

## 'Birds hoping for third victory in Shrum Bowl

The third annual United Way Shrum Bowl, between the football teams from the University of B.C. and Simon Fraser University, will be held at Empire Stadium Oct. 17 at 8 p.m., with SFU's Clansmen the favorites.

Although UBC has taken the Shrum Bowl two years running, this year's young and inexperienced Thunderbirds may still be a season away from realizing their potential. And the loss since the opening of the season of seven starting players through injuries has hit hard at coach Frank Smith's rebuilding program.

Football observers give the edge to SFU this year mainly because of the SFU and UBC records against the University of Saskatchewan Huskies.

The Huskies have won only one football game this season, and it was the Thunderbirds they defeated. It was, in fact, UBC's worst loss of the year at 34-10. The Simon Fraser team downed the Huskies 29-12 in a game even more one-sided than the score would indicate.

The only other common opponent of the Clansmen and Thunderbirds was the University of Calgary Dinosaurs. This time UBC won and SFU lost, but the games could have gone either way. It was Calgary 10-9 over SFU and UBC 6-1 over Calgary in a game without a touchdown.

Tickets for the Shrum Bowl are available on campus at the AMS box office on the main floor of the Student

Union Building. Tickets are \$3 for students, and \$6 (covered seating) and \$5 for non-students. Proceeds of the game go to the United Way.

Meanwhile, the Thunderbirds still have a chance for a playoff spot in the Western Intercollegiate Football League despite a 34-16 loss to the University of Alberta in Edmonton last weekend. UBC now has a record of two wins and three losses and is tied for third place with the University of Manitoba. The 'Birds meet Manitoba in Winnipeg on Saturday (Oct. 11) and must win to have any realistic playoff hope. Alberta is on top with a 4-1 record, with Calgary second at three and two. The top two finishers play for the league title.

# UBC reports

Volume 26, Number 19, Oct. 8, 1980. Published by Information Services, University of B.C., 6326 Memorial Road, Vancouver, B.C. V6T 1W5, 228-3131. Jim Banham, editor. Loric Chortyk, editorial assistant. ISSN 0497-2929.

## Research funds up 95 per cent

Funding for research at the University nearly doubled from \$16 million to \$31.3 million in the five-year period from 1975-76 to 1979-80, UBC research administrator Dr. Richard Spratley reveals in his annual report to the Board of Governors.

The five-year jump in research funding represents an increase of 95 per cent, Dr. Spratley says in his report. The 1979-80 total of \$31.3 million is an increase of 21 per cent over the previous fiscal year and marks the third consecutive year in which research-award increases exceeded 20 per cent.

Dr. Spratley's report also points to a notable five-year shift in the source of funds for research.

"Federal support (from federal government departments and national councils which receive funds directly from the federal government) is now only 59 per cent of total, down from 75 per cent in the early 1970s," he says.

"Provincial support, through the B.C. Health Sciences Research Fund and the Science Council of B.C., has increased dramatically (by) nearly 500 per cent since 1975-76."

Other highlights and trends noted by Dr. Spratley are:

- A five-year increase of 370 per cent in research funding in the Department of Medicine in UBC's medical faculty, making it the highest-funded department on campus with a total of \$2.82 million in 1979-80;

- Dramatic increases in funding over the past five years for the Faculties of Education (up 258 per cent), Pharmaceutical Sciences (up 328 per cent) and Agricultural Sciences (up 164 per cent); and

- An overall trend over the past five years which shows that funding for the health sciences and social sciences and humanities increased more rapidly than did grants for other disciplines.

Fund increases for research in the humanities and social sciences were of the order of 150 per cent and 130 per cent for the health sciences in the past five years. In the same period, increases for research in the natural sciences were of the order of 85 per cent and for the applied sciences of the order of 70 per cent.

"The general picture in 1979-80," Dr. Spratley says, "was encouraging, as levels of research funding continued to compensate for the difficult years at the beginning of the decade. The trend towards the funding of 'relevant' research continues."

A major concern in the research picture centres on continuity of funding, the report said.

