

Bird Construction of Vancouver has been awarded a \$5,295,976 contract to build the new School of Home Economics Building on the East Mall of the University. Total cost of the building, which will house lecture rooms, laboratories and faculty offices, will be about \$5.8 million. Sketch by project architects, dalla-lana/griffin.



New plan for UBC research

UBC's administration has announced a plan to streamline and improve the efficiency of research administration, particularly in dealing with matters of policy.

The reorganization provides for establishment of an executive committee for research administration and policy to replace the president's advisory board, its executive committee, the major grants committee, the University/industry liaison committee and the committee on patents and proprietary rights.

The new executive committee will be chaired by the dean of the Faculty of Graduate Studies, Dr. Peter Larkin, whose appointment as associate vice-president, research, was approved by UBC's Board of Governors Oct. 7.

Members of the executive committee will be the vice-president for academic development, Prof. Michael Shaw, to whom Dean Larkin will report, research administration officer Dr. Richard Spratley, plus appropriate persons depending on the



Beach berm approved

A protective berm of rock, gravel, sand and dune grass will be constructed along the base of the Point Grey cliff at Tower Beach in the spring as the second phase of an erosion control program that was started this year by UBC.

The berm will stop any further erosion by the sea and thus will help to stabilize the cliff and safeguard University buildings along the top, as well as providing a safer beach with an extended foreshore.

The UBC Board of Governors has approved expenditure of \$450,000 for the work, most of which will go for the purchase of more than 25,000 tons of rock.

A number of groins, or sills, constructed of heavy rock will run sea-

Board okays upgrading of Empire Pool

UBC's Empire Pool, built in 1954 for what were then the Empire Games, is going to be renovated.

Given the choice of fixing up the outdoor pool or having it closed by health authorities, the UBC Board of Governors has approved expenditure of \$480,900 for renovations.

The work will include the installation of new filters and water circulation system in the filter room, a new chlorination system, new heating system, new water piping under the pool deck, new water supply inlets and drains, new lights and replacement of much of the electrical system.

"The renovations are major, but the pool has had 26 years of heavy use," said Neville Smith, director of Physical Plant at UBC.

ward from the shore, with smaller rock used as fill material between the sills.

The plan was prepared by Swan Wooster Engineering of Vancouver, in conjunction with shore resource consultant Wolf Bauer of Seattle, and was subsequently approved by a number of interested groups, including the Wreck Beach Committee as representative of the beach users.

Neville Smith, director of Physical Plant at UBC, who is reponsible for implementation of the erosion control program, said work on the protective berm would start early in the spring and should be completed by next summer.

"Apart from controlling erosion of the cliff, this will mean establishment of a Class I beach," Smith said.

He said it might be necessary to put

subject to be discussed.

The reorganization also calls for various subject area committees for the health sciences, the natural and applied sciences, arctic and alpine research and the humanities and social sciences, as well as screening committees in such areas as research involving human subjects, animal care, biohazards and radioisotope and radiation protection.

The effect of the reorganization will be to reduce from 16 to 11 the number of committees dealing with research matters.

Dean Larkin said the reorganization stems from the increasing importance and the expanding amount of research being carried out at UBC. In the past five years, the total in grants awarded to UBC researchers has almost doubled. These three members of UBC's Department of Metallurgy, Prof. Keith Brimacombe, seated, acting department head Prof. Fred Weinberg and Prof. E.B. Hawbolt have been honored by the American Society of Metals. They'll receive the society's Henry Marion Howe Medal at the ASM's annual awards dinner Wednesday (Oct. 29) in Cleveland, Ohio, for a paper they authored. Prof. Weinberg holds the 1980 Alcan Award of the Canadian Institute of Mining and Metallurgy, which he received at the institute's annual meeting in Halifax in "recognition of highly significant contributions to the advancement of metallurgy in Canada." in a temporary access road along the beach from Spanish Banks to the work site, but the beach would be restored to its natural state once the berm was completed.

Smith said work in 1980 included improvements to two beach access trails, construction of a new trail near the UBC Museum of Anthropology, seeding and fertilizing of the cliff face, the cutting back of potentially dangerous cliff-edge trees, and the erection of fencing and directional signs.

Stan Weston, the soils expert and UBC governor who drew up a comprehensive five-year plan for erosion control at the request of the University, said he was really pleased with the first-year work and with the proposal for the protective berm.

UBCreports

Formula financing again aired at Senate meeting

The use of a formula for allocating provincial operating grants among B.C.'s three universities got another airing at the October meeting of UBC's Senate.

