professor Emeritus Mary Ashworth was honored for her seminal influence and contribution to both policy and practice in English as a Second Language instruction in Canada.

Adjunct Language Education Professor Margaret Fulton was selected in recognition of her distinguished career as a teacher and educator which began in a one-room country school and led to the presidency of Mount Saint Vincent University in Halifax.



Ashworth

Other fellows to be honored at the awards ceremony Nov. 20 in Toronto are Edward Barbeau, University of Toronto, Douglas Light, George Brown College, and Fred Ryan, recently retired from Loyalist College, Belleville.

A team of two UBC faculty and a recent UBC graduate has won second place in a design competition sponsored by the Architectural Institute of B.C. and the Greater Victoria School Board.

The winning team members were Freda Pagani, design co-ordinator with Campus Planning and Development and an adjunct professor in the School of Architecture, Moura Quayle, a professor in the Landscape Architecture Program and School of Architecture, and Alan Boniface, a recent graduate of the School of Architecture.

They were awarded an \$8,000 prize in the Rogers Elementary School Competition for their design of the school and the landscape of the three-acre site.

Economics Head John Helliwell has been appointed to a royal commission looking into passenger transportation in the 21st century.



Helliwell

Helliwell, who teaches international economics and specializes in research in international economics, was appointed by Prime Minister Brian Mulroney, along with eight other commissioners.

The commission will advise on the needs of Canadians and relationships between different modes of transport of the future. It is expected to provide a plan of action to ensure transportation links among Canada's regions are maintained and improved.

Quiet resignation is the life of B.C.'s MS care givers

By JO MOSS

A group of people in homes throughout B.C. are living lives of quiet resignation.

They look after relatives with multiple sclerosis and in coping with the monumental task, they seem to experience more fatigue, higher stress and take more medication than any other known group of caregivers, a UBC Nursing study has found.

It's speculated their marriages break up at double the rate of other care giving groups.

MS caregivers carry out an enormous number of health-care tasks which are invisible to their friends and neighbors and receive little recognition or support from the health-care system, say Nursing Professors Helen Niskala and Marilyn Dewis who conducted the survey.

B.C. has one of the highest prevalence rates of MS in Canada, or elsewhere—more than nine cases per 1,000 people as compared to the national average of one per 1,000. There is one case per 500 people in Vancouver. In total, it's estimated there are more than 4,500 cases in the province.

Difficult to diagnose, little is known about its cause and there is no cure.

While it has long been suspected that MS caregivers were at risk for stress and stress-related symptoms, Niskala's and Dewis' one-year study of their well-being may be the first of its kind in Canada. In a detailed survey of 61 caregivers, located through community agencies, they asked respondents questions about the quality of their life.

"We'd expected we'd find they weren't in great shape," Dewis said. "We were surprised they were under such great stress."

Because the disease is unpredictable, usually beginning early in life and following a long and uncertain course, MS patients live longer than people with other kinds of chronic illnesses. Niskala and Dewis found the average length of care a relative provided was



Niskala

more than 10 years.

"That's what creates a lot of the stress," explained Niskala. "There is no end in sight. MS can be diagnosed in one partner early in the marriage and go on for decades."

"One of the hardest things the caregiver lives with is that they could spend their whole lives looking after the patient," Dewis adds.

Predominantly women, caregivers said they had a lot of worries in addition to their stress. More than half the respondents said they felt overwhelmed by the responsibility. About a third said they experienced loneliness and reported that no one understood them. One third wondered if anything was worthwhile.

Providing direct care often involves heavy physical demands, driving patients to appointments, for example, or lifting them from the bed to a chair. Many caregivers, whose average age was early 50s, complained of arthritis, headaches, and sleeplessness.

As the patients disease progressed, the caregiver's social activities decreased. They said they spent less time visiting friends, going to church, attending clubs, or enjoying personal hobbies.



Marilyn Dewis

"The little things in life we take for granted get struck off one by one as the patient's condition worsens," Dewis said. "We know from other studies the patient at home does better than in an institution. But at what cost to the caregiver?"

Part of the problem is that society takes for granted that as family, the caregiver should be looking after the patient.

Often they can't afford to hire someone to help and for many people institutionalized care is not an option because the patient doesn't want it or it isn't available.

A limited number of community support services, such as the MS Society, are available for caregivers, but finding out which ones are available and coordinating them can be difficult. Niskala's and Dewis' study indicated caregivers didn't use services as much as they could because they didn't know what they had access to.

Video tapes used to help teach nurses

By JO MOSS

The nurse sees a patient on the video screen experience a heart attack. His skin color changes and he clutches his chest.

It's a situation where seconds count and the nurse has to act quickly. What if she makes a mistake?