"Some granting agencies continue to provide funds on a one-year basis," he said, "and will not guarantee con-

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Picture by Jim Banham

Creative writing major Chris MacDonald, back to camera, created a moment of levity during a class on screen-play writing that brought a reaction from playwright Tennessee Williams, left, an old hand at screen writing himself, and fellow student Stan Hyde, a fifth-year Education student with a creative-writing concentration. Williams, who is at UBC until mid-October as Artist-in-

Residence, is lecturing to eight classes in the two departments sponsoring his visit, Creative writing and Theatre. He's making only one public appearance during his stay in Vancouver, this Saturday (Oct. 11) at 8:15 p.m. in Lecture Hall 2 of the Woodward Building, when he gives a program of readings and discourse sponsored by the Vancouver Institute.

## Record winter enrolment expected

UBC's daytime winter session enrolment stood at 23,162 students on Sept. 30, a total that is almost identical to the number who were registered on the same date last year.

However, associate registrar Jack Piercy says an additional 350 or so students are expected to register, which would mean an increase in UBC's 1980-81 daytime enrolment between 1.5 and 2 per cent over last year.

The latecomers are chiefly graduate students and medical residents — interns and other doctors who are taking

specialized training under UBC auspices in Vancouver hospitals.

Like other Canadian universities, UBC will strike its final winter session enrolment figure on Dec. 1.

The biggest enrolment gains at the first-year level this year appear to be in the Faculties of Applied Science and Forestry.

The first-year Forestry class is up by more than 50 per cent to 146 students and the first-year class in Applied Science totals 490, an increase of 65 students over last year.

The first-year class in the Faculty of Arts has increased by almost 200 students from 1,337 last year to 1,530 this year. The Sept. 30 total for all years in Arts is 5,752, compared to 5,634 last year.

Mr. Piercy expects that UBC's nighttime winter enrolment will exceed the 1,183 who were registered last year. An increase is also expected in enrolment for guided independent study (correspondence) courses offered through the Centre for Continuing Education. A total of 1,130 registered for such courses last year.

## Committee seeks views

The University and the UBC local of the Association of University and College Employees have set up a six-member committee to make recommendations about a bi-weekly pay system for support staff.

UBC employees are now paid twice a month. They receive an advance on the 15th of each month and the balance of their pay on the last working day of the month.

A switch to a bi-weekly pay system would mean employees would receive a cheque every second Friday. This would give them 26 pay cheques a year instead of 24 and in leap years they would get three cheques in some months instead of two.

The committee is asking for opinions, suggestions and criticisms of the proposed scheme from interested support staff. Written submissions should be sent to Linda Tretiak, AUCE Office, Campus Mail.

In addition, members of the support staff may phone any member of the joint committee to express an opinion. Committee members and their UBC locals are: Vicki Ayerbe, Continuing Education, 2181; Fern Long, University Co-ordinator Office, 6486; Linda Tretiak, Office of the Co-ordinator, Health Sciences, 2258; Lynne Warneholdt, Employee Relations, 5811; Nancy Wiggs, Legal Clinic, 2880; and Bob Seeley, Finance, 6355.

## Service held for engineer

A memorial service was held Thursday (Oct. 2) for Professor emeritus Wilfrid G. Heslop, a member of UBC's Department of Civil Engineering for 27 years from 1945 until his retirement in 1972.

Prof. Heslop died on Sept. 27 at the age of 74 after several months of illness.

A native of England who came to Canada with his parents as a child, Prof. Heslop received his civil engineering degree at the University of Toronto. He worked for Ontario Hydro and the Ontario highways department until the outbreak of the Second World War, when he joined the RCAF.

He rose to the rank of squadron leader and was in charge of Canadian navigation schools which were part of the Commonwealth Air Training Program for the training of air crews.

Prof. Heslop joined the UBC faculty in 1945 at the invitation of UBC's former president, Dr. Norman MacKenzie. He took a great interest in the whereabouts and accomplishments of engineering graduates and in addition to his teaching and research duties was active on University committees concerned with athletics.

## New UBC lecture series to begin

A leading Quebec political scientist will inaugurate a new lecture series at UBC honoring Prof. Stuart Jamieson, who retired last year from the Department of Economics after a 34-year teaching and research career.

The first Jamieson lectures will be given Oct. 16 and 17 by Prof. Leon Dion of the political science department at Laval University in Quebec City, who will speak on "The Debate on the Constitution: Aftermath of the Quebec Referendum."

His Oct. 16 lecture will be given in Room 104 of the Buchanan Building at 12:30 p.m. His second lecture, a further development of his topic, will be given in the same location at 7:30 p.m. on Oct. 17.