At the end of an hour-long discussion last week Senate voted:

• To record its "deep concern" to the Universities Council of B.C. (UCBC), which uses a formula for grant allocation, and to provincial minister of universities, science and technology, Dr. Patrick McGeer, about the Council's three-year experiment with a formula that is enrolment driven; and

• To establish an ad hoc committee of Senators and other appropriate people to consider alternatives to the UCBC's grant allocation formula.

The committee has been asked to focus on alternatives "which will recognize and help ensure excellence in university education" in B.C.

The motions, which were presented by dean of Commerce and Business Administration Dr. Peter Lusztig, stemmed from a discussion at the September Senate meeting on the report of the Senate budget committee, which drew attention to the underfunding of UBC as the result of UCBC's formula financing.

Speaking to the motions, Dean Lusztig said the use of a formula for allocating funds would make sense if one were talking about the production of running shoes or hamburgers.

"It is totally inappropriate for university education," he said, "because it reflects a complete absence of concern about the quality of education."

The use of a formula, he added, is a "real disincentive" to quality considerations because of a preoccupation with a head count of students, with the number of full-time equivalent students and with relative enrolment shifts within the three public universities.

Dean Lusztig also described as "suspect" two assumptions which he said were built into the formula. These were that a trimester system was more expensive to operate than the sessional system used at UBC and the University of Victoria, and the idea that economies of scale are possible in a university ("if you have more students, then you can train them more cheaply").

He said the Council's research staff should look at these issues, adding that he knew of no studies that confirm either of the assumptions.

Any university that pursues and

supports quality pays "an extremely high price," Dean Lusztig continued.

If we hold to or raise existing admission requirements, he said, the relative shift of marginal students to other universities which have different standards will be rewarded under the formula allocation of grants because of the concern for the head count of students.

One could suggest, he said, that to avoid future cutbacks, standards of admission to the University and to graduate programs should be lowered and students enrolled in non-credit courses should be offered credit in order to increase the head count.

Under the UCBC allocation system, Dean Lusztig said, 95 per cent of the funds received from government were allocated using the formula and 5 per cent was held back to finance new and emerging programs.

emerging programs. He said UBC was at a disadvantage in the allocation of this 5 per cent for two reasons — "we already have graduate programs in place which don't qualify as either new or emerging" and some programs rejected by UBC as inappropriate have been funded at other universities.

Senate's chairman, President Douglas Kenny, said the report of the ad hoc committee approved by Senate should report by early fall in 1981 if its recommendations were to have maximum impact on UCBC discussions concerning formula financing.

A new, five-year program leading to either a Bachelor of Arts or a Bachelor of Education degree in secondary

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Senate at its October meeting. The new program, resulting from two years of discussions between the Faculties of Arts and Education, provides for the registration of students in

vides for the registration of students in the Bachelor of Music program in years one to three. In years four and five, students proceeding to the Bachelor of Education (Secondary) degree with a music major will choose electives in Education, while those proceeding to the Bachelor of Music in Secondary Music Education in Arts will choose music electives.

Senate also approved a new program in Romance languages in the Faculty of Arts to enable students to attain a high level of proficiency in two of the major Romance languages (French, Italian and Spanish) and a reading knowledge of a third with some linguistic and literary background. UBC anthropologist Dr. Michael Kew gives a final check to a unique display of Indian rattles made by the Salish tribe of the Pacific northwest. The rattles

UBC anthropologist Dr. Michael Kew gives a final check to a unique display of Indian rattles made by the Salish tribe of the Pacific northwest. The rattles, which were used in cleansing rituals for the ill, are among 130 pieces of Salish art which will be on display at the Museum of Anthropology until the spring of 1981.

Museum gathers Salish art from many sources

The Museum of Anthropology is currently exhibiting one of the most exciting Indian art shows it has ever housed. The exhibit, entitled Visions of Power, Symbols of Wealth, is a collection of over 130 pieces of art produced by B.C.'s Central Coast Salish Indians.

Salish art has been neglected in the past and there are relatively few pieces left in B.C. The exhibit marks a significant effort on the part of the museum, and particularly by UBC anthropologist Dr. Michael Kew, who organized the exhibit, to bring Salish art back to B.C. and make British Columbians more aware of the Salish culture.

Dr. Kew has assembled art pieces from museums throughout the U.S. and Britain. "This is the first time that such a range and quantity of Salish art has been gathered in one place," he says.

