UBC REPORTS

VOLUME SIXTEEN, NUMBER SEVEN

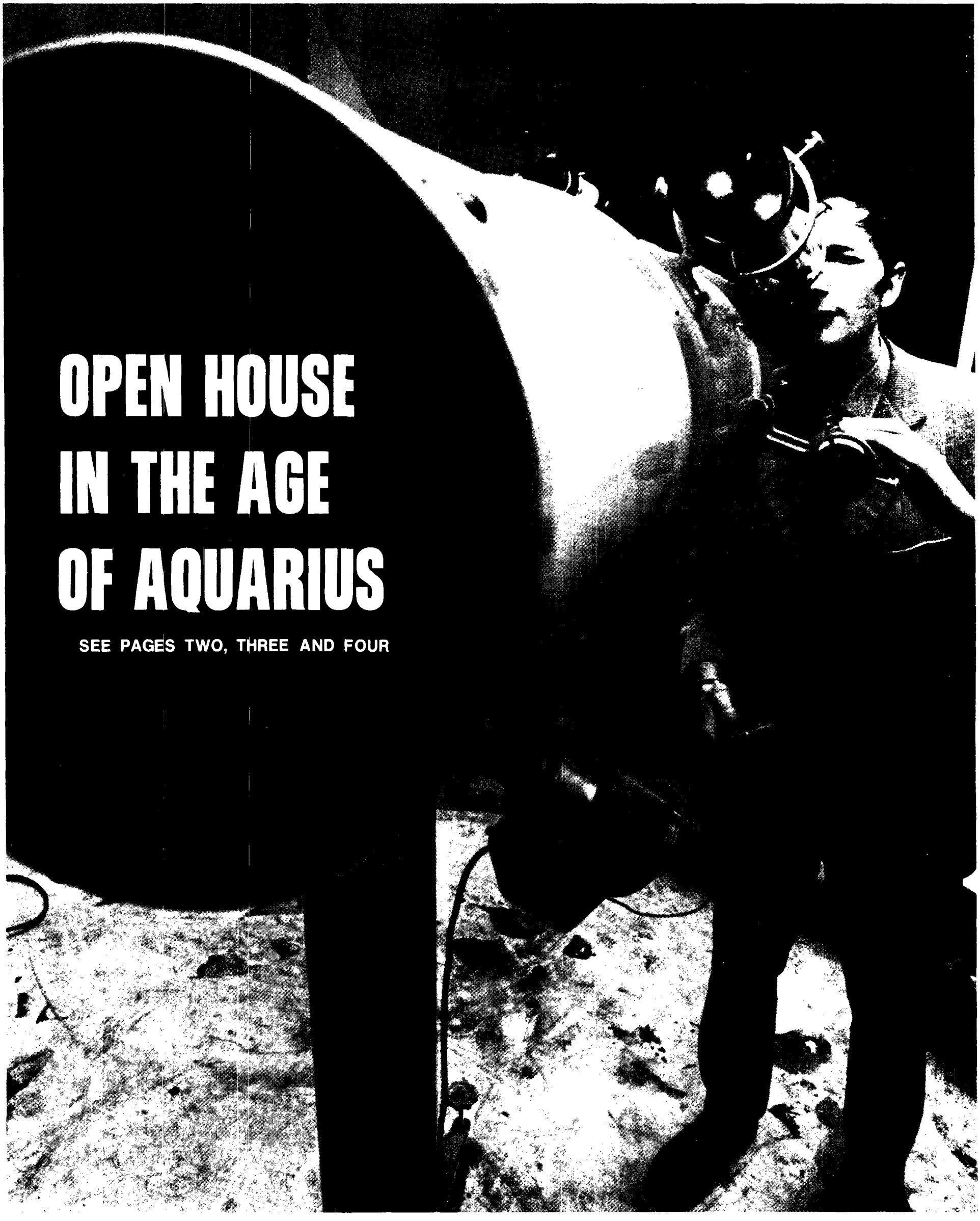
FEBRUARY 26, 1970, VANCOUVER 8, B.C.

RETURN REQUESTED

UBC Reports,
Information Services,
University of British Columbia,
Vancouver 168, B.C.

BULK

CANADA
POSTAGE - POSTES
4c CTS.
PERMIT No. 2027
VANCOUVER, B.C.



OPEN HOUSE IN THE AGE OF AQUARIUS

SEE PAGES TWO, THREE AND FOUR

Colorful posters showing the 12 signs of the zodiac will decorate the Department of English display in the UBC Buchanan building during Open House. Assistant professor Dr. Thomas Blom, above, has arranged the display which relates the zodiac to English literature. Six fortune tellers will dispense literary fortunes to visitors, naming famous literary figures and their signs and quoting poetry. Assisting Dr. Blom in decorating zodiacal posters are Claire Sander, second year Arts, left, and Barbara Pow, second year Education, right. You'll be able to see how primitive man made crude weapons for hunting and work at the archaeology display in the north west basement wing of the Mathematics Building. Anthropology Ph.D. candidate Paul Sneed demonstrates in the picture below how B.C. Indians used obsidian, or volcanic glass, to create knives, spear points and cutting and scraping tools. Photos by Extension Graphic Arts.

UBC Opens Its Doors March 6-7

This is, the astrologers tell us, The Age of Aquarius, a period when, according to the hit musical *Hair*, "peace will guide the planets and love will steer the stars."

It is doubtful that anything as unscientific as the arcane and ancient Babylonian art of astrology would appeal to Dr. Gordon Walker, associate professor of astronomy, who is shown on the front cover of this issue of *UBC Reports* star-gazing with the help of a 10-inch reflecting telescope.

The telescope, located in a dome atop the Geophysics Building, which used to be inhabited by the B.C. Research Council, will allow evening visitors to UBC's eighth triennial Open House on March 6 and 7 to look far into space and see the planet Saturn, the dominant planet of Aquarius, a fanciful name applied to one of the 12 divisions of the Zodiac. During the daylight hours, UBC astronomers plan to train the telescope on the sun and project that star's image on a screen which will allow visitors to see sunspots.

The UBC telescope will, of course, be only one of hundreds of displays which will be available for public viewing during Open House, a joint faculty-student venture designed to acquaint the people of B.C. with the research and activities of one of Canada's largest and most highly developed universities.

Open House 1970 will get underway at 3 p.m. on March 6 when B.C.'s Lieutenant-Governor, the Hon. John Nicholson, declares the event officially open at a short ceremony at the flagpole at the north end of the Main Mall.

The official hours of Open House 1970 are 3 to 10 p.m. on Friday, March 6, and 10 a.m. to 10 p.m. on Saturday, March 7.

Here are brief descriptions of some of the hundreds of displays available to visitors:

FACULTY OF AGRICULTURAL SCIENCES – Displays will be built around the theme "Spaