

UBC reports

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Research grants boosted

UBC scientists have begun to reap the benefits of the turnaround in federal government policy on funding of research in Canadian universities.

The Natural Sciences and Engineering Research Council (NSERC) has awarded a record \$9,011,823 to 453 faculty members in basic and applied science faculties and departments for 1980-81, an increase of 17 per cent over the previous year and a whopping 43 per cent increase over the total awarded in the 1978-79 academic year.

The Medical Research Council (MRC) has made grants totalling \$4,123,737 to 90 UBC health scientists in the Faculties of Medicine, Dentistry and Pharmaceutical Sciences for 1980-81. The total represents an increase of 11 per cent over last year and 16 per cent over the amount awarded in 1978-79.

The increases reflect a change in federal government policy, which has been under fire for nearly a decade, during which time appropriations for university research were virtually frozen and subject to the ravages of inflation and the declining value of the Canadian dollar.

The turnaround in policy came during the brief tenure of the Progressive-Conservative government, which announced increased support for research prior to the federal election in February, which resulted in the election of a Liberal government.

In May of this year, the Hon. John Roberts, the federal minister of science and technology, confirmed the Liberal government's intention to implement the research-grant policy

Please turn to page 2
See RESEARCH

Type gremlins at work in course list

The type gremlins got to work somewhere along the way in an article in the Aug. 27 edition of *UBC Reports* which listed the courses that will be required for students entering the University directly from B.C. secondary schools in September, 1981.

We said that one of the required courses will be "a science 12." The phrase should have read "a science 11."

For the record then the offending paragraph should have read: B.C. students entering directly from secondary schools in 1981 will be required to have a C+ average and they must have taken English 11 and 12, social studies 11, mathematics 11, French 11 or a foreign language 11, a science 11, and four additional subjects from the arts and science category of the senior secondary curriculum, three of which must be numbered 12.

Vision old as UBC now reality

At precisely 10:30 a.m. on Tuesday, Sept. 2, Mrs. Hughina Paul became the first patient to be admitted to Vancouver's newest hospital — the brand-new 240-bed Acute Care Unit, the final component of the 600-bed Health Sciences Centre Hospital on the eastern edge of the UBC campus.

On hand to greet Mrs. Paul was a bevy of government and hospital officials, including provincial minister of universities, science and communications Dr. Patrick McGeer (who presented a bouquet of roses to the hospital's first patient), hospital administrator Lloyd Detwiler and unit medical director Dr. George Price, and Dr. Walter Koerner, the man after whom the Acute Care Unit is named and a University benefactor who has been associated with the development of the hospital and the adjacent UBC Health Sciences Centre from their inception.

Hovering in the background to see the unit's first patient admitted was a score or more of the professional and clerical employees of the unit who will provide services and care for patients.

When the introductions were completed, Mrs. Paul was wheeled over to one of the admitting desks just inside the unit's main entrance, answered a few questions for admitting clerk Fran Franklin, had a plastic identification bracelet placed on her wrist by hospital admitting supervisor Lois Blanchard and was finally taken up to ward



Picture by Jim Banham

Special treatment accorded last week to Mrs. Hughina Paul, the first patient admitted to the Walter Koerner Acute Care Unit, included a bouquet of roses from provincial minister of universities, science and communication Dr. Patrick McGeer. At left is Mrs. Paul's husband, George.

B-2 of the unit where she'll be treated for rheumatoid arthritis.

In one sense, the admission of the first patient to the Walter Koerner Acute Care Unit meant that a vision as old as the University itself had become a reality.

An on-campus teaching, research and service hospital was first envisioned in the early part of this century by Dr. Frank Westbrook, UBC's first president.

In fact, says hospital administrator Lloyd Detwiler, a University hospital was proposed in exactly the place it is now located in the original plan for the University campus drawn up in 1914 by the architectural firm of Sharp and Thompson (the successor to that firm, Thompson Berwick Pratt and Partners, has been the architect for the hospital and the Health Sciences Centre).

The 240-bed Acute Care Unit is one of three buildings which make up the 600-bed Health Sciences Centre Hospital. The 60-bed Psychiatric Unit has been open for 12 years, and the 300-bed Harry Purdy Extended Care Unit admitted its first patients in 1977.

What makes the Health Sciences Centre Hospital different from most other hospitals, says Mr. Detwiler, is the fact that each of the units incorporates a teaching and research function in addition to its

primary function of providing the best possible patient care.

In fact, Mr. Detwiler emphasizes, the hospital units have to be considered not in isolation but in relation to the adjacent Health Sciences Centre, which is named for the late Dr. John F. McCreary, who pioneered in Canada the idea that health sciences students should be trained together so that they know the strengths and limitations of their own and other professions.

Dr. McCreary, who was dean of UBC's Faculty of Medicine from 1959 to 1972, knew that many new professions, e.g. rehabilitation specialists and social workers, were joining the traditional disciplines — doctors, nurses, pharmacists and dentists — in providing health care to Canadians.

He anticipated the need for all health professions to work together as a team and was the driving force behind many buildings making up the Health Sciences Centre today.