The Salish Indian tribes occupied the Fraser Valley region and adjacent areas on Vancouver Island, and areas along the coast of the State of Washington. "One of the reasons that Salish art isn't well known," says Dr. Kew, "is because these were the most desirable areas in the northwest, and they were the first to be settled. The Salish culture suffered from outside influence quite a while before other Indian cultures in B.C." Another reason Salish art hasn't enjoyed the same popularity as Haida or Kwakiutl art in the northwest, according to Dr. Kew, is because Salish Indians didn't produce art for decorative or trading purposes. Their art objects were used in private and religious rituals. "Therefore," says Dr. Kew, "there were fewer art objects produced, and the Salish people were very reluctant to give them to outsiders. They were usually passed down in families."

Most of the pieces in the exhibit were made in the late 19th century. Dr. Kew has assembled sculptures, rattles, spindle whorls, textiles, houseposts and mortuary effigies for the exhibit.

Dr. Kew explains that the title, Visions of Power, Symbols of Wealth, reflects two important aspects of Salish culture. "Often artists would make an art object from images they saw in a vision. Salish people believed that visions had supernatural power, and these visions were very important to them, but they also believed that they shouldn't talk about them. Instead they shared the vision through the piece of art.

"The art objects were also symbols of wealth in the Salish culture. The more wealth or power an individual had, the more elaborate his possessions were."

Faculty approves four-year engineering program

UBC's engineering school, enjoying a record first-year enrolment, wants a four-year undergraduate program. The Faculty of Applied Science last week approved in principle in a near unanimous vote a four-year program. At present the engineering school, the only one in B.C., has a five-year and a four-year program leading to a bachelor's degree. The present accelerated four-year program is for exceptional students. The faculty's proposal will now go to Senate. The earliest the new program would go into effect is September, 1983, to allow secondary schools to make necessary adjustments. The move toward a full four-year program in the school began at least three years ago. One faculty committee recommended a four-year program as long ago as 1962.

First year enrolment in the school this year is 493. In the past few years it

engineering schools. The major argument they have put forward is that the number of students graduating from UBC isn't sufficient to meet provincial needs. more cost efficient to strengthen the one existing engineering school in the province before financing additional schools.

page 2

has been between 410 and 420. But even this year's record enrolment is deceptive, because about 100 students enrolled in other institutions will transfer into the school.

Students at Simon Fraser University and Selkirk, Cariboo, Malaspina, New Caledonia and Okanagan Colleges can take first-year science and firstyear engineering before transferring to the second-year of engineering at UBC.

Allowing for attrition, the number of students already registered will result in about 475 graduating students in 1984. This brings the participation rate of students in engineering in B.C. up to the national average.

Both Simon Fraser University and the University of Victoria are applying to the Universities Council of B.C. for But these figures are based on the number of graduates up until 1978 and ignore the larger enrolments of the past few years and of this year's record registration.

Based on current enrolment figures, the supply of graduates from UBC will be in balance with provincial demands as early as 1983.

UBC Dean of Applied Science Martin Wedepohl has presented UBC's position in the September issue of *The B.C. Professional Engineer*, published by the Association of Professional Engineers of B.C., and in speeches in communities in the Interior.

Dean Wedepohl says it would be

He emphasized that high technology research will have to be done if the Canadian economy is to successfully compete in the international marketplace. This research will mean a greater demand for engineers trained at the post-graduate level.

He said the program of training engineering students during their first years at community colleges should be expanded. The dean also maintains that it makes more economic sense to strengthen the graduate program of the UBC school before creating another undergraduate program in the province.

UBCreports

Programs integrate academic life with workplace experience

"The academic training a university offers is extremely valuable, but in addition, students need a chance to apply what they've learned in jobspecific situations. The purpose of our programs is to provide this connection with a work environment while the students are still undergraduates."

The speaker is Mrs. Maryke Gilmore and the programs she is referring to are the Co-operative Education and Internship Programs at UBC, which she co-ordinates.

The Co-operative Education Program is open to first-year Science students who are planning to enter first-year Forestry or Engineering. The program integrates supervised work experience in the summer months with the students' academic studies during the winter session.

The Internship Program is for students in the Faculties of Arts, Education and Commerce, and involves establishing students in work situations during the winter session to obtain practical job experience related to their field of study.

"It's good for students to be out in a working environment while they're going to school because it gives them a sense of what's going on in the working world and how fast it's changing," says Mrs. Gilmore. "It's also important for students to discover they have something to offer an employer."

The Co-operative Education Program began three years ago in the former Dean of Women's Office, and was initially just for women. The program was so popular with both students and employers, however, that it was expanded to include male students as well.

Students in the program undertake three consecutive summer work placements related to their academic studies. "This is definitely not just a job placement program though," Mrs. Gilmore emphasizes. "The students are selected by faculty advisors, they attend workshops on writing resumes and coping in a work environment and they must write a technical report at the end of the summer which is graded by a faculty advisor."