These four young UBC researchers are winners of prestigious University Research Fellowships, awarded for the first time this year by the Natural Sciences and Engineering Research Council under a plan aimed at expanding research opportunities for a select number of very promising post-doctoral students. The first UBC winners, who will receive up to \$23,500 a year plus an annual \$10,000 research grant are, left to right, Dr. Alexander MacKay, a physicist who is doing work in the field of biophysics; Dr. Edwin A. Perkins, a mathematician working in the field of probability theory; David Garbary, a botanist who specializes in marine algae; and Paul Hickson, an astronomer who is working on the photometry of galaxies and quasars.

Picture by Jim Bannan

## UBC profs on task force

Two UBC faculty members are key figures on a national task force that is preparing a report which is expected to have a significant impact on future federal support for scientific research.

Prof. Fred Siller of the Faculty of Commerce and Business Administration is the chairman of a ten-member task force appointed by the Natural Sciences and Engineering Research Council (NSERC) to report on funding priorities for university research equipment and to recommend the most efficient use of such equipment.

A second member of the task force, Prof. Myer Bloom of the Department of Physics, has primarily been responsible for analysing the results of a questionnaire distributed to natural and applied science departments at 16 Canadian universities, including UBC.

The questionnaire asked researchers to report on such things as the present state of scientific equipment in their departments, how much of it will be obsolete within five years and the magnitude of the funds needed for new equipment.

The results of the questionnaire will

be incorporated into the task force's report, which is expected to be ready for submission to NSERC in December.

Prof. Siller said establishment of the task force was an outgrowth of recommendations made in a five-year plan prepared by NSERC on the funding of university research. One of the major problems cited in the NSERC report is the inability of many university researchers to carry out advanced work because of the outdated nature of research equipment.

The task force is looking at more than simply the cost of updating such equipment, Prof. Siller said.

It's also looking at the possibility of establishing "centres of instrumentation" in various locations. Researchers who wanted to use advanced and expensive equipment would travel to such centres to carry out their projects.

The task force is also investigating the maximum utilization of new equipment with the idea of purchasing items which would be used for teaching purposes after becoming obsolete for "frontier research."

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tinuing support. This is particularly true in the health sciences, where it is important to make provision for projects to be carried out over a reasonable length of time."

Five UBC faculties received research funds in excess of \$2 million in 1979-80, compared to only two five years ago.

The Faculties of Medicine (\$9,636,791) and Science (\$9,601,318) topped the list in 1979-80. Other faculties which received more than \$2 million in 1979-80 were: Applied Science — \$2,549,662; Agricultural Sciences — \$2,354,028; and Arts — \$2,266,294.

Six UBC departments — five in the natural sciences and one in the health

sciences — were each awarded grants in excess of \$1 million in 1979-80.

Topping the list in the natural sciences were: chemistry — \$2,190,806; physics — \$1,884,143; zoology — \$1,118,209; oceanography — \$1,109,618; and biochemistry — \$1,078,064.

The medical faculty's Department of Medicine received \$2,316,973 for research projects in the 1979-80 fiscal year.

In the applied sciences, the Department of Metallurgical Engineering led the research-fund list with grants totalling \$645,848, the leader in the social sciences was the psychology department with \$932,642, and the Department of Music received \$63,780 to lead the humanities departments.

## Games combine education and fun

Throw the dice and move three spaces...It doesn't sound like a typical classroom lesson, but thanks to WEDGE (Western Education Development Group) more and more elementary and secondary students are learning in a way that is fun as well as educational.

WEDGE, a curriculum development group at UBC headed by Prof. Kip Anastasiou of the Faculty of Education, has produced eight educational games and more than 60 booklets since it began life in 1972 as the Vancouver Environment Education Project, or VEEP for short.

Their latest game, Shop Hop, simulates a trip to a shopping mall and is designed to teach students about basic budgeting and comparative shopping.

"Our objective in producing the game," says Prof. Anastasiou, "was to create a consumer learning resource that is fun to use, and that complements the present elementary curriculum, including mathematics. The game provides a learning exercise in consumer fundamentals that kids can enjoy."

Shop Hop players are given a list of items to buy and a certain amount of money to spend. Since the prices of items differ at various stores on the board, players must shop around to find bargains in order to keep within their budget.

The idea for the game was conceived four years ago by two Richmond teachers, Arlene Offer and Margaret Compeau, and was developed further by another teacher,

Trish Richardson. Shirley Haines, a full-time employee at WEDGE, worked with Ms. Richardson and Ms. Offer developing the game and did the art work for the board.

