

Volume 31 Number 9

April 17, 1985

IBS FORER

Third-year philosophy student Aymen Nader leaves April 25 on a 4,850-kilometre bicycle trip across Canada to raise funds for cancer patient care services. See story on Page 3.

Robert Smith accepts appointment

Dr. Robert H.T. Smith, UBC's president pro tem, will return to his native Australia in January, 1986, to take up an appointment as vice-chancellor (the equivalent of president) of the University

Man-in-Motion Tour

Update: April 17, 1985. Rick Hansen has travelled 1,110 miles on his round-the-world wheelchair tour to raise funds for spinal cord research and rehabilitation, and is currently in Soledad, California. Contributions so far total \$175,505. If you'd like to make a donation, call 687-5200.

of Western Australia in Perth.

In a letter to the UBC community early in April, Dr. Smith said his decision to accept the appointment "marks the culmination of a lengthy process: I was invited by the search committee at the University of Western Australia to be a candidate for the vice-chancellorship in July of 1984, and the Senate of UWA resolved to offer me the appointment only last month."

He said the Board of Governors at UBC "were aware of the possibility of my being offered this position when they asked me to serve as president protem on March 7, 1985. I assured the Board then, and I assure you now, that I will continue to give my responsibilities at UBC my complete attention."

UBC chemist receives major grant from NIH

Basic research into the family of proteins similar to heme, the red pigment in blood hemoglobin that carries oxygen throughout the body, is being supported at UBC under a \$560,000 grant from the U.S. National Institutes of Health.

Dr. David Dolphin in UBC's chemistry department will receive the grant over three years.

"It's refreshing that the NIH is not only willing to make a very large grant to a scientist outside of the U.S., but

Consultants assist search for president

Chancellor W. Robert Wyman, chairman of the Advisory Committee for the Selection of Presidential Candidates, has announced that the committee has engaged the services of a firm of Executive Research consultants to assist in its search for a new president.

He indicated that the committee wishes to proceed as expeditiously as possible and the consultants, who are experienced in academic searches, should be able to provide a good deal of systematic help by gathering information concerning prospective candidates.

Chancellor Wyman emphasized, however, that the consultants are an adjunct to the advisory committee itself and will act only in a supporting role. Liaison has been established between the advisory committee and the consultants who, at all times, will be acting under the committee's direction. In the later stages of the search process, the advisory committee will have full responsibility in determining the short list of names, interviewing and making the final recommendations to the academic committee of the Board of Governors.

Chancellor Wyman has asked UBC Reports to remind all members of the University Community — faculty, students, staff and alumni - that the advisory committee is anxious to have a broad spectrum of advice to assist it in its task. Such advice or opinions could address the role of the University and the appropriate attributes candidates for president will need to meet the future. The committee is open to nominations, and would be glad to receive supporting information for those candidates. Since the committee has already begun its work, it encourages those who wish to respond to do so as quickly as possible. Letters should be addressed to Room 108, Old Administration Bldg., UBC.

that they recognize the importance of basic research," Dr. Dolphin said.

"They realize that important clinical advances that can improve health care often come from basic research."

In its assessment of Dr. Dolphin's work, the NIH said his laboratory is one of the best of the numerous inorganic chemistry laboratories on the continent.

The proteins he studies are all, with the exception of hemoglobin, enzymes, substances that accelerate the rate of chemical reactions in the body. He builds "model systems" of the enzymes and their reactions — test tube versions of the reactions — many of them little understood, that occur in the living body.

The enzymes are similar in form to hemoglobin but entirely different in function.

"One of the enzymes is cytochrome P-450 that's found in the liver. If it becomes defective, toxins can build up and the person could be dead in a day.

"When the enzyme is functioning normally but is introduced to abnormal substances, such as some of the constituents of car exhaust for example, it can produce virulent carcinogens."