In addition, the students are evaluated by their employer in terms of the quality of their work, and traits such as initiative, dependability, organizational skills and ability to get along with co-workers.

The Engineering and Forestry Coop faculty advisors give students advice on their technical reports and visit them at their summer placement site, where they have an opportunity to meet the student's supervisor.

"The Co-op Program is a good opportunity for UBC to keep in contact with the business community," says Mrs. Gilmore.

Another reason for the visits is to give the students a chance to talk about any difficulties they may be having on the job. A Forestry student, Kathy Kerr, who was working in Williams Lake this summer, said the faculty advisors provided "both technical advice and emotional support."

Denise Duncan, a second-year mining and mineral process engineering student, says, "the Co-op Program helped me decide what I wanted to do with my career when I was in the Science faculty. It got me started in an engineering office and helped me establish contacts. When I graduate I'll have four summer's experience in mining engineering."

mining engineering." In the summer of 1980, 62 students (33 women, 29 men), 20 Co-op faculty advisors, and 31 employers were involved in the program. Employers included B.C. Hydro, MacMillan Bloedel Research Ltd., the provincial Ministry of Forests, H.A. Simons (International) Ltd. and Noranda Mines (Bell Copper Division).

Several of these employers are participating on an Employer Advisory Council, which has been recently formed by UBC to assist in the planning and further development of the Co-op Program.

Work experience isn't the only advantage of the Co-op Program. It is also an opportunity for students to clarify the field that is best suited to their skills and interests.

"Not all students go into the field that they were planning to before their summer work," says Mrs. Gilmore. "One Science student was planning to enter electrical engineering, but after his summer work he decided to stay in the Science faculty and pursue computer science. Other students change

the branch of engineering they thought they were best suited for. The program is also successful, I think, when students find out they're not suited for a certain field before they spend four years of study in that area."

The Co-op summer work placements are now listed in the UBC course calendar as non-credit courses (APSC and FRST 110, 210 and 310), and students in the program will have a notation on their transcripts to indicate that they have successfully completed the three summers.

"Students who complete the program usually have a strong commitment to the profession they are entering," says Mrs. Gilmore, "and employers recognize this." According to a Coop employer at B.C. Hydro, students who invest time in the program end up "head and shoulders above others."

Unlike the Co-op Program that involves work in the summer months, the Internship Program provides work placements for Arts, Commerce and Education students during the winter session (recommended work periods are September to December and January to April).

Mrs. Gilmore and her staff contact agencies at UBC and around Vancouver and arrange for students to work four to eight hours a week on a non-paid basis to gain job experience in their area of interest.

"I am a firm believer in the liberal arts program," says Mrs. Gilmore. "But it is harder for these students to get specific job training as undergraduates. The Internship Program gives them a chance to apply the organizational, analytical and research skills they have acquired in their academic training to a particular job."

The Internship Program has over 50 positions for students this year in a variety of fields. If a student is interested in working in television, there is a position at Cable 10 to assist in research and script-writing. There is a job at IBM for someone interested in economics to do business forcasting using computer modelling. Or if a student wants experience in politics, a position is available to assist an alderman with research for city planning.

Employers involved in the Internship Program include the provincial Ministry of Human Resources, CKVU, the Civil Liberties Association, The Bay, the Maritime Museum, City Hall, Statistics Canada and Mac-Millan Bloedel.

For further information about the Co-operative Education or Internship Programs, contact Maryke Gilmore, co-ordinator, or Alexandra MacGregor, assistant co-ordinator, at



Maryke Gilmore

She links students and work

The success of the Co-operative Education and Internship Programs at UBC is largely due to the hard work and organizational talents of co-ordinator Maryke Gilmore.

When Mrs. Gilmore came to UBC in 1977 to fill the position of assistant to the Dean of Women, the Co-operative Education Program was just being initiated. (Mrs. Gilmore came to UBC with her husband, Paul Gilmore, who had been appointed head of the computer science department.)

She took over the job of setting up the Co-op Program when the first coordinator left that same year. She also set up career orientation counselling, which included the Internship Program. The Co-op and Internship Programs grew so rapidly, involving men as well as women students, that last year the University approved the creation of a separate office to handle the growing amount of work necessary to carry out the programs.

Mrs. Gilmore did her undergraduate work in comparative literature and English at the Universities of Amsterdam and Toronto, and at Sarah Lawrence College in New York. She earned her Master of Arts and Teaching degree from Manhattanville College in New York and taught at various high schools in the state.

In 1973 she was appointed director of admissions at Sarah Lawrence College and three years later she became director of career counselling and field work at the college. In the latter position, Mrs. Gilmore carried out programs similar to the Co-op and Internship Programs. "I'm fascinated by being able to provide links for students between the academic and the work environment," she says. "And I really enjoy working with students in a counselling-related position."



Jane Koch, a second-year Forestry student, was among the 62 students involved in the Co-op Program this summer. She was hired by MacMillan Bloedel to do growth and yield plot establishment studies in forest areas near Nanaimo. 228-3022, or visit the Co-op/Internship Office in Room 213 of Brock Hall.

UBCalendar

UBC CALENDAR DEADLINES

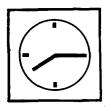
 Events in the week of:
 Deadline is 5 p.m. Oct. 23

 Nov. 2 to Nov. 8
 Deadline is 5 p.m. Oct. 23

 Nov. 9 to Nov. 15
 Deadline is 5 p.m. Oct. 30

 Send notices to Information Services, 6328 Memorial Rd., (Old Administration Bldg.), Campus. For further information call 228-3131.

THE VANCOUVER INSTITUTE



THURSDAY, OCT. 23 The Dalai Lama of Tibet on The Buddhist View of Reality at 7:00 p.m. SATURDAY, OCT. 25

Dr. Charles Scriver, Paediatrics, Genetics and Biology, McGill University, and director, de Belle Laboratory, Montreal, on You and the New Genetics, at 8:15

p.m. SATURDAY, NOV. I Prof. M.H. Abrams, English, Cornell University, on The Radical Ambiguity of William Blake, at 8:15 p.m. All lectures in Lecture Hall 2, Woodward

Instructional Resources Centre.

MONDAY, OCT. 27

- 12 noon CANCER RESEARCH SEMINAR. Dr. Fumio Takei, Pathology, UBC. on Immunology and Cell Differentiation. Lecture Theatre. B.C. Cancer Research Centre, 601 W. 10th Ave.
- 12:30 p.m. HISTORY LECTURE. Robert Darnton, History, Princeton University, on The Great Cat Massacre of the Rue Saint-Severin. Room 202, Buchanan Building. BIOCHEMICAL SEMINAR. Dr. Franklin Hamilton, Chemistry, Atlanta University, Ga., on Ribonucleotide Reduction and Its Impact on DNA Synthesis. Room 4210, Block A, Medical Sciences Building. WORLD UNIVERSITY SERVICES OF CANADA Film Series. The third in this series on international

development is Tanzania: The World is One. Room 205, Buchanan Building. 3:30 p.m. HISTORY SEMINAR. Robert Darnton on The Book

- Trade at The Diffusion of Ideas in Eighteenth-Century France. Penthouse, Buchanan Building. 3:45 p.m. APPLIED MATHEMATICS SEMINAR. Dr. Andrew
- 3:45 p.m. APPLIED MATHEMATICS SEMINAR. Dr. Andrew Willmott, Mathematics, UBC, on Atmospherically Forced Eddies in the Northeast Pacific. Room 203, Mathematics Building.
- 4:00 p.m. ASTRONOMY SEMINAR. Dr. Jorge Melnick, European Southern University, Munich, Germany, on Can HII Regions Be Used As Distance Indicators? Room 318, Hennings Building.
 4:30 p.m. PHYSIOLOGY SEMINAR. Prof. H. Karten,
- 4:30 p.m. PHYSIOLOGY SEMINAR. Prof. H. Karten, Neurobiology and Behavior, State University of New York at Stony Brook, N.Y., on Task Specific Ganglion Cells and the Accessory Optic System. Room 2449, Biological Sciences Building.
- 8:00 p.m. PRO ARTE STRING QUARTET. Norman Paulu and Martha Francis, violin; Richard Blum, viola; and Parry Karp, cello, perform Music of Beethoven, Bartok and Schubert. Recital Hall, Music Building.

TUESDAY, OCT. 28

- 11:30 a.m. DENTISTRY SPECIAL LECTURE. Dr. A.R. Ten Cate, dean, Faculty of Dentistry, University of Toronto, on Developmental Aspects of the Periodontium Applicable to Clinical Practice. Lecture Hall 5, Woodward Instructional Resources Centre.
- 12:30 p.m. BOTANY SEMINAR. Dr. H. Kennedy, Botany, University of Manitoba, on Floral Specialization and Pollination Biology in the Marantaceae. Room 3219, Biological Sciences Building.
 ASIAN RESEARCH NOON-HOUR SERIES Film on Vietnam — The New Challenge. Room 322, Buchanan Building.

CENTRE FOR HUMAN SETTLEMENTS Video Previews presents two films: The Guanchias Project and Fight For A Shelter. Room 308, Library Processing Building.