"We went through a lot of revisions before the game was finished," says Ms. Haines. "The game was tested in schools and we made changes according to the feedback we got. We didn't want to make it too complicated or the kids would find it too confusing to play. On the other hand we had to make it challenging enough so they wouldn't be bored. It took a while to reach just the right level of difficulty."

The game takes about 20 minutes to play. "You go around the board three or four times," says Ms. Haines. "The first time around you just compare prices to find the best place to spend your money."

The game is designed for ages nine to adult and would probably do well on the commercial market. But Shop Hop, like the other games produced by WEDGE, is distributed only in schools. "We're in education," says Prof. Anastasiou, "and our purpose in developing the games is to teach and not just entertain."

Shop Hop was financed by the provincial ministry of consumer and corporate affairs and is the first WEDGE product to be distributed to schools by the B.C. ministry of education (WEDGE materials are usually sold and distributed by the B.C. Teachers' Federation). Every school in the province receives a copy of the game and can order up to 10 more copies if they

wish. The game has also been sent to schools throughout the world, says Prof. Anastasiou.

5,000 copies of the game have already been distributed and Prof. Anastasiou expects that up to 20,000 more copies will be produced for classroom use. His staff is now completing a booklet to accompany Shop Hop which will provide lesson-plan suggestions for teachers using the game.

Prof. Anastasiou feels strongly about the need for universities to produce learning materials. "Universities shouldn't produce just ideas. Education is an applied profession and we should be turning our ideas into materials that people of the community can relate to and benefit from. And Shop Hop is something that people can relate to."

Ideas and financing for booklets and games come from individual agencies which approach WEDGE to produce materials on their particular subject. Prof. Anastasiou, as project director, chooses the topics he feels would be most beneficial to students. Booklets and games produced so far explore such topics as cancer education, forest and mining industries in B.C., population growth and development, biochemical pathways in the human body, local transit systems and earth science.

WEDGE plans 15 new booklets for the fall. Topics to be covered will include Indian music, river estuaries, lakes, Chinese culture and an update on their cancer-education series.



UBC Education professor Kip Anastasiou and Shirley Haines get a lesson in consumer education.

Picture by Loree Cherryk



Many media services available to the University community are illustrated above in drawing prepared for UBC Reports by the graphics division of Space and Audio-Visual Services, which has recently moved into new and spacious quarters in the campus Library Processing Centre on the East Mall.

## There are advantages to being a little late

The fact that UBC has been a little late in providing a full range of media services for the University community has been an advantage, according to Rudy Jahelka, who heads UBC's newly expanded and equipped audio-visual services department.

He's quick to point out that the "state of the audio-visual arts" has progressed so rapidly in the last decade that television, audio and photographic equipment purchased ten years ago would now be regarded as obsolete and would have to be replaced.

"The delay in providing a complete range of services," says Mr. Jahelka, "has enabled us to choose equipment that is at the leading edge of the art and which will be durable enough to meet campus needs as far ahead as we can see."

In addition to adding graphic artists and sound and videotaping facilities to the roster of services provided by the department, the University has provided funds to upgrade such traditional services as photography and the repair and maintenance of electronic equipment.

The department is also able to pro-

vide on a loan-out basis every type of slide and film projector, public address systems, tape recorders, record players and videotape recording systems.

One of the problems that delayed the department's expansion was a lack of space. Formerly known as the Instructional Media Centre, the department has been rechristened Space and Audio-Visual Services and has moved from cramped quarters in a former army hut to spacious and modern facilities on the third floor of the Library Processing Centre on the East Mall immediately west of the Woodward Library.

Mr. Jahelka sums it all up when he says: "The move to new quarters, plus the expansion and upgrading of services and facilities, means we're now able to offer a full range of media services to support the entire research and teaching capacity of the University at prices that are considerably lower than those off campus."

Here's a bare-bones listing of the services offered by the various divisions of audio-visual services. For additional information and price lists, call 228-4771.

**GRAPHICS.** Graphic artists are available to provide services that include technical and mechanical drawings, diagrams, video, slide and film graphics. Creative artwork in black and white and color can be created for overhead transparencies, journal publications, displays and signage. Additional services include mounting, matting, laminating and framing. Call 228-4070.

**AUDIO SERVICES.** The department boasts a newly equipped, sound-proof, eight-track studio which can record up to 24 inputs at once. High-speed equipment can duplicate recordings and transfer recorded material onto cassettes. Equipment for remote recording of classroom lectures and other events is also available. Call 228-5036.