Dr. Dolphin is popularly known for his hypothesis that the myths of vampires and werewolves originated with people who were victims of a rare genetic disorder called porphyrias. The disease results in the failure of the body to properly synthesize heme. Victims of various forms of the disease may be hunched, hairy, and have their lips drawn back which would exaggerate the appearance of their teeth.

"The symptoms of one form of the disease would be improved if sufficient heme were available. One method of doing so before modern medicine would be to drink blood."



David Dolphin

CAMPUS — PEOPLE



Elaine Chang

Elaine K. Chang, a 21-year-old honors student in UBC's English department, is one of 119 North American students who have been named 1985 Mellon Fellows in the Humanities.

The award will enable Ms. Chang, who graduates in May with the degree of Bachelor of Arts, to enrol at Stanford University, where she will commence a graduate program leading to a Doctor of Philosophy degree in the Department of Modern Thought and Literature.

She has specialized in contemporary fiction in her UBC studies. At Stanford, she plans to write a Ph.D. thesis analysing modern American writers such as Thomas Pynchon from a political-historical standpoint.

This is the third year in which Mellon fellowships have been awarded since the program was established by the Andrew W. Mellon Foundation in 1982.

The Mellon awards seek to ensure that the next generation of teachers and scholars in the humanities in North America's universities and colleges will include men and women possessing exceptional critical and creative abilities.

The awards are aimed at countering a trend of the past decade, which has seen many of the ablest college graduates turning away from careers in higher education.

The winners of the 1985 competition were selected from among 1,425 candidates nominated as showing unusual promise by faculty members in the U.S. and Canada. The awards cover tuition and other fees at the university where fellows enrol, plus an annual stipend of \$8,000.

Students and graduates of UBC's Department of Music continue to distinguish themselves at home and abroad.

Leslie Robertson, a third-year music student and student of the viola, won first prize in the string division in the Tri-Bach Competition in Edmonton, an event which is part of the current tercentenary celebrations of the birth of J.S. Bach.

Five student string players are among the nine semi-finalists chosen for the 1985 Eckhardt-Gramatte competition, one of Canada's leading music events. The five from UBC are John Friesen, Ailsa Hunter, Gillian Kent, Joanne

Opgenorth and Cameron Wilson.
Tom Hadju, a fourth-year student in composition, has won second prize in the American Society of University

Composer's student composers competition with a work for cello.

Marissa Gaetanne, a graduate student in voice, has been engaged by the Vancouver Opera Association to play the role of the Queen of the Night in Mozart's opera, *The Magic Flute*, in the association's upcoming season.

Judith Forst, one of the music department's most distinguished graduates, will make her debut at one of the world's leading opera houses, La Scala in Milan, next year in Rossi's opera Orfeo.

Prof. Michael Bullock, who retired from UBC's Department of Creative Writing in 1983, is the author of a new book of "surreal fables" entitled *The Man with Flowers Through His Hands,* which is being published jointly by Melmoth, a Vancouver firm, and Third Eye, of London, Ont.

Prof. Bullock uses the term "fable" in the sense of "fabulous," rather than in the tradition of a short tale with a moral attached to it. "I leave people to draw whatever moral they wish from these stories," is the way he puts it.

A collection of 113 of Prof. Bullock's fables, translated into Chinese by Dr. Simon S.C. Chau, professor of translation at the Chinese University of Hong Kong, has recently been published in that city under the title *The Scarlet Women*.

Dr. Chau translated the short fables over the past couple of years for publication in various Hong Kong journals and the book represents a collected edition. It has been very favorably reviewed in Hong Kong by a critic who says it is the first surreal work ever to be translated into Chinese.

Prof. Bullock says Dr. Chau became interested in translating the fables because he believed they expressed a philosophical viewpoint that had a great deal in common with Buddhism.

Prof. Bullock was himself best known for his teaching and activities in the field of translation and was the recipient in 1979 of a Canada Council award for distinguished translation.



The first scholarship in the name of Margaret MacKenzie, honorary president of UBC's Faculty Women's Club has been awarded to first-year Arts student Birgit Raynard. The club raised \$4,000 to endow the scholarship acknowledging Mrs. MacKenzie's contributions to life at UBC when her husband, Dr. Norman MacKenzie was president from 1944 to 1962.