- 1:30 p.m. ELECTRICAL ENGINEERING SEMINAR. Ernest Tarnai, Bell Northern Research, Ottawa, on Signal Processing At Bell Northern Research. Room 402, Electrical Engineering Building.
- trical Engineering Building.
 4:30 p.m. CHEMISTRY RESEARCH CONFERENCE. Dr. T. Chivers, Chemistry, University of Calgary, on Recent Studies of Sulfur-Nitrogen Rings, Chains and Cages. Room 250, Chemistry Building.
 PHYSIOLOGY SEMINAR. Dr. J.H. McNeill, Pharmaceutical Sciences, UBC, on Do Cardiac Adrenergic Receptors Interconvert? Room 2605, Block A, Medical Sciences Building.

WEDNESDAY, OCT. 29 (Continued)

- 4:00 p.m. ANIMAL RESOURCE ECOLOGY SEMINAR. Neil Gilbert, Animal Resource Ecology, UBC, on How to Marry Ecology and Genetics. Room 32, Hut B-2.
- 7:30 p.m. INTERNATIONAL FOLK DANCING. Beginning dances and steps will be taught from 7:30 to 9:00 p.m. No experience necessary. Dancing until 11:00 p.m. For further information call Marcia Snider. 224-0226. or Richard Spratley, 228-8415. Upper Lounge, International House.

THURSDAY, OCT. 30

- 9:00 a.m. MEDICAL GRAND ROUNDS. Dr. Robert A. Kyle, Medicine, Mayo Clinic, Rochester, Minn., on Monoclonal Gammopathies. Lecture Hall B, Vancouver General Hospital.
 12 noon DENTISTRY SEMINAR. Dr. A.R. Ten Cate, dean,
 - **DENTISTRY SEMINAR.** Dr. A.R. Ten Cate, dean, Faculty of Dentistry, University of Toronto, on **Repair** and **Regeneration of Dental Tissue**. Room 388, Macdonald Building.
- 12:30 p.m. FACULTY RECITAL. Kathleen Rudolph, flute, and Melinda Coffey, piano, perform Music of Schubert and Prokofieff. Recital Hall, Music Building. EXPLORING THE NATURE OF EVIL Lecture

Series. Parin Dosso, Anthropology, on A Muslim Perspective. Room 215, Student Union Building. TIME MANAGEMENT WORKSHOP. The Women

Students' Office begins a three-week workshop on Time Management. Group size limited. Pre-registration necessary at the Women Students' Office, Room 203, Brock Hall. For information, call 228-2415. INDUSTRIAL RELATIONS MANAGEMENT

INDUSTRIAL RELATIONS MANAGEMENT SEMINAR. Prof. David Copp, Philosophy, SFU, on The Ontology of Organizations and Other Collectives. Penthouse, Angus Building.

- house, Angus Building.
 12:45 p.m. HEALTH CARE AND EPIDEMIOLOGY SEMINAR. Dr. David Fish, professor and head, Social and Preventive Medicine, University of Manitoba, on Choice of Controls in Case-Control Studies. Room 146, Mather Building.
 2:00 p.m. NATIONAL SOCCER COACHING SEMINAR.
- 2:00 p.m. NATIONAL SOCCER COACHING SEMINAR. UBC's Department of Physical Education in conjunction with the Canadian Soccer Association is sponsoring a national coaching seminar for instructors. National Level coaches from across Canada will be attending this threeday course. Osborne Centre. Observers welcome. Further information, 228-2767.
- 2:30 p.m. PHYSICS CONDENSED MATTER SEMINAR. Mike Brett, UBC, on Laser Annealing. Room 318, Hennings Building.
 4:00 p.m. PHYSICS SEMINAR. Dr. J.W. McGowan, University of
- 4:00 p.m. PHYSICS SEMINAR. Dr. J.W. McGowan, University of Western Ontario, on A Light Source Which 'Outshines the Sun' Used for Technology and Research. Room 201, Hennings Building.
 MEDICINE SPECIAL LECTURE. Dr. D. Harold

MEDICINE SPECIAL LECTURE. Dr. D. Harold Copp. Physiology, UBC, on Serendipity and Calcium Regulation — Three Decades in Perspective. Lecture Hall 6, Woodward Instructional Resources Centre.

- 4:30 p.m. CHINA SEMINAR. Ralph Huenemann, research associate, Asian Research, on Skinning the Ox Twice: The Chinese Railroad Loans at the Turn of the 20th Century. Penthouse, Buchanan Building.
 8:00 p.m. CENTRE FOR CONTINUING EDUCATION
- 8:00 p.m. CENTRE FOR CONTINUING EDUCATION presents Drs. Bennet Wong and Jock McKeen in a lecture/discussion on Life's Project: Is There A Right Way? Lecture Hall 2, Woodward Instructional Resources Centre. Admission, \$6: students, \$5. Information at 228-2181, local 261.