**TELEVISION/FILM.** Television or film production is available either on location or in the new studio. In addition to the actual production, the department provides program consultation and scripting services as well as music, narration, sound and special effects and editing. Videotape duplication and film-to-video transfer services are also available. Call 228-5036.

**PHOTOGRAPHY.** Photographers

are available for both location and studio work and are qualified to handle everything from portraiture to research work in black and white and color. They'll also process and print film you take yourself. Also available — graphic copy work, slides and overhead transparencies from existing art work. Call 228-6549.

**FILM LIBRARY.** This division has a catalogue listing some 1,500 titles on 16 mm film that are kept on the premises. Films can also be ordered from other B.C. universities and colleges, the National Film Board, in fact, from anywhere in Canada and the U.S. Call 228-4400.

**EQUIPMENT REPAIR.** Technical experts are available to repair all types of electronic items and will supply replacement equipment when needed. Division also designs, installs and services audio-visual, television and public address systems on campus.

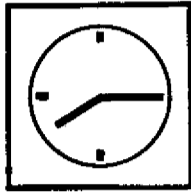
**A-V LOANOUT.** Is prepared to rent on a daily, weekly or monthly basis almost any type of film and slide projector, plus reel to reel and cassette tape recorders as well as record players, p.a. systems, screens, microphones and complete videotape recording systems. Call 228-5731.

# UBC Calendar

## UBC CALENDAR DEADLINES

Events in the week of:  
 Oct. 19 to Oct. 25 Deadline is 5 p.m. Oct. 9  
 Oct. 26 to Nov. 1 Deadline is 5 p.m. Oct. 16  
 Send notices to Information Services, 6528 Memorial Rd., (Old Administration Bldg.), Campus. For further information call 228-3131.

## THE VANCOUVER INSTITUTE



**SATURDAY, OCT. 11**  
 Tennessee Williams, author and playwright, on Readings and Discourse.  
**SATURDAY, OCT. 18**  
 Prof. Stanley Coren, Psychology, UBC, on The Psychology of Visual Illusions, a lecture-demonstration.  
 Both lectures at 8:15 p.m., Lecture Hall 2, Woodward Instructional Resources Centre.

## MONDAY, OCT. 13

Thanksgiving Day. University closed.

## TUESDAY, OCT. 14

**12:30 p.m. BOTANY SEMINAR.** Prof. Tom Mabry, Botany, University of Texas at Austin, on The Chemical Basis of Plant-Insect Interaction, Emphasizing Terpenoids. Room 3219, Biological Sciences Building.  
**LAWYERS' CHRISTIAN FELLOWSHIP Lecture Series on Christianity and Law.** Lynn Buzzard, executive director, Christian Legal Society (U.S.A.) on A Christian Conception of Justice. Room 102, Curtis Law Building.  
**HISTORY AND ANTHROPOLOGY/SOCIOLOGY Lecture Series (Distinguished Visitors Program).** Series with the general title The State of the Human Sciences. Alasdair MacIntyre, Philosophy and Political Science, Boston University, on What is Progress in a Science? Room 100, Buchanan Building.  
**THE LONG SEARCH film series.** The second in a series of seven films sponsored by the Women Students' Office. Today's film is *Hinduism: 350 Million Gods*. Auditorium, Student Union Building.  
**CENTRE FOR HUMAN SETTLEMENTS VIDEO PREVIEWS.** Today's films are *Water - The Hazardous Necessity and Ways Forward*. Room 308, Library Processing Building.  
**ASIAN RESEARCH NOON-HOUR SERIES** presents a film *The Dalai Lama Speaks. A Transformation of A Way*. Room 106, Buchanan Building.  
**3:30 p.m. OCEANOGRAPHY SEMINAR.** Dr. T.S. Murty, Institute of Ocean Sciences, Sidney, B.C., on The World Meteorological Organization Storm Surge Research Program for Bangladesh. Room 1465, Biological Sciences Building.  
**ENGLISH COLLOQUIUM.** Prof. Gernot Wieland, English, UBC, on *Chewing the Cud Over Caedmon*. Penthouse, Buchanan Building.  
**4:30 p.m. CHEMISTRY RESEARCH CONFERENCE.** Dr. D.C. Nonhebel, Pure and Applied Chemistry, University of Strathclyde, on The Chemistry of Ketone Cyclic Peroxides. Room 250, Chemistry Building.