Dr. William D. Wray of the Department of History is the author of a major work on the Japanese shipping industry, published by the Council on East Asian Studies at Harvard University.

Entitled Mitsubishi and the N.Y.K., 1870-1914, and sub-titled "Business Strategy in the Japanese Shipping Industry," the 672-page volume presents an in-depth analysis of the origins and growth prior to the First World War of Mitsubishi, today Japan's largest industrial group, and the Nippon Yusen Kaisha (N.Y.K.), now the world's leading shipping enterprise.

Dr. Wray drew on previously inaccessible material from Japanese and Western companies in writing the book, which is the first of a sub-series on the history of Japanese business and industry to be published under the aegis of the Harvard Council on East Asian Studies.

Dr. Izak Benbasat of UBC's Faculty of Commerce and Business Administration has been selected as the first Marvin Bower Fellow at the Harvard University Graduate School of Business Administration.

The new fellowship is to allow young business scholars an opportunity to spend a year at Harvard to continue their research without any teaching responsibilities. While at Harvard next year, Dr. Benbasat will conduct research in the area of computer-based information and support systems. His salary will be paid by Harvard and Harvard will grant him a further \$10,000 to continue his research back at UBC the following year.

Three other scholars yet to be selected will join Dr. Benbasat at Harvard next year. The Bower fellowships, funded under a \$2 million endowment from McKinsey & Co., an international business consulting firm, are awarded to those "who have demonstrated, by the superior quality and quantity of their published works, outstanding achievement in business scholarship and exceptional promise of continuing scholarly productivity, influence, and leadership," according to Harvard Business School guidelines.

Letter

Dear Editor:

I would like to draw your attention to the magnanimous benefits we, at Brock House, have received from UBC professors. The English department has provided ten lecturers each quarterly session on English Literature. These lectures are given voluntarily and are very much appreciated. The professors who offer these services have been scheduled by David Macaree and Jan de Bruyn. The lectures have been specially enjoyable events for the past two and a half years.

The question and answer period followed by lunch with the speaker has been much appreciated by the 40 or so seniors who regularly attend.

Very little publicity has been given to this generous donation of time, energy and expertise for the benefit of seniors. I hope you may find space in *UBC Reports* to record our thanks and appreciation.

Brock House Society

Neville Scarfe, President

Brock House is an activity centre for seniors at Jericho Beach. Its president, Neville Scarfe, is dean emeritus of UBC's Faculty of Education.—Ed.



Yunshik Chang

Prof. Yunshik Chang of UBC's Department of Anthropology and Sociology was not only a participant but a guest of honor at a conference in his native Korea recently where he was recognized for his contributions to the growth and development of the Population and Development Studies Centre at Seoul National University.

Prof. Chang, who graduated from Seoul National University in 1958, was involved in the beginnings of the Population and Development Studies Centre in Korea, which was originally funded by the U.S. Population Council, which has its headquarters in New York

Over the years, Prof. Chang has continued to have a close association with the Korean centre, which he visits regularly and which serves as the basis for his own research on population and industrialization and its social implications in Korea.

At a recent meeting in Seoul to mark the 20th anniversary of the establishment of the Population and Development Studies Centre, Prof. Chang gave a paper on the rise of commercial farming in Korea since 1945 and also received a plaque of appreciation for his "invaluable contribution" to the centre's development.

Dr. Peter Oberlander, director of UBC's Centre for Human Settlements, will be a member of the Canadian delegation at the eighth session of the United Nations Commission on Human Settlements to be held in Kingston, Jamaica from April 29 to May 10.

The UBC Centre was commissioned to prepare a background paper on "Planning and Managing Small and Intermediate-Size Settlements" for discussion in Jamaica. The UN Commission on Human Settlements, which is comprised of 58 nations, provides continuity and coordination of all United Nations activities on settlement issues.