"Roughly half the space in the new Acute Care Unit," says Mr. Detwiler, "is academic in the sense that it's devoted to offices for faculty members and researchers who are associated with the University's Faculty of Medicine and the Schools of Rehabilitation Medicine

Please turn to page 2
See HOSPITAL

Professor suspended; termination process starts

Prof. Julius Kane has been suspended by the University of British Columbia, pending the outcome of a process which could result in his dismissal for cause.

Prof. Kane was convicted in county court in June of the theft of funds from a government research grant and was fined \$5,000.

UBC President Douglas T. Kenny initiated the proceedings for termination of Prof. Kane's

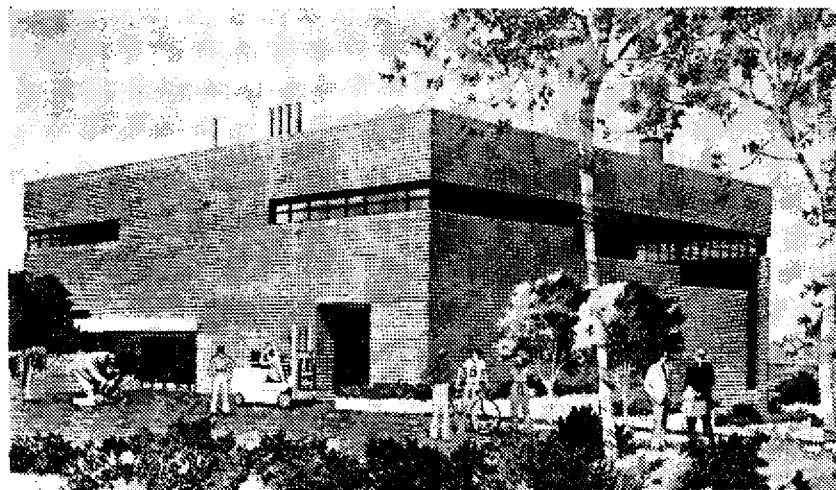
appointment and has relieved him of his duties until the matter has been decided. He took the action after reviewing the transcript of Prof. Kane's trial.

Under terms of the agreement between UBC and the Faculty Association, Prof. Kane has been asked to meet with President Kenny to discuss the matter of his dismissal. If President Kenny then decides to proceed with the termination for cause, Prof. Kane would have 30 days in which

to request a three-person hearing on the issue. A hearing committee decision would be binding.

Should Prof. Kane not request a hearing, his appointment with UBC would automatically be terminated.

Meanwhile, the suspension means that Prof. Kane is relieved of his teaching and other duties at UBC immediately. He is a professor in the Department of Zoology and the Institute of Animal Resource Ecology.



Sod will be turned Sept. 18 at 3 p.m. for UBC's new Centre for Coal and Mineral Processing. The centre, to be located west of the Frank A. Forward Building will provide laboratories for teaching and research. The emphasis will be on maintaining Canada's position as a supplier of mineral resources and on achieving optimum use of coal for metallurgical uses and as an energy alternative to petroleum. The centre will be built by Interland Construction for \$2,167,880. Prior to the sod-turning, a public lecture on "Engineering Requirements for Developing B.C. Coal" will be given at 1:30 p.m. in Room 124 of the Chemistry Building by E.R. Macgregor, assistant deputy minister of Energy, Mines and Petroleum Resources for B.C.

U.S. playwright resident artist

Playwright Tennessee Williams, whose *A Streetcar Named Desire* and *Cat On a Hot Tin Roof* both earned Pulitzer Prizes, will be Distinguished Artist in Residence at UBC from Sept. 28 through Oct. 18.

The Williams play *Red Devil Battery Sign* is being produced by the Playhouse Theatre Company and will open in Vancouver Oct. 18.

The Departments of Creative Writing and Theatre are co-

sponsoring his stay on campus, and Williams will meet informally with small groups of writing and theatre students. These students also will attend some rehearsals for *The Red Battery Sign*.

Tennessee Williams will make only one general public appearance during his visit — on Saturday, Oct. 11, when he will be the Vancouver Institute speaker at 8:15 p.m. in the Woodward Instructional Resources Centre.

RESEARCH

Continued from page 1

outlined by the Progressive-Conservatives.

This gave NSERC a 35-per-cent increase this year. The MRC budget has been increased by 17.4 per cent. and grants to the Social Sciences and Humanities Research Council have been upped by 16.2 per cent.

The record total of NSERC grants to UBC faculty members is for "free" research as opposed to targeted research, because researchers themselves selected the topic to be investigated.

The grants will enable investigators to meet the costs of research pro-

grams, purchase and maintain research equipment, and travel to other laboratories in Canada and abroad.

In addition, 157 UBC graduate students and post-doctoral fellows will receive more than \$1.5 million in the coming year as part of NSERC's program for the training of researchers in science and engineering.