## WEDNESDAY, OCT. 15

**12 noon PHARMACOLOGY SEMINAR.** Dr. Simon W. Rabkin, Cardiology, UBC, on Experimental Cardiac Arrhythmias and the Antiarrhythmic Effects of Cyclic GMP. Room 114, Block C, Medical Sciences Building.  
**12:30 p.m. LAWYERS' CHRISTIAN FELLOWSHIP Lecture Series on Christianity and Law.** Dr. Klaus Bockmuehl, Regent College, on Christianity and Marxism. Room 102, Curtis Law Building.  
**SIMULATION AND MODELLING IN SCIENCE.** Dr. James V. Whittaker, Mathematics, UBC, on World Models: Magic Wand or Club of Rome. Room 105, Mathematics Building.  
**WEDNESDAY NOON-HOUR CONCERT.** Jane Coop, piano, performs Music of Schumann and Bartok. Recital Hall, Music Building.  
**3:30 p.m. STATISTICS WORKSHOP.** Dr. Yoel Haitovsky, Hebrew University, Jerusalem, on Election Night Forecasting: An Application of Multivariate Ridge Regression. Room 240, Geography Building.  
**HISTORY AND ANTHROPOLOGY/SOCIOLOGY SEMINAR.** Alasdair MacIntyre on The Ambiguous Status of History. Penthouse, Buchanan Building.  
**CHEMICAL ENGINEERING SEMINAR.** P. Tam Doo, PAPRICAN, on Flexibility of Wet Pulp Fibres. Room 206, Chemical Engineering Building.  
**4:00 p.m. ANIMAL RESOURCE ECOLOGY SEMINAR.** Dr. Irving K. Fox, Westwater Research Centre, UBC, on Designing A Policy Research Program for Water Resources Management in the Yukon. Room 32, Hut B-2.  
**GEOPHYSICS AND ASTRONOMY SEMINAR.** Dr. Gordon James, Communications Research Centre, Ottawa, Ont., on Radio Experiments in the Spacelab Program. Room 260, Geophysics and Astronomy Building.  
**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.  
**8:00 p.m. CHILD STUDY CENTRE'S 20TH ANNIVERSARY SERIES.** Dr. Joan Tough, head of the advanced Diploma Course in Primary Education and director, Schools Council Communication Skills, on Young Children and Language. Child Study Centre, 2855 Acadia Rd.  
**SENATE MEETING.** A limited number of tickets for the observers' gallery is available and must be applied for at least 24 hours in advance of the meeting. Call Frances Medley, clerk to Senate, 228-2951. Senate meets in the Board and Senate Room, Old Administration Building.

## WEDNESDAY, OCT. 15 (Continued)

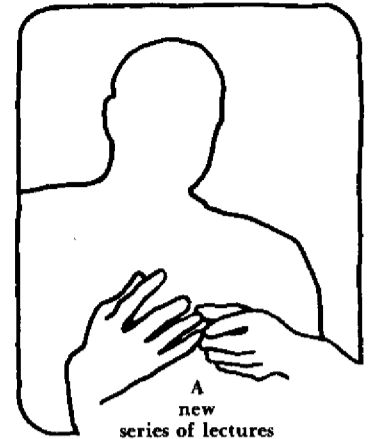
**8:00 p.m. CENTRE FOR CONTINUING EDUCATION Biology Lecture Series.** Claire Weeks, Biochemistry, Duke University, continues the series on *Biology: Foundations and Frontiers*. \$36 for series. For information, call the Centre for Continuing Education, 228-2181, local 261.  
**UBC WIND SYMPHONY,** with director Martin Berinbaum, performs Music of Stravinsky and Mussorgsky. Old Auditorium.