Student plans fund-raising bicycle trip across Canada

Aymen Nader, a third-year philosophy student at UBC, is a young man who likes a challenge.

In September of last year, for example, when he arrived in Vancouver from Montreal to enrol at UBC, he divided his time between the campus, where he kept his clothes and books in various lockers, and the nearby University Endowment Lands, where he lived in a makeshift tent in the bush for six weeks near the junction of 41st Ave. and Southwest Marine Drive.

On April 25, the day after he finishes writing exams at UBC, Nader plans to begin a 4,850-kilometre bicycle journey from Vancouver to Montreal to raise money for cancer patient care services provided by the B.C. and Yukon Division of the Canadian Cancer Society.

Nader said his trans-Canada bicycle journey, which he estimates will take five to six weeks, was something he had planned to do in any case. "It seemed like a good idea to combine the trip with a fund-raising effort to help people who are hospitalized with cancer," he said

Nader approached the B.C. and Yukon Division of the society, which has endorsed his trip and fund-raising in B.C. only. He said that in addition to raising money, his effort is designed "to show the community that UBC cares enough to help."

While Nader hopes that a substantial amount of money will be raised within the UBC community, he wants others to know that contributions from any individual and group in B.C. are welcome. Cheques, made payable to the B.C. and Yukon Division of the Canadian Cancer Society, should be sent to the division's headquarters at 955 West Broadway, Vancouver, V5Z-3X8.

Contributors, who will get receipts for tax purposes, should note on the cheque that the donation is for the "21 Vancouver to Montreal" special event, a description Nader himself specified because he happens to be 21 years old.

ecause ne nappens to be 21 years old. Nader is also getting help from other sources. The Alma Mater Society at UBC has endorsed his fund-raising effort and given him \$50 for the purchase of spare parts for his bike. And Ace Cycle Shop at 3155 West Broadway has volunteered to tune and clean his bike free of charge before he sets out on April 25.

Nader emphasizes that he doesn't go around looking for challenges, such as roughing it in the bush in the UEL or crossing Canada by bike. "They're just things that come up in life and I've tried to emancipate my imagination so my life is enriched through a variety of experiences," he says with a grin.

A resident of St. Lambert, a suburb of Montreal, Nader came to Vancouver last year after spending two years studying at McGill University. He injured his back as a member of McGill's rowing team and took up biking on the recommendation of his doctor.

"I came out to Vancouver knowing that the weather was a good deal milder than in Montreal," he said, "and it seemed like a good idea to try to live in my tent"

He rejected Stanley Park because it was "too dangerous." He got a topographic map of the Endowment Lands from UBC's map library and decided to try tenting out at the southeast corner of the area because there is a stream there, which meant he had access to fresh water.

He found some plywood at the rear of a store at 41st and Dunbar and trucked it to the Endowment Lands. He put the plywood across a couple of logs, which gave him a raised platform on which he erected his tent. He also had a Coleman stove and "a good warm sleeping bag" in the tent.

Nader said he showered every day at the UBC War Memorial Gym, where he kept his clothes in a locker, and stored his books in a second locker in the Buchanan Building. In the morning, he'd make up a meal in a plastic container and heat it up in microwave ovens that are in the public area in the Health Sciences Centre Hospital on campus

Just when his life style had "boiled down to a very comfortable routine," Nader arrived back at his UEL tent to find that all his equipment had vanished. "I thought some one had stolen it, but then I got a letter from my mother in Montreal, who said the RCMP had been in touch with my parents."

Nader said he never did discover how the RCMP, who police the Endowment Lands, found out about his bush home, but he guesses that someone reported

Nader said he went round to the RCMP detachment office on the UBC campus, where he retrieved his gear. "The RCMP were very good about the whole thing," he said, "after I'd convinced them I wasn't an escaped convict or a dope pusher.

"But they did suggest that I should adopt a more traditional life style and find a place to live."

Historian wins fellowship to study brewing industry

A University of B.C. historian has been awarded one of North America's most prestigious fellowships to write a complete history of the brewing industry in the Netherlands.