That's the benefit of interactive video simulation exercises, says Barbara Milne, Assistant Professor in the School of Nursing. "It's a very safe way of teaching because it allows students to make mistakes and see the consequences of their action without jeopardizing a real patient."

Flight simulation videos have long been used to train airline pilots. More recently, medical simulation videos have been introduced to the health-care field where they are ideal for training professionals such as nurses who also rely extensively on visual cues to make decisions.

Unfortunately the new technology is expensive, too expensive for most

nursing schools in Canada and the U.S. to purchase. Interactive videodisc systems can run as high as \$11,000 and the program videodiscs up to \$1,700.

A recent grant of \$25,600 from an American foundation, the Helen Fuld Health Trust, has enabled UBC's School of Nursing to purchase two videodisc systems and a number of videodisc programs. The trust is the largest in the U.S. devoted exclusively to the welfare of undergraduate nursing students and since 1969 has made grants in excess of \$4-million to nursing schools in North America and overseas.

The interactive videodisc systems come complete with touch-screen monitors—a bonus for people without typing or keyboard skills. Students interact with a taped scenario and are asked to input their responses. They work at their own speed, stopping and starting the video at will, or repeating sections that are confusing. Most important, Milne says, the students can actually see the consequences of their choices.

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Photo by Media Services

UBC Clinical Psychiatrist Dr. Raymond Lam demonstrates the use of a light box for Mary Kapelus.

SAD strikes in winter, causes severe depression

BY CONNIE FILLETTI

A disturbance in the biological clock may cause severe depression in as many as five per cent of Canadians, says UBC Clinical Psychiatrist Dr. Raymond Lam.

Dr. Lam's studies indicate that Seasonal Affective Disorder (SAD) usually strikes in winter when less sunlight is available. As the days get shorter and the nights get longer, our daily body rhythms get thrown out of sync.

"Humans have not evolved past their dependency state on light," said Dr. Lam. "It appears that bright light affects the daily rhythms that run our hormones and sleep cycles. Most people can resynchronize their biological clocks during winter, others can't."

Although Dr. Lam estimates that about 70 per cent of the population experiences some seasonal mood changes, SAD sufferers exhibit extreme symptoms of winter depression. They are chronically fatigued, sleep more, lack interest in

their usual activities, crave carbohydrates, gain weight and feel alienated. They become dysfunctional to the point where their productivity diminishes and their relationships with family and friends become strained.

Dr. Lam and several colleagues in the Faculty of Medicine have opened a Seasonal Mood Disorders Clinic to examine why people get SAD and to explore methods of treatment.

Last year about 60 patients at the clinic were treated with light therapy. Each person spent approximately two hours each day over the winter months in front of a box emitting high intensity light. The light used is five times brighter than normal room lighting, but only about half as bright as a cloudy day in Vancouver.

Dr. Lam discovered that 90 per cent of the patients responded positively to the treatment. More than half of them were fully cured, their symptoms of

winter depression totally disappearing. The treatment is done at home while the patient is awake and does not require changes to diet or normal activities.

Dr. Lam cautions that although the light boxes can be purchased commercially, they should not be used without the recommendation and supervision of a physician. He also warns that mild side-effects may accompany light therapy, including eye strain and headaches.

People with SAD who would rather try stronger lightbulbs in their home, a Hawaiian vacation or visiting a tanning salon be forewarned — these methods don't work, Dr. Lam says.

The therapeutic effect of light on winter depression is still being studied at Dr. Lam's clinic, the first of its kind in Canada and now in its second year of operation.

Anyone wishing to contact the clinic at the UBC site of University Hospital should call 228-7325.

Business of future to provide workers' childcare: study

By GAVIN WILSON

Forward-thinking businesses will look after the childcare needs of employees in the 1990s, say researchers at UBC's Child Study Centre and Douglas College.

The researchers, conducting a joint nation-wide study of employer attitudes to childcare, say businesses are recognizing that employees' childcare needs can affect the corporate bottom line.

Absenteeism, tardiness and sagging morale may result from work-family conflicts. By providing flexible childcare options, employers can benefit through improved productivity, recruitment and retention, the researchers say.

It is believed to be the first time a Canadian university and community college have collaborated in research.

The principal investigators of the study are Glen Dixon, director of the UBC Child Study Centre, and John McKendry, dean of Applied Programs at Dou-

glas College. Other staff include researcher Carol Ebner, research coordinator Elva Reid and project manager Stephen Bath, who is coordinator of special projects at UBC's Child Study Centre.

The second phase of the joint UBC-Douglas College study has received more than \$250,000 in funding from the Child Care Initiatives Fund. Funding was announced by Perrin Beatty, minister of National Health and Welfare.

In the next decade it will be increasingly difficult for companies to recruit and retain skilled workers. How successful they are will depend in part on how they accommodate work-family issues such as childcare and care of aging parents, said Ebner, who teaches early childhood education at Douglas College.

"Recent research shows flexibility in family issues makes good business sense for employers," she said. "The leading edge companies are looking ahead."

The first phase of the study produced a broadcast quality video describing the different needs, benefits and options of childcare assistance available to employers.

In the second phase, a multimedia presentation will be shown to a hand-picked group of 40 personnel directors and human resources managers during a seminar this January held under the auspices of the Industrial Relations Management Association of B.C.

In a forthcoming national phase of the project, research results will be released to business and academic communities across Canada, describing the state of corporate need for increased employer involvement in childcare.

"Employers are now realizing the benefits of accepting some responsibility for the childcare needs of Canadians," said Bath. "Recent research has shown that flexibility in family issues makes good business sense for employers."

Forum

New patent act an improvement

By RON SIMMER

(Ron Simmer is a UBC patent service librarian)

Canada's new patent act, effective Oct. 1, allows Canadians to play on the same field with the same patent rules as the rest of the industrialized world. While the changes are designed to modernize and streamline the transfer of technology to the community, there are new hazards to avoid.

But life for the university inventor will generally be improved under the new act, which should help quicken the flow of scientific communication.

The amendments that most concern the academic researcher are:

- First-to-File as opposed to a first-to-invent rule - the first person to file an application gets the patent.
- Early publication - patent applications are made public after 18 months.
- Absolute novelty - information published about an innovation before the patent application is filed destroys patentability.

Since Canada is now a first-to-file country, it is important a patent application be filed at the earliest possible date, preferably before any public disclosure. Once this priority filing date is established the inventor is free to publish his work anywhere without fear of losing patent rights.

It is possible to file a patent application in Vancouver before an invention is fully completed or evaluated. Then an inventor has one year from this filing date to further develop and test the invention. By international convention, after the Canadian inventor files his Canadian patent application, he has one year to file equivalent applications in foreign countries.

Canada joins many other nations in becoming a "Fast Publishing" country, further expediting the communication of patent information. All patent applications become public 18 months after filing.

Thus, after a patent application, publication of research results can be easily coordinated. By comparison, American patent applications remain secret until the date of issue.

The main criteria for obtaining a patent is that the invention be new to the world. Canada has adopted the generally accepted international standard for novelty which insists that a patent will not be granted for an inven-

tion previously revealed by any means in any country before the application is filed.

The Canadian inventor has the option of a one year grace period to publish or advertise his invention before filing. In so doing however, he or she kills any chance of filing later patent applications in foreign countries having stringent absolute novelty requirements. This includes many western European states and Japan. Since most major countries do not permit any grace period, in practice it is advisable to keep inventions absolutely confidential until a patent application is filed somewhere.

In the current state of international technology exploitation, premature disclosure of an innovation is a serious hazard. In some conservative jurisdictions, any previous public disclosure at all, regardless of degree, may destroy a patent application.

Public disclosure means a variety of things under the laws of different countries. Publication of a discovery in a journal is usually comprehensive enough to constitute public disclosure under any law. Public use or demonstration of an invention, unless experimental, also amounts to publication. If developmental work must be disclosed to others for evaluation, it is advisable to have written and signed confidentiality agreements.

The new Patent Act affects the way we patent in many other areas - fees, licences, examination, terms of protection, and claims for food and medical substances. But one of the most far reaching changes involves the ratification of the Patent Cooperation Treaty, effective Jan. 2, 1990. We will have a standardized international procedure shared by 43 countries, including the U.S., Japan and most of the EEC. Canadians will be able to file for a patent in as many of the member countries as they choose, with a single Canadian application.

Further information on patents and inventorship is available from the PATSCAN office in the Science Division of the UBC library. Ask for a free copy of a recent paper "The University Inventor and the Patent World" by Gerald Oyen, UBC Law Faculty lecturer.



Simmer

Vrba is honored for war heroism

Associate Professor of Pharmacology Dr. Rudolf Vrba was honored at the Holocaust Memorial Center in Detroit recently for his heroism during World War II.

He received the 1989 Righteousness Award at the centre's fifth anniversary dinner.

Previous recipients of the award include the United States Congress and Swedish diplomat Raoul Wallenberg.

While imprisoned at Auschwitz, Dr.

Vrba learned of the Nazis plan to murder almost 1-million Hungarian Jews in the death camp's gas chambers. He escaped from Auschwitz — one of only five people in the history of the war to do so — and warned the leaders of Hungarian Jewry of their imminent fate.

Dr. Vrba's award comes on the fiftieth anniversary of the holocaust. James Blanchard, Governor of Michigan, was the principal speaker at the official state function.