## THURSDAY, OCT. 16

**9:00 a.m. MEDICAL GRAND ROUNDS.** Dr. Douglas G. Cameron, professor and chairman, Medicine, McGill University, on A Case of Crohns, with case presentation by Dr. L. Rabeneck. Lecture Hall B, Vancouver General Hospital.  
**9:30 a.m. EDUCATION LANGUAGE SEMINAR.** Dr. Joan Tough, C.B.E., University of Leeds, will speak to faculty and graduate students about her longitudinal research on the language of children at three, five and seven years, and her work as director of the Schools Council Communications Skills Project. Room 209, Scarfe Building.  
**12:30 p.m. LAWYERS' CHRISTIAN FELLOWSHIP Lecture Series on Christianity and Law.** Dr. James I. Packer, Regent College, on A Theological Foundation for Law. Room 102, Curtis Law Building.  
**FACULTY RECITAL.** Paul Douglas, flute, and Robert Rogers, piano, perform Music of F.K. Mozart, Beethoven and Donizetti. Recital Hall, Music Building.  
**INSTITUTE OF ASIAN RESEARCH/PRESIDENT'S COMMITTEE ON JAPANESE STUDIES Lecture.** Dr. Brian Moeran, Anthropology, SOAS, University of London, on Words and Deeds: Social Organization and the Japanese Folkcraft Movement. Room 207, Anthropology and Sociology Building.  
**ECONOMICS DEPARTMENT Stuart M. Jamieson Lectures.** Prof. Leon Dion, Political Science, Laval University, on The Debate on the Constitution: Aftermath of the Quebec Referendum. See also Friday, Oct. 17, at 7:30 p.m. Room 104, Buchanan Building.  
**EXPLORING THE NATURE OF EVIL Lecture Series.** George Hermanson, campus minister, on God, Power, and Evil: A Process Theodicy. Student Union Building.  
**INDUSTRIAL RELATIONS MANAGEMENT SEMINAR.** Prof. Dan Cothran, Commerce, UBC, on Program Flexibility and Budget Growth in Organizations. Penthouse, Angus Building.  
**HISTORY AND ANTHROPOLOGY/SOCIOLOGY Lecture Series (Distinguished Visitors Program).** Series with the general title The State of the Human Sciences. Alasdair MacIntyre on Laws and Case Histories in the Social Sciences. Room 100, Buchanan Building.  
**2:30 p.m. PHYSICS CONDENSED MATTER SEMINAR.** Bill Buyers, Atomic Energy of Canada Ltd., on Spin-Wave Response in a One-Dimensional Antiferromagnet. Room 318, Hennings Building.  
**3:30 p.m. CLINICAL ENGINEERING SEMINAR.** Lawrence Hercz, medical computing engineer, Montreal Children's Hospital, on Experience With a Multi-Hospital Computerized System for Pathology. Conference Room, fourth floor, Woodward Instructional Resources Centre.  
**4:30 p.m. ZOOLOGY SEMINAR.** Dr. Rob Colwell, Zoology, University of California, Berkeley, on Sex Ratio and Dispersal in Hummingbird Flower Mites. Room 2000, Biological Sciences Building.  
**7:00 p.m. SUBFILMS** presents "10". Continues until Sunday, Oct. 19. Showings at 7:00 p.m. Thursday, 7:00 and 9:30 p.m. Friday and Saturday, 7:00 p.m. Sunday. Admission is \$1. Auditorium, Student Union Building.  
**8:00 p.m. CENTRE FOR CONTINUING EDUCATION Lecture Series.** Third in a series of ten lectures with the general title *The World as a Machine: Science and Human Values*. Tonight's lecture is *Computers: The Mechanization of Judgment*. Individual lectures, \$6. Room 202, Buchanan Building.

## FRIDAY, OCT. 17

**9:00 a.m. CLINICAL ENGINEERING SEMINAR.** Lawrence Hercz on Directions in Computerizing Patient Information in a Hospital. Seminar Room, Surgical Day Care Centre, VGH, 795 W. 13th Ave.  
**11:30 a.m. DEVELOPMENTAL MEDICINE SEMINAR.** Dr. J. Frohlich, Pathology, UBC, on Egypt and Israel: A Contrast. Room 15, 811 W. 10th Ave.  
**12:30 p.m. LAWYERS' CHRISTIAN FELLOWSHIP Panel Discussion on Integration of Christian Faith With Practice of Law with speakers from Washington State and B.C.** Room 102, Curtis Law Building.  
**1:00 p.m. MEDICAL GENETICS SEMINAR.** Dr. Peter Byers, University of Washington, Seattle, on Biochemical Findings in Marfan's Syndrome and Osteogenesis Imperfecta. Fourth Floor Conference Room, Health Centre for Children.  
**3:30 p.m. LINGUISTICS COLLOQUIUM.** Prof. Guy Carden, head, Linguistics, UBC, on The Dechovitz Effect: Evidence that Syntactic Structure Affects Phonetic Perception. Room 2225, Buch. Bldg.  
**HISTORY AND ANTHROPOLOGY/SOCIOLOGY SEMINAR.** Alasdair MacIntyre on The Place of Narrative in the Social Sciences. Penthouse, Buchanan Building.  
**7:30 p.m. ECONOMICS DEPARTMENT Stuart M. Jamieson Lectures.** Prof. Leon Dion, Political Science, Laval University, on The Debate on the Constitution: Aftermath of the Quebec Referendum. See also Thursday, Oct. 16, at 12:30 p.m. Room 104, Buchanan Building.