The awards to UBC students were made in three categories: 124 received post-graduate scholarships, each valued at \$8,500 as of Sept. 1 (up from \$7,000 last year); 15 received \$17,000 post-doctoral awards (up from \$14,000); and 17 were awarded 1967 Science Scholarships, each worth \$11,200 (up from \$8,700).

The two largest equipment grants made by NSERC to UBC scientists were for the purchase of different types of spectrometers. Prof. Richard L. Armstrong of geological sciences was awarded \$170,000 for a solid source mass spectrometer, while Prof. Leslie M. Lavkulich of soil science receives \$148,742 for a plasma-atomic emission spectrophotometer.

Prof. A.J. Barnard of the Department of Physics was the recipient of the largest NSERC operating grant of \$146,000 for research on laser fusion and plasma physics. Other faculty members who received operating grants of \$90,000 or more were: Prof. D.F. Measday, physics — \$95,000; Prof. D.G. Fleming, chemistry — \$93,200; and Prof. D.A. Axen, physics — \$90,000.

Health researchers who received grants of \$80,000 or more from MRC are: Profs. P.D. Bragg — \$81,177, Michael Smith — \$147,150 and Gordon Tener — \$91,750, all of the Department of Biochemistry; Prof. John Dirks of the Department of Medicine — \$121,000; Prof. J.C. Hogg of the pathology department — \$90,096; Profs. J.C. Brown — \$86,440, D.H. Copp — \$108,717 and Hugh McLennan — \$80,350, all of the physiology department; and Prof. John Wada of the Department of Psychiatry — \$80,000.

New UBC film to be screened in five places

Bring your own popcorn. The film made last year by UBC, at UBC, for UBC, but not specifically about UBC, will be screened at 12:30 p.m. across campus later this month.

The 20-minute film has already been warmly received by the Board of Governors and Senate and other University groups.

Entitled "A University Is...." it aims at meeting a basic information requirement of the general public concerning universities: what a university does.

So if you're curious or interested or have nothing else to do, make a point of going to a screening nearest you.

Buchanan 106, Monday, Sept. 22.

IRC 2, Tuesday, Sept. 23.

Scarfe 100, Wednesday, Sept. 24.

MacMillan 166, Thursday, Sept. 25.

SUB Auditorium, Friday, Sept. 26.

HOSPITAL

Continued from page 1

and Nursing." (The latter schools occupy new quarters on the fourth floor of the building).

"My job," Mr. Detwiler adds, "is to create an environment in which all health professionals from doctors through to dieticians can come together and create the patterns of treatment and care that will benefit the patient. And through a series of co-ordinating committees a teaching program has been developed that will pass on that knowledge to students who are in training as health care specialists."

Mr. Detwiler's philosophy about the Health Sciences Centre Hospital is echoed by Dr. George Price, medical director of the Koerner Acute Care Unit, who says that "our number one mandate is to look after patients and to show the community that we can do it well."

"Our second mandate is to teach and foster research with the aim of developing innovative programs that can be passed on to health professionals in training at UBC. I fully expect, too, that the Acute Care Unit will have considerable input into the health sciences continuing education program for practicing health professionals."

"In the widest possible sense," he adds, "we'll be serving the entire population of British Columbia."

Dr. Price says that one unique feature of the hospital will overcome one of the long-standing shortcomings of the UBC medical school.

Usually, Dr. Price explains, patients visit doctors in offices in medical and dental buildings and are rarely seen by health science students.

"The Acute Care Unit is the first B.C. hospital designed with the feature of incorporating doctor's offices into the building," he says. "People with medical problems will be referred to the specialists who will have their offices in the hospital."

"And attached to these specialists for varying periods of time will be students or residents who will experience patient treatment and who will have the opportunity to discuss that treatment with the specialist."

"While the Psychiatric and Extended Care Units provided this opportunity in their specialty areas, the lack of a facility to foster this student-teacher relationship has been one of the shortcomings of health sciences training at UBC. Now we have a facility that provides the opportunity for teaching using both in-patients and out-patients."

In addition to those people who will visit the Acute Care Unit for a doctor's appointment, health sciences students will be drawn into teaching situations involving the 240 patients who will occupy the beds in the Acute Care Unit.

"All patients in the Acute Care Unit will be teaching patients, unless an exception is made at the request of the patient or doctor for some very special reason," says Dr. Price. "The patients and the doctors with admitting privileges must understand that."