CENTRE FOR CONTINUING EDUCATION Lecture Series on The World As A Machine: Science and Human Values. Dr. Douglas A.R. Seeley, Computing Science Program, SFU, on Personal Computers and Decentralization. Room 202, Buchanan Building. \$6 at the door.

8:30 p.m. BASKETBALL. The UBC Thunderbirds will meet a team from the Senior A Dogwood League to open their season. War Memorial Gymnasium. See Friday at 8:30 p.m. also.

FRIDAY, OCT. 31

- 11:30 a.m. DEVELOPMENTAL MEDICINE SEMINAR. Drs. D.W. Rurak and B.K. Wittmann, Centre for Developmental Medicine, UBC, on Real-Time Ultrasound Observations of Fetal Lambs in Utero. Room 15, 811 W. 10th Ave.
- 1:00 p.m. MANAGEMENT SCIENCE SEMINAR. Prof. Y. Wand, University of Calgary, on A Dummy Resource

FRIDAY, OCT. 31 (Continued)

8:30 p.m. EARLY MUSIC RECITAL, sponsored by the Vancouver Society for Early Music in conjunction with the UBC Music department. Anner Bylsma, baroque violoncello, performs The Unaccompanied Cello Suites of J.S. Bach (I). Recital Hall, Music Building. The second recital takes place on Sunday, Nov. 2. Tickets, \$6.00 (\$10.00 for both recitals); students, \$4.50 (\$7.50 for both recitals).

SCIENCE SPECTRUM CONFERENCE

The 21st annual Science Spectrum Conference for elementary and secondary school students will be held at UBC on Friday, Oct. 24, and Saturday, Oct. 25. The conference will focus on current developments in elementary and secondary curriculum. For further information, call Fred Gornall, conference chairperson, at 228-5319.

HAIDA FROG PRINT FOR SALE

A limited edition of numbered, black-and-white, silk-screen Haida frog prints by Richard Hunt was printed for the 2nd international Congress of Systematic and Evolutionary Biology held at UBC in July, 1980. Forty-six of the original 170 prints are for sale until Oct. 31. Price: \$35 each, from the Department of Zoology, Room 2362, Biological Sciences Building.

PSYCHOLOGY EXPERIMENTS

We need right-handed male volunteers to participate in experiments on verbal memory. The study takes about one hour to complete and includes filling out a questionnaire package. Subjects will be paid \$5 and complete feedback will be provided. For information, call Jeff or Sandy at the UBC Psychophysiology Lab at 228-2756.

FACULTY LIBRARY GUIDE

The 1980/81 edition of the Faculty Library Guide is available at the Main Library. Phone Information and Orientation Division, 228-2076, to have a copy mailed to you or ask for one at the Circulation Division, Main Library.

THE CHRISTMAS STORY (Carl Orff) ENSEMBLE

Rehearsals: Tuesdays 12:30-1:20 p.m. began Oct. 21. Openings for women's voices, percussion instrumentalists (no previous experience necessary), viol and string bass players. Two performances in December. Music Education Hut 0-16, 6388 Old Orchard Rd. Information from Sandra Davies, 228-5206 or 228-5367.

MUSEUM OF ANTHROPOLOGY

STUDENT EXHIBITIONS: Contemporary Salish Weaving: Continuity and Change; Kwagiutl Graphics: Tradition in a New Medium; West Coast Graphics: Images of Change; Bent Boxes. All exhibits continue until Jan. 3, 1981.

TEMPORARY EXHIBITIONS: Salish Art: Visions of Power, Symbols of Wealth. Opens Oct. 21 and continues until April, 1981. Guided orientations of the exhibit on Oct. 26 and Nov. 2, 3:30 p.m. Free with Museum admission.

FREE IDENTIFICATION CLINICS:

Bring your collectibles to the Museum and staff will help you with identification. Oct. 28, Nov. 25, 6-8 p.m.

SNAKE IN THE GRASS MOVING THEATRE:

Clowns Garbanzo and Koko give Sunday performances until Dec. 7 at 2:30 p.m. Free with Museum admission.

NITOBE GARDEN HOURS

After Thanksgiving: weekdays 10 a.m. - 3 p.m.; weekends 10 a.m. -half-an-hour before sunset.

LOST AND FOUND

The campus Lost and Found is located in Room 112a, Brock Hall, and is open on Monday, Wednesday, Thursday and Friday, 11:50 a.m. to 2:30 p.m.; Tuesday, 12:30 to 2:30 p.m. and 3:30 to 4:30 p.m. Where possible, found items should be delivered to Room 112a during the above hours. The phone number for Lost and Found is 228-5751.