Prof. Richard Unger, the recipient of the award from the John Simon Guggenheim Foundation of New York, aims to produce a book that covers all aspects of the Dutch brewing industry, including its business and economic history as well as social and technological aspects from the early middle ages, when Dutch brewing began, to modern times.

Prof. Unger began work on the project in 1978 and has already collected a large amount of data on legislation, tax records and other aspects of the Dutch brewing industry, some of which has been stored in computer files. He plans to supplement earlier data with material on beer production, taxes, consumption and prices in the coming year while on leave.

What will emerge from Prof. Unger's research will be a composite picture of an industry that has always played a major role in Dutch society and which has been subject to many ups and downs.

The slow growth of the industry in the middle ages was followed by surprising success in the 15th century while elsewhere in Europe serious economic problems were the norm. The 16th and 17th centuries were a period of rapid growth and development for the Dutch industry. The 18th and early 19th centuries were a disaster, Prof. Unger said, but from about 1870 there was a revival and expansion of both the economy and the brewing industry.

The importance of the brewing industry goes beyond its place in the general history of the Dutch economy, Prof. Unger said.

Dutch brewers, in the first half of the 17th century, converted their industry to the use of coal for beer production. "In short," he said, "brewing became a transforming industry. The Dutch imported coal from Britain, grain from the Baltic area and made large quantities of beer which they sold in France.

"And that model has been repeated on a number of occasions in more contemporary times. It fueled the growth of Great Britain in the 18th and 19th centuries and since the Second World War it's been the hallmark of economic development in Japan, where Canadian coal and Australian iron ore has been used to create cars that are shipped back to the raw material suppliers."

Prof. Unger said his concerns about getting accurate data on beer production and consumption in Holland over the centuries have been eased by



Guggenheim fellow Dick Unger of UBC's history department reckons that if he is going to produce a book on the history of the Dutch brewing industry he should know what the product tastes like.

the mass of records that exist in town and city archives.

"Brewing in Holland, and elsewhere for that matter, has always been government controlled to the extent that beer production and consumption has been taxed. In Holland, local governments taxed production while provincial governments taxed consumption, all of which meant, of course, that the consumer paid twice.

"However, this also meant that very careful records were kept over the years, which can be used to chart the ups and downs of the industry quite accurately. I also have access to the records of one large brewery which has been in continuous operation since the 17th century. One of the problems of this project is simply digesting the wealth of information that's available."

Prof. Unger, who has been a member of UBC's Department of History since 1969 and also serves as one of two associate deans of the Faculty of Arts, is widely known for his work in the fields of medieval and renaissance history and economics.

Grad fee increases to be phased in

The blow of increased tuition fees for most graduate students was softened somewhat last week when UBC's Board of Governors approved recommendations that will have the effect of phasing some increases in over two years.

Here is a summary of the changes approved by the Board.

Tuition fees for third-year doctoral students and second-year master's students will increase from the 1984-85 level of \$876 to \$1,100 on April 1, 1985 and to \$1,300 on April 1, 1986. Doctoral students who continue beyond the third year will pay an annual tuition fee of \$500 as will master's students who continue their studies beyond the second year.

The 18-month fee for second-year master's students, last year set at \$2,188, increases to \$2,350 on April 1, 1985 and to \$2,450 on April 1, 1986.

Graduate degree candidates who pay on a per-unit basis, set at \$180 in 1984-85, will pay \$200 per unit as of April 1, 1985 and \$225 beginning April 1, 1986.

Unclassified students who take graduate courses numbered 500 and above, who paid \$77 per unit in 1984-85, will be subject to the same per-unit costs as graduate students.

Not affected by the recommendations approved by the Board last week were increases in fees for first-year master's and doctoral students, which increased only 2.86 per cent from \$1,750 to \$1,800

per year, and fees for second-year doctoral students, which declined slightly from \$1,307 to \$1,300 a year.