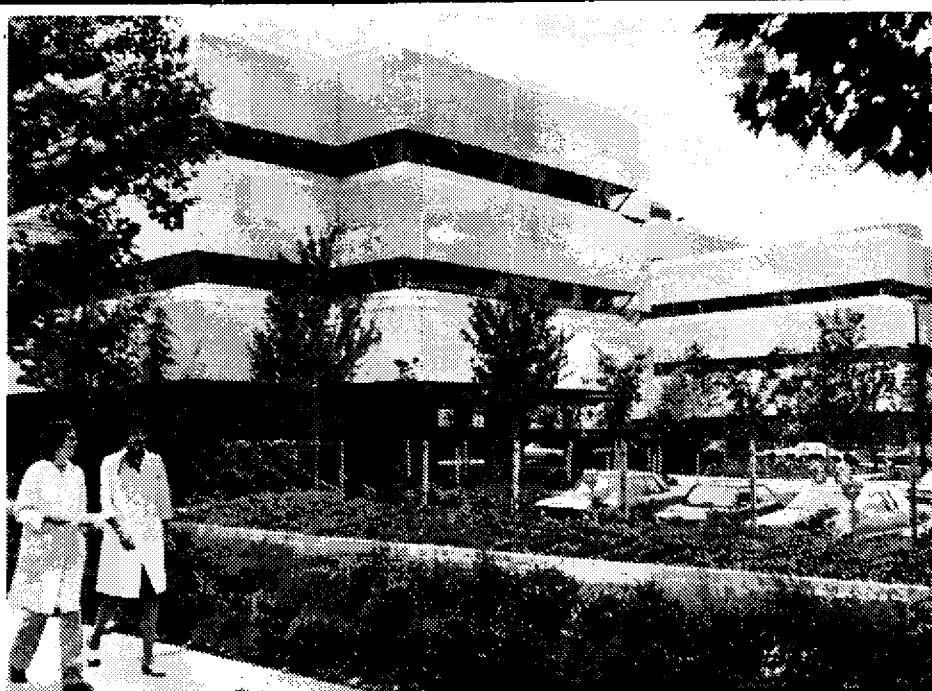
The emphasis will be on general medicine and surgery in the new unit, but Dr. Price says some special areas of treatment and research will develop. "We've been over this ground very carefully with the other treatment and teaching hospitals in the Vancouver area," he adds, "to ensure that we will not be duplicating any services offered elsewhere."

There will be no cardio-thoracic (including open-heart) surgery performed in the UBC hospital, for instance. "The Vancouver General, St. Paul's and Royal Jubilee Hospitals will remain the main centre for that kind of surgery for B.C.," says Dr. Price.

No eye, ear, nose or throat surgery or neurosurgery will be done in the Acute Care Unit, nor will it have a maternity unit. Dr. Price expects, however, that some work in the field of gynecology will be done in the unit.

Dr. Price expects the campus unit will become a major treatment and research centre for problems of the gastrointestinal tract and for the diagnosis and treatment of certain neurological diseases, notably multiple sclerosis.

Other specialties will involve treatment and investigation of some forms of metabolic



Unique health information service is planned in UBC's new acute care unit

TV will ease the minds of patients in acute care unit

You have a bad heart. You're in hospital and you're worried. You don't know what is going to happen and everyone around you is busy. You have a lot of questions you wish you could ask someone.

Today, many hospitals are trying to answer such questions through education specialists who visit patients at their bedside.

The new Acute Care Unit at UBC will also offer education programs at the patient's bedside. But an additional health information service that is unique in Canada will also be available.

Patients will be able to watch television programs concerning their medical situation on bedside TV monitors.

Heart patients, for example, will be able to watch TV programs that give basic information on the structure and function of the heart, how it works and what diseases can impair its function.

If the patient is to receive tests or an operation, they are explained in simple, non-technical language. And when the program is ready to leave hospital, the TV programs will deal with changes in lifestyle or diet that may be necessary.

If the patients have questions they will still be able to speak to patient-education specialists who will give them individual attention.

The television information system will be made possible through a \$40,000 grant from

the Vancouver Foundation for the purchase of 200 small black and white TV sets. Patients will receive all the usual TV channels but will also be able to see health information programs.

Many hospitals provide small bed-side sets through a commercial company for a fee to the patient of \$2 per day. UBC patients will be charged the same amount. The money will be used to service and replace the sets, and to buy and produce new health information television programs and provide other services of benefit to patients.

Providing the health education will be two UBC organizations — the Department of Biomedical Communications and the Health Science Volunteer Services Organization.

Biomedical Communications head Victor Doray said he has more than 400 programs for patient education and is getting more from other centres.

"Patients won't be limited to watching programs dealing with their condition," Mr. Doray said. "If a heart patient wants to see a program on asthma or diabetes because someone in their family may have the condition, they will be able to do so."

"The beauty of the system is that it is self-financing. We'll be able to replace the sets and provide new programs in perpetuity."

The system is the idea of Ian Cameron, head of the audio visual and television division of Biomedical Communications.

spring of 1981.

Eleven residents will be appointed initially, hopefully rising to approximately 30 when the unit is fully operational. They'll cover a wide range of interests, from family practice through surgery and pathology to ophthalmology and radiology.

Not all 240 beds in the new unit will be ready for occupancy immediately. Sixty patients will be admitted this month and by the end of the year it's expected that 120 beds will be occupied. Sixty surgical beds will come into operation on Jan. 1, 1981, and the unit will be fully operational by April 1, 1981.

However, when Mrs. Paul, the unit's first patient was admitted last week, all the necessary diagnostic and treatment services associated with patient care were largely in place.

"You can't just bring in a patient for diagnosis and treatment without having all the backup services — diagnostic labs, x-ray facilities and dietary service, to name only three — available and operating," says Mr. Detwiler.