STATISTICAL CONSULTING SERVICE

The Institute of Applied Mathematics and Statistics offers a free statistical consulting service to UBC faculty and students for academic projects. For information, call Dr. J.V. Zidek, 228-2479, or Dr. F.P. Glick, 228-6621.

STUDENT HEALTH SERVICE

The Student Health Service is now located in Room 334 of the Acute Care Unit of the Health Sciences Centre Hospital on Wesbrook Mall. Phone 228-7011 (you must dial the entire number). The former University Health Service Hospital on the third floor of the Wesbrook Building has closed. Its functions have been taken over by the Acute Care Unit.

STUDENT WORK INTERNSHIPS

Study-related work experience before graduation is available for students in third- and fourth-year Arts, Education and Commerce. You'll learn and work on an unpaid basis. For more information, contact the Office of Co-operative Education/Internship Programs, Room 213, Brock Hall. Telephone 228-3022.

M.Y. WILLIAMS GEOLOGICAL MUSEUM

WEDNESDAY, OCT. 29

12 noon INFLATION: FACING UP TO IT, a free noon-hour series sponsored by the Centre for Continuing Education. This week George Freeman, deputy governor, Bank of Canada, Ottawa, on Inflation and Canada's Monetary Policy. Auditorium, Robson Square Media Centre, 800 Hornby St.

PHARMACOLOGY SEMINAR. Dr. Basil Ho Yuen, Obstetrics and Gynaecology, UBC, on Regulation of Ovarian Follicular and Luteal Functions With Exogenous Gonadotropins. Room 114, Block C, Medical Sciences Building.

- 12:30 p.m. WEDNESDAY NOON-HOUR CONCERT with the Pro Arte String Quartet: Norman Paulu and Martha Francis, violin; Richard Blum viola; and Parry Karp, cello. Recital Hall, Music Building.
- 3:30 p.m. CHEMICAL ENGINEERING SEMINAR. F. Shake on Wood Waste Gasification. Room 206, Chernical Engineering Building. STATISTICS WORKSHOP. Dr. Piet de long, Com-

puting Centre, UBC, on How Should We Estimate the Financial State of an Insurance Company? Room 240, Geography Building. Approach to Analyse Activity Networks. Penthouse, Angus Building.

MEDICAL GENETICS SEMINAR. Drs. B. Poland and F. Dill on State of Embryo Transfer: Discussion of MRC Proposal. Fourth Floor Conference Room, Health Centre for Children, Vancouver General Hospital.

- 3:30 p.m. LINGUISTICS COLLOQUIUM. Dr. David Perlmutter, Linguistics, UBC, on Two Theories of Clause Structure. Room 2225, Buchanan Building.
- 4:00 p.m. GEOPHYSICS SEMINAR. Dr. Garry Ransford, Jet Propulsion Laboratory, Pasadena, Calif., on Europa Cracking Patterns. Room 260, Geophysics and Astronomy Bulding.
- 8:00 p.m. CENTRE FOR CONTINUING EDUCATION Letture/Demonstration. Joshu Sasaki Roshi, founder of Rinzai-ji of America Zen Centres and author of Buddha is the Center of Gravity, on The Heart of Zen. Lecture Hall 6, Woodward Instructional Resources Centre. Admission, \$5; students, \$4. For information, call 228-2181, local 261.
- 8:30 p.m. BASKETBALL. The UBC Thunderbirds meet a Senior A Dogwood team. War Memorial Gymnasium. See Thursday at 8:30 p.m. also.

A display of photographs of the May 18 eruption of Mt. Saint Helens is currently exhibited at the M.Y. Williams Geological Museum in the Geological Sciences Building. The photographs, taken by a student in the department and as yet unpublished, are one of only four sets which show the initial activity. A package including 20 color slides and descriptive information is available for sale at the museum.

DUPLICATE BRIDGE

A social evening of duplicate bridge is held every Tuesday night, 7:00 -10:30 p.m. at the Faculty Club. The fee is \$2, which includes refreshments. For information, call Steve Rettig, 228-4865 or John Stevens, 228-3936.

FITNESS APPRAISAL

The School of Physical Education and Recreation offers a comprehensive physical fitness assessment through the John M. Buchanan Fitness and Research Centre in the Aquatic Centre. A complete assessment takes about an hour and encompasses various fitness tests, interpretation of results, detailed counselling and an exercise prescription. The assessment costs \$15 for students and \$20 for all others. To arrange an appointment, call 228-3996.