Chemistry launches fund-raising drive

UBC's chemistry department is out to raise \$10,000 to enable it to close a gap in the resources of its departmental reading room.

The department wants to purchase a 75-volume collective index to *Chemical Abstracts*, a weekly publication that summarizes articles that appear in hundreds of chemistry journals.

The collective index needed covers the years 1977 to 1981 and will enable students and faculty members to have quick access to material that relates to their field of interest.

The department began its fund-raising drive by staging a "Chemistry Fund Run" that netted between \$1,500 and \$2,000 in pledges, according to Prof. William Cullen, one of the organizers.

He said plans are being considered to raise additional funds through an appeal to UBC graduates who specialized in chemistry.

Members of the University community who want to make tax-deductible donations to the fund should contact Prof. Cullen at 228-2625.

Board approves new rates for residences

UBC's Board of Governors has approved increases in most rates for room and room and board in campus residences

The highlights of the increase package are as follows

Rates for single rooms in the Walter Gage Residence, where room-only is provided, will increase 4 per cent to \$1,720.62 for the term.

Rates for large single and single rooms in Totem Park and Place Vanier Residences will increase by 1.8 and 3.4 per cent respectively, and the meal rate will increase 3.9 per cent to \$6.55 a day

in both residences.

There will be no increase in rates for double rooms at either Totem Park or

Rental rates for apartments in the Acadia Park high-rise unit will increase 3 per cent, resulting in monthly rents ranging from \$287 to \$301. Rental rates for accommodation in some townhouse clusters and some units on President's Row will increase to eliminate a two-tier rent structure that was instituted

Rates in Acadia Camp housing units will be increased only when units are

renovated. Currently, rates for these units range from \$123 to \$268.

The Board also approved monthly rental rates for apartments in the new low-rise unit in the Gage Residence complex as follows: studio apartment - \$335; one bedroom — \$475; and two bedroom - \$600.

Golf Tournament

The 29th annual faculty and staff golf tournament will be held on Thursday, April 25 at the University Golf Course. Fees are \$14.50, dinner in the Faculty Club following the tournament is \$15.50. Open to all active and retired members of faculty and staff. Applications are available at the Faculty Club reception desk.

Law student wins essay competition

Third-year law student Michael Woodward is this year's winner of an essay competition for the William G. Black Memorial Prize.

The prize, worth approximately \$1,250, was made available by the late Dr. William Black, who retired from the UBC faculty in 1963 after many years of service. The award is given annually for the best essay on a topic related to some aspect of Canadian citizenship. This year's topic was the possible impact of free trade on Canadian political, economic and cultural sovereignty, and the status of Canada in the international community.

Calendar Deadlines

For events in the weeks of May 5 and 12, material must be submitted not later than 4 p.m. on Thursday, April 25. Send notices to UBC Community Relations, 6328 Memorial Road (Old Administration Building). For further information,

Items for inclusion in the Calendar listing of events must be submitted on proper Calendar forms. Forms are available at the Community Relations Office, Room 207 of the Old Administration Building, or by calling 228-3131.

MONDAY, APRIL 22 Terry Fox Visiting Professor Seminar.

Radiosensitizing Drugs, Hypoxia and Haemoglobin

— Can They Be Used and Exploited in Cancer Therapy? Dr. Ian J. Stratford, Radiobiology Unit, Medical Research Council, England, Lecture Theatre, B.C. Cancer Research Centre, 601 W. 10th

Chemical Engineering Seminar.

Integrated Circuit Manufacture. Milcah Chung, Chemical Engineering, UBC. Room 206, Chemical Engineering Building. 1:30 p.m.

Biochemical Discussion Group.

LTA₄ Hydrolase: A Potential Anti-Inflammatory Target. Dr. Jilly Evans, Merck Frosst Canada, Inc., Dorval, Quebec. Lecture Hall 1, Woodward Instructional Resources Centre. 4 p.m

TUESDAY, APRIL 23 Neuroscience Discussion Group/ Audiology and Speech Sciences

Neural Mechanisms of Complex-Sound Processing for Echolocation. Dr. Nobuo Suga, Biology, Washington University, St. Louis. Lecture Hall 3, Woodward Instructional Resources Centre. 4:30 p.m.