The person who's been concerned with the nuts and bolts of operating the Acute Care Unit is Sheila Ryan, who functions as the

unit's assistant administrator for patient care services and nursing. She was seconded to the position some months ago from her duties as director of nursing in the nearby Psychiatric Unit.

"Our goal," she says, "is to provide first-class patient services and to be involved in the teaching and research program of the unit. All the department heads have been involved formally and informally with the various health sciences faculties and schools and we will all be involved in planning educational programs."

"We feel we're involved in an exciting and unique venture based on the health sciences centre philosophy of professionals working together in the provision of patient care and professional education."

Here's a series of snapshots of the various departments providing services in the Acute Care Unit.

NURSING — Forty nurses were on staff in the unit when it opened Sept. 2 and nursing director Shirley Mermet, formerly nursing director at Shaughnessy Hospital, foresees a need for about 300 in the department when the unit is fully operational. In some areas, unit nurses will work a 12-hour shift. Ms. Mermet says recruiting for nursing staff is not a problem at present, but she anticipates that as the hospital expands the current shortage of registered nurses may be of concern.

DIETETICS — Carol Omsted, who's director of dietetics for all the units of the hospital, says it's expected some 70 per cent of the patients in the Acute Care Unit will be on some kind of diet modification because of illness. Each patient will get a selective menu daily and will be instructed in how to select the most nutritious food appropriate to diet modification and preference. Modern and labor-saving equipment will enable meals to reach patients between three and five minutes after leaving the kitchen. "We're looking to take a more active role in assessing a patient's nutritional problems, developing a plan and following it through. That will involve closer interaction with the medical, nursing, social work and rehabilitation staff," says Ms. Omsted. Will have some 58 employees when unit is in full operation.

HOUSEKEEPING — Quite apart from looking after such things as the 1,800 pairs of sheets the Acute Care Unit will have, housekeeping supervisor Peter Phillips and his assistant, Glenn Sterne, are concerned with establishing standards of cleanliness and sanitation. These standards have to be high throughout the unit and special procedures will be required in areas such as operating theatres and other specialized areas. Was one of the first departments in operation because of the need to train and orient staff. Will employ between 75 and 80 persons when unit is in full operation.

LABORATORY MEDICINE — Provides a multitude of services which are an essential part of the diagnostic and treatment procedure — chemistry, hematology, microbiology, surgical and anatomical pathology, blood bank and, in the Acute Care Unit, nuclear medicine. Department is highly automated and all test results will be computerized. Computer links between department and nursing stations will enable ward personnel to instantly request results or enquire about status of tests. Computer will even analyse lab activity so personnel can be shifted to handle test volume. The unit's lab manager, Sheila Armstrong, heads a staff of 24, which will expand to 60 when unit is fully functional.

RADIOLOGY — Provides services for all units of the Health Sciences Centre Hospital. Opened with two general x-ray and two fluoroscopic rooms, an ultrasonic room containing a diagnostic machine that utilizes high-frequency sound waves, and an angiographic suite with special equipment for x-raying blood vessels using radio-opaque dye. Radiology co-ordinator Beryl Rowse says the discipline has changed more in the past ten years than in the previous 50. In addition to taking x-rays and participating in the diagnostic process, radiology is also involved to a lesser degree in therapeutic care, e.g. removal of gall stones and dilation of restricted blood vessels. Will have some 40 employees when the unit is fully operational.

UBC's oldest teacher comes back to campus

Prof. emeritus J.M. Turnbull, 103 years old and the only surviving member of the original faculty which was on hand when UBC opened its doors to students in 1915, came back to the campus on Sept. 2.

He was the second patient admitted to the Acute Care Unit of the campus Health Sciences Centre Hospital, where he is being treated for injuries he received in a recent fall.

A graduate of McGill University in 1897, Prof. Turnbull came to B.C. after graduation to work at the Lanark Mine near Revelstoke. He was a member of the first Senate of the University representing the Interior city of Trail and was among the first appointments made to the UBC faculty by UBC's first president Dr. Frank Westbrook.

Prof. Turnbull headed the Department of Mining and Metallurgy in the Faculty of Applied Science for 30 years, retiring in 1945. He's the oldest living member of the Canadian Institute of Mining and Metallurgy, which he joined in 1904. The institute honored him in 1978 with a citation "in recognition of... exceptional service to the mining industry."

He's also a charter member of the Association of Professional Engineers of B.C. and holds registration number five.

Prof. Turnbull's last visit to the UBC campus was in March, 1979, when he delivered a 45-minute, stand-

up lecture to students in Mining and Mineral Process Engineering on the way it was in the mining world in B.C. at the turn of the century.



Acute Care Unit admitting director Lois Blanchard puts a plastic identification bracelet on Prof. emeritus J.M. Turnbull, UBC's oldest living faculty member and the second patient admitted to the new campus hospital. Picture by Jim Banham

REHABILITATION MEDICINE — Rehabilitation services director Kathy Scalzo says the goal of her unit is to help patients attain for themselves maximum function in normal living activities. There will be ten physiotherapists, four occupational therapists and a speech therapist in the department. Eventually, its facilities will be available to out-patients.