A new series of lectures honoring retired economics professor Stuart Jamieson begins this week. See Thursday, Oct. 16, at 12:30 p.m. and Friday Oct. 17, at 8:00 p.m.

## FRIDAY, OCT. 17 (Continued)

**8:00 p.m. SHRUM BOWL** football game in aid of the annual United Way Campaign. The UBC Thunderbirds will meet the Simon Fraser Clansmen at Empire Stadium for the Shrum Bowl trophy. Tickets are available on campus at the AMS Box Office on the main floor of the Student Union Building. Ticket prices: \$6 (covered seating); \$5; and \$3 for students.  
**SATURDAY, OCT. 18**  
**10:00 a.m. CENTRE FOR CONTINUING EDUCATION** presents two lecture/discussion sessions (Oct. 18 and 19) with Paul Repe, author of *Zen Flesh, Zen Bones*. Fee is \$10 for two sessions; \$6 for a single session. Granville and Oak Rooms, Sheraton Plaza 500, 500 W. 12th Ave. For information, call 228-2181, local 261.  
**8:00 p.m. ICE HOCKEY.** UBC Thunderbirds vs. Delta. The same two teams will play a second game at 8 p.m. on Sunday, Oct. 19. Thunderbird Winter Sports Centre.

## CAMPUS FOOD SERVICES

All campus food services will be closed Monday, Oct. 15. Full cash meals are available in Place Vanier and Totem Park residences during the following hours: Breakfast - 8:00 to 9:00 a.m.; Lunch - 11:45 a.m. to 1:00 p.m.; and Dinner - 4:45 to 6:00 p.m.

## PHYSICS CONFERENCE

UBC is hosting the 16th annual Undergraduate Physics Conference on Oct. 16, 17 and 18. Students with an interest in physics, engineering physics and astronomy are invited to attend. The conference will include speakers, tours and film presentations. Registration is \$35; \$30 if you register before Oct. 15. For information, contact the Physics Society in Room 307, Hennings Building.

## ART EXHIBITION

*Landscapes 1980*, an exhibition by Margaret Devenyi continues until Oct. 26 in the Faculty Club lounge.

## BLOOD DONOR CLINIC

Red Cross Blood Donor Clinic continues until Friday, Oct. 10, in Rooms 207, 209, 211, 213 and 215 of the Student Union Building. Hours are 10 a.m. to 4 p.m.

## 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 215, Brock Hall. Telephone 228-3022.

## NITOBE GARDEN HOURS

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

## MUSEUM OF ANTHROPOLOGY

Guests of the University are invited to visit the Museum free of charge during open hours. The host department or faculty should make prior arrangements, however, by telephoning Jennifer Kendon, 228-5567. Winter hours of the Museum: Tuesdays, 12-9 p.m.; Wednesdays through Sundays, 12-5 p.m. Closed Mondays.

**STUDENT EXHIBITIONS:** Contemporary Salish Weaving: Continuity and Change; Kwagiutl Graphics: Tradition in a New Medium; West Coast Graphics: Images of Change; Beat 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.

## LECTURE SERIES:

Offered in co-operation with the Centre for Continuing Education. **DAYTIME COURSES:** Food and Culture: Vancouver's Chinatown - Four Fridays, beginning Oct. 24. For information, phone 228-2181, local 273. **EVENING COURSES:** The B.C. Indian Cultural Renaissance - Eight Tuesdays, began Oct. 7; The Celts in History - Six Thursdays, began Oct. 9; 3,000 Years of Peruvian Art - Six Wednesdays, began Oct. 8. For information, phone 228-2181, locals 237 or 252.

## FREE IDENTIFICATION CLINICS:

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

## CHILDREN'S PROGRAMS:

Introduction to Prehistoric Archaeology - for ages 11-13. Four Saturdays, beginning Oct. 11; Indian Art for Children: Learning the Elements of Northwest Coast Design - for ages 9-12. Four Saturdays, beginning Oct. 18.

## 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.