WEDNESDAY, APRIL 24 Pharmacology & Therapeutics Seminar.

Series on the ZAP-Experiments: III: The Use of Bootstrap Statistics. B. Gimbarzevsky, Pharmacology and Therapeutics, UBC. Room 317, Block C, Medical Sciences Building, 12 noon

THURSDAY, APRIL 25 Botany Seminar.

Morphological and Cytological Study of Two Species of Audouinella: porphyrae and vaga. Carol Tam, Botany, UBC. Room 3219, Biological Sciences Building. 12:30 p.m.

Science, Technology and Society Studies Meeting.

Non-Rigorous Infinitesimals and The Growth of Mathematical Thinking. Mark Reimers, Mathematics, UBC. Room D121, Buchanan Building. 12:30 p.m.

Health Care and Epidemiology

Privatization in Canadian Health Care Financing and Delivery: What are the Real Issues? Dr. Gregory Stoddart, Clinical Epidemiology and Biostatistics, McMaster University. Room 253, James Mather Building. 12:30 p.m.

FRIDAY, APRIL 26 Terry Fox Visiting Professor Seminar.

Development of Drugs for Use in Radiotherapy: From Chemistry through to Clinical Trials. Dr. Ian J. Stratford, Radiobiology Unit, Medical Research Council, England. Lecture Theatre B, B Floor, Heather Pavilion, VGH. 12 noon

Medical Genetics Seminar.

Positron Emission Tomography in Twins with Schizophrenia. Dr. Clark Campbell, Psychiatry, UBC. Parentcraft Room, Grace Hospital. 1 p.m.

SUNDAY, APRIL 28 Calligraphy Lecture/Demonstration.

Karma of the Brush: Lecture and Demonstration held in conjunction with the Chinese and Japanese calligraphy exhibition held at the Asian Centre April 29 to May 12. Shiko Kataoka, the head of the Japanese calligraphers, will be giving the lecture and demonstration. Admission is free. For further information, call 228-2427 or 228-2746. International

MONDAY, APRIL 29 Chemical Engineering Seminar.

Frictional Pressure Drop for Two-Phase Flow in Pipes — A New and Extremely Convenient Correlation. Hans Muller-Steinhagen, Chemical Engineering, UBC. Room 206, Chemical Engineering Building, 1:30 p.m.

Health Care and Epidemiology/ Preventive Medicine Lecture.

Adolescent Smoking Prevention: Is There Hope? Community Health Services, British Columbia Ministry of Health. Room 253, James Mather

WEDNESDAY, MAY 1 Noon-Hour Lecture Series.

People and the Law — The Family Relations Act Five Years Later. Prof. Donald J. MacDougall, Law, UBC. Admission is free (no pre-registration required). Robson Square Media Centre. 12 noon.

Notices . . .

Nitobe Garden Hours

The Nitobe Japanese Garden will be open daily from 10 a.m. to 6 p.m. beginning April 5

Operation Raleigh Canada

Over the next four years, an international scientific expedition will circumnavigate the world. Operation Raleigh is divided into 16 three-month phases, each to be centered in a different location. The 1,900-ton research support vessel will proceed around the globe westward, mainly at tropical latitudes. Research will range from fundamental studies to highly applied projects tied in with community tasks to resource management work of wider significance. Operation Raleigh Canada is encouraging faculty and graduate students from UBC to participate in this unique expedition. For more information contact Barbara Jackson or Anna French at 688-2778.

Learned Societies Conference

The Learned Societies Conference will be held this year at the University of Montreal from May 26 to June 8. For information, contact Phillipe Roy at (514) 343-5814.

Fine Arts Gallery

Against Great Odds: Posters of Nicaragua is on display until April 27. The gallery, located in the basement of the Main Library, is open from 10 a.m. to 5 p.m. Tuesday through Friday and from noon to 5 p.m. on Saturday. For details, call 228-2759. Admission is free.