PHARMACY — David Hill, who's director of pharmacy services for all units of the Health Sciences Centre Hospital, will head a staff of 17, including 10 licensed pharmacists, when the unit is fully operational. In addition to preparing and dispensing the medications required by hospital patients, his staff will monitor patient drug use to make sure they're getting rational and appropriate drug therapy. A drug information centre will be developed for the use of the hospital's medical and professional staff and the department expects to play an active role in educational programs for pharmaceutical sciences students.

MEDICAL RECORDS — A key hospital department that keeps complete and detailed records of all procedures carried out on patients by the health team. Generates the statistics used as the basis for the payment of hospital costs by the provincial government and by teams of visiting experts who recommend hospital accreditation. Health records director Marcia Taggart, who's been at UBC since the Psychiatric Unit opened in 1968, says the degree of computerization applied to the hospital's records is as advanced as any in Canada. Expects to have 13 people in her department when the Acute Care Unit is fully operational.

ADMITTING — As the department which has first contact with incoming hospital patients, admitting director Lois Blanchard says her employees are trained to provide "sympathetic and efficient service." Ms. Blanchard will be a good person to have around if the hospital ever has to be evacuated in a hurry. She was on the admitting staff of Mississauga General Hospital last November when a railway train jumped the tracks and exploded about two miles away. She was a member of the hospital team that transferred nearly 500 patients to other Toronto-area hospitals within two hours.

Medical advances lecture subject

Two days of lectures on recent advances in medicine will be held at UBC Sept. 25 and 26. The lectures are to mark the opening of the 240-bed Acute Care Unit which has accepted its first patients.

Speakers will be experts from the Universities of Chicago, McGill, Toronto and UBC, as well as from France and Alberta.

Among the speakers will be Dr. Donald Paty, who has recently joined UBC and VGH as head of the Division of Neurology in the Department of Medicine.

Dr. Paty will direct a multiple sclerosis clinic in the Acute Care Unit on campus. He is a world authority on the disease and this will be the first time he will lecture on this subject in Vancouver.

Other topics will include epilepsy, arthritis, urology, immunology and aging. The lectures will be given in the lecture theatre of the Psychiatric Unit.

Copies of the program can be obtained from Dr. D.E. Vance, associate dean for research in the Faculty of Medicine at 228-4305. Admission is free.

Volunteers needed

Volunteers are needed to support the team approach to health care in the three hospital units on campus.

Health care in the Health Sciences Centre is based on interdisciplinary team work, and volunteers from the University and surrounding community are an integral part of the therapy program, says Mrs. Sherry Kendall, director of volunteers.

"This is an excellent opportunity for faculty, students and staff or for those living near the hospital who wish to help," Mrs. Kendall said. "We have an exciting approach to health care, and I'm sure many people would like to be a part of it."

Workshops and training sessions will be available to volunteers. Among volunteer programs are exercise, gardening, gift shop, library, craft and one-on-one sessions with patients.

Anyone interested should phone Mrs. Kendall at 228-7384.

UBC Calendar

UBC CALENDAR DEADLINES

Events in the week of:

Sept. 21 to Sept. 27 Deadline is 5 p.m. Sept. 11

Sept. 28 to Oct. 4 Deadline is 5 p.m. Sept. 18

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

MONDAY, SEPT. 15

3:30 p.m. APPLIED MATHEMATICS SEMINAR. Prof. Frederic Y.M. Wan, Mathematics and Institute of Applied Mathematics & Statistics, UBC, on **Polar Dimpling of Shallow Caps under Sub-buckling Pressure Loads.** Room 203, Mathematics Building.

MANAGEMENT SCIENCE SEMINAR. Prof. Joseph Kadane, Carnegie-Mellon University, on **Subjective Probability and the Theory of Games.** Penthouse, Henry Angus Building.

COMPUTING CENTRE LECTURE. The first in a series of six lectures on **Introduction to Computing** by J. Bjerring of the UBC Computing Centre. Room 201, Computer Sciences Building.

4:00 p.m. ASTRONOMY SEMINAR. Dr. Nolan Walborn, Cerro Tololo Interamerican Observatory La Serena, Chile, on **The Eta Carinae Association.** Room 318, Hennings Building.

TUESDAY, SEPT. 16

12:30 p.m. CENTRE FOR HUMAN SETTLEMENTS VIDEO PREVIEWS. Second in a series with the general title **Third World Development.** Today's films are: **Traditional Architecture (Yemen)**, which explores the value of traditional building materials and craftsmanship and their relevance to contemporary requirements, and **Heart of Asia (Afghanistan)**, showing the role of water and agricultural policies as well as individual methods of farming. Room 308, Library Processing Building.

INSTITUTE OF ASIAN RESEARCH China Film and Lecture Series. Today's films are **Rise of Communist Power in China, 1941-49**, and **China's Chair**, which documents the events leading to the People's Republic being seated in the United Nations. Room 322, Buchanan Building.