Language Programs

French, Spanish, Chinese and Japanese non-credit conversational programs begin the week of April 22. For further information, contact Language Programs and Services, Centre for Continuing Education, at 222-5227

TRIUMF Tours

TRIUMF, at the south end of Wesbrook Mall, houses the world's largest cyclotron. (A cyclotron accelerates large numbers of atom-sized particles almost to the speed of light. The particles are then shot at various targets, and the ensuing nuclear reactions are studied.) Beginning May 1, you or your friends may take a free tour of the cyclotron and the experimental areas at 11 a.m. or 2 p.m. daily, except on weekends or holidays. Your tour will last approximately 1 4/4 Mours. Note that a tour would not likely be interesting to children under 14, and also that pregnant or hysically handicapped persons would have difficulty with parts of the route. Please contact the TRIUMF Information Office (222-1047) in advance if you intend to come for a tour with more than four persons, so that extra guides can be arranged if necessary

Daycare

UBC Daycare Unit I has openings for children aged 17 months to 3 years. Full-time, part-time or summer months. For information, call 228-3019 (days, Unit I Daycare) or 228-9800 (evenings,

Reading, Writing, Study Skills

The Reading, Writing and Study Skills Centre, Centre for Continuing Education, offers programs in reading for speed and comprehension, writing improvement, grammar and basic composition, study skills. Classes begin the week of April 29. Phone 222-5245 for registration information.

Asian Centre Exhibit

Karma of the Brush, an exhibition of Chinese and Japanese calligraphy, will be on display at the Asian Centre April 29 to May 12. For further information call 228-2427 or 228-2746. Admission is free. Open 11 a.m. to 6 p.m. daily

Note. All external grant requests must be signed by the Head, Dean, and Dr. R.D. Spratley Applicant is responsible for sending application

May (Deadline Date in Parenthesis)

- B.C. Heritage Trust
- Research (1) B.C. Medical Services Foundation
- (BCMSF)
- Research (21)
- · Bedding Plants Foundation, Inc. Research (1)
- Canada Council: Aid to Artists
- Aid To Artists (15) Canada Council: Explorations Prog.
- Explorations Grant (1) Canada Council: Killam Program
- I.W. Killam Memorial Prize (30)
- Killam Research Fellowship (30)
- Canadian Foundation for Ileitis & Colitis Research Training Fellowship (Ontario)
- Canadian Law Information Council Research Fellowship Program (15)
- Department of Regional Industrial Expansion
- Canada Awards for Excellence (17)
- Deutscher Akadem. Austauschdienst (DAAD)
- Study Visits of Foreign Academics (1) Distilled Spirits Council of US
- Grants-in-aid for Research (1)
- Hamber Foundation - Foundation Grant (5)

- Indian & Northern Affairs Canada
- Annual Northern Science Award (10) Japan Society for the Promotion of Science JSPS Fellowship for Research in Japan
- March of Dimes Birth Defects Fdn. (US) Reproductive Hazards in the Workplace
- Muscular Dystrophy Assn. (U.S.)
- Postdoctoral Fellowships (31)
- Research (31) NSERC: Strategic Grants Division
- Equipment (1)
- Strategic Grant (1) Royal Society of New Zealand
- Captain James Cook Fellowship (31)
- Science Council of B.C. Research (1)
- Secretary of State
- Canadian Ethnic Studies Conference
- Canadian Ethnic Studies Program: Professorships (15)
- Ethnic Research (15) Spencer, Chris Foundation
- Foundation Grants (31)
- SSHRC: Research Grants Division Research (15)
- Standards Council of Canada
- University Research Contribution (1)
- World Wildlife Fund (Canada) General Research (1)

Faculty members wishing more information about the following research grants should consult the Research Services Grant Deadlines circular which is available in departmental and faculty offices. If further information is required, call 228-3652 (external grants) or 228-5583 (internal