4:30 p.m. CHEMISTRY/MICROBIOLOGY SEMINAR. Prof. Michael Heidelberger, New York University Medical Center, on **The Relation of Chemical Structure to Immunological Specificity as Indicated by the Study of Cross-Reactions.** Room 250, Chemistry Building.

7:30 p.m. AMS SPEAKERS FORUM. Caroline Bird, writer and lecturer, on **The Two-Paycheque Marriage.** Tickets, at \$1 for AMS members and \$3 general admission, are available at the AMS box office in SUB. Auditorium, Student Union Building.

FRIENDS OF FINDHORN Lecture and Slide Presentation. Peter Caddy, founder of Findhorn Community in Scotland, on **Planetary Transformation and the Network of Light.** Lecture Hall 2, Woodward Instructional Resources Centre. Admission \$5; students \$4.

WEDNESDAY, SEPT. 17

12 noon PHARMACOLOGY SEMINAR. Dr. Viktor Havlicek, Physiology, University of Manitoba, on **Behavioral Effects of Brain Peptides.** Room 114, Block C, Medical Sciences Building.

12:30 p.m. WEDNESDAY NOON-HOUR RECITAL by bassoonist George Zukerman. Recital Hall, Music Building.

3:30 p.m. GREEN VISITING PROFESSOR. Prof. Anders Rapp, head of physical geography, University of Lund, Sweden, on **Relict Landforms from an Ordovician Glaciation in the Central Sahara Desert.** Room 201, Geography Building.

ECONOMICS THEORY SEMINAR. Ron Harstad, Economics, UBC, on **Experiments with Incentive-Compatible Mechanisms for Decentralized Public Good Allocations.** Room 351, Brock Hall.

4:00 p.m. ASTRONOMY SEMINAR. Dr. Anne B. Underhill, Goddard Space Flight Center, Greenbelt, Maryland, on **The Physical State of the Atmospheres of B-type Supergiants.** Room 260, Geophysics and Astronomy Building.

ANIMAL RESOURCE ECOLOGY SEMINAR. Dr. C. Richard Tracy, Zoology and Entomology, Colorado State University, on **The Role of the Physical Environment in the Ecological Interactions of the Galapagos Land Iguana.** Room 32, Hut B-2.

WEDNESDAY, SEPT. 17 (Continued)

7:30 p.m. FREDERIC WOOD THEATRE season opens with Eugene O'Neill's **Long Day's Journey Into Night**, directed by Stanley Weese. Continues until Saturday, Sept. 27 (excluding Sunday, Sept. 21). Tickets at Room 207, Frederic Wood Theatre. For reservations, call 228-2678. Frederic Wood Theatre.

FRIENDS OF FINDHORN WORKSHOP. Peter Caddy, founder of the Findhorn Community, Scotland, on **Conversations with Peter: The Principles of a Planetary Culture.** Garden Room, Graduate Student Centre. Admission \$10; students \$8.

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, SEPT. 18

12:30 p.m. GREEN VISITING PROFESSOR. Prof. Anders Rapp, head of physical geography, University of Lund, Sweden, on **Process of Desertification in The African Drylands.** Room 100, Geography Building.

COMPUTING CENTRE OPEN HOUSE. A self-guided tour through the centre's machine room, open to students, faculty and staff, continues until 4 p.m. Starting point is Room 100, Computer Sciences Building.

ANTHROPOLOGY AND SOCIOLOGY LECTURE. Dr. Francis Huxley, Philadelphia Association of London, on **The Gorgon's Head: A Discussion of Symbolism.** Rooms 207-209, Anthropology and Sociology Building, 6309 Northwest Marine Dr.

MUSIC LECTURE. Prof. Jan Maegaard, Music, UCLA, on **When Does Schoenberg's Music Not Sound Like Schoenberg?** Room 113, Music Building.

3:30 p.m. ANIMAL RESOURCE ECOLOGY SEMINAR. Dr. T.G. Calder, head, Science Section, State College of Victoria at Coburg, on **Tree-Hollow Habitats for Australian Birds and Mammals.** Room 2449, Biological Sciences Building.

4:00 p.m. PHYSICS COLLOQUIUM. Dr. A.V. Gold, Physics, UBC, on **Spin Properties of Conduction Electrons.** Room 201, Hennings Building.

5:00 p.m. YOUNG ALUMNI CLUB chicken barbecue. Doors open at 5 p.m., dinner at 7 p.m. \$4 per person, tickets to be purchased in advance. Cecil Green Park, 6251 Cecil Green Park Rd.

FRIDAY, SEPT. 19

11:30 a.m. DEVELOPMENTAL MEDICINE SEMINAR. Dr. N. Bruchovsky, Cancer Control Agency of B.C., on **New Aspects of Androgen Action in Prostate Gland.** Room 15, 811 West 10th Ave.

ASIAN RESEARCH INSTITUTE/ASIAN STUDIES DEPARTMENT film showing. First of two showings of **Life of Norman Bethune**, film made in China in Mandarin with English subtitles. Repeated at 2:30 p.m. Room 106, Buchanan Building.

12:30 p.m. CO-OPERATIVE CHRISTIAN CAMPUS MINISTRY LECTURE. Dr. Jonathan King, Biology, MIT, on **The Role of the Scientist in Social Responsibility.** Informal discussion. Luthern Campus Centre, 5885 University Blvd.

1:00 p.m. MEDICAL GENETICS SEMINAR. Report on **Teratology Conference** by Dr. Muriel Harris. 4th Floor Conference Room, Health Centre for Children, VGH.

3:30 p.m. MUSIC COLLOQUIUM. Prof. Jan Maegaard, Music, UCLA, on **What Was New in Harmony in 1910.** Room 400, Music Building.

8:00 p.m. CO-OPERATIVE CHRISTIAN CAMPUS MINISTRY LECTURE. Dr. Jonathan King, Biology, MIT, on **Medical, Biological and Social Consequences.** Vancouver Unitarian Church, 949, West 49th Ave.

FINE ARTS GALLERY

An Interior Environment created specifically for the UBC Fine Arts Gallery by Georgiana Chappell continues until Oct. 10. Gallery hours are 10:00 a.m. to 5:00 p.m. Tuesday through Saturday. The gallery is located in the north basement of the Main Library.

M.Y. WILLIAMS GEOLOGICAL MUSEUM

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

FINAL ORAL EXAMINATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Listed below are scheduled final examinations for the degree of Doctor of Philosophy at the University. Unless otherwise noted, all examinations are held in the Faculty of Graduate Studies Examination Room, General Services Administration Building. Members of the University community are encouraged to attend the examinations, provided they do not arrive after the examination has commenced.

Monday, Sept. 15, 3:30 p.m.: ANGELA SAVAGE, Chemistry: **Structural Investigations and Bacteriophage Degradations of Klebsiella Capsular Polysaccharides.** (Room 225, Chemistry Building).

Tuesday, Sept. 16, 2:00 p.m.: SHEILA GAY CALVERT, Archaeology: **A Cultural Analysis of Faunal Remains from Three Sites in Hesquiat Harbour, B.C.**

Tuesday, Sept. 16, 3:30 p.m.: MANFRED WINTER, Chemistry: **A Formal Total Synthesis of 9-Isocyanopupekeanane.** (Room 225, Chemistry Building).

STUDENT HEALTH SERVICE

The Student Health Service is now located in Room 534 of the Acute Care Unit of the Health Sciences Centre Hospital on Westbrook Mall. Phone 228-7011 (you must dial the entire number). The former University Health Service Hospital on the third floor of the Westbrook 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.

LAB COAT SALE

A sale of Protech lab coats, sponsored by the student chapter of the Chemical Institute of Canada, will be held daily from 12:30 to 1:30 p.m. until Sept. 19 in Room 162 of the south wing of the Chemistry Building. \$6 each.

ACQUIRING A CANADIAN ACCENT

Do you know English but want to improve your accent? The Centre for Continuing Education is offering classes for students wishing to perfect their skills in English as a second language. Courses include: **Acquiring a Canadian Accent**, **Written English**, **Effective Communication and Practical Spoken English**. Classes will be held on campus Tuesday and Thursday, afternoons and evenings and Saturday mornings beginning Sept. 16. Register now by phoning 228-2181, local 285.

FACULTY AND STAFF EXERCISE CLASS

Men and Women Term I - Mondays, Wednesdays, Thursdays, 12:30 to 1:05 p.m., Gym E, Robert Osborne Centre. No fee. Locker and towel available at cost. Starts Sept. 15. Instructor S.R. Brown. For information call 228-3996.

LIBRARY TOURS

Guided tours of Main and Sedgewick Libraries will be given during the first 2 weeks of classes, Sept. 8-12 and 15-19, Mondays through Fridays, at 10:30 a.m. and 12:30 p.m. Meet in the Main Library entrance hall.

CHANCELLOR BOULEVARD PARKING

The University detachment of the RCMP advises that parking on Chancellor Boulevard was banned, effective Aug. 15. No parking will be allowed at any time on this route to the University. The regulation will be strictly enforced, an RCMP spokesman said.

LANGUAGE PROGRAMS

Fall Language Programs at UBC's Centre for Continuing Education begin Sept. 15. In addition to the regular courses in conversational French and Spanish normally offered at this time, the Language Institute is introducing new non-credit programs in French and Spanish for travellers, French grammar and Quebec culture, and a 12-week conversational course in Japanese for beginners. Specialized non-credit courses for language teachers and courses in French for francophones are also being offered for the first time. For further information phone 228-2181, local 227.

STUDENT LEADERSHIP CONFERENCE

Student Leadership Conference will be held at Camp Elphinstone on the Sunshine Coast from Friday, Sept. 19 through Sunday, Sept. 21. Topics to be discussed at the conference will be University organization and student leadership. Cost of the conference is \$40.00; \$17.50 for students. You must register before Sept. 12. For information contact Doris Wong at the AMS Business Office, 228-2901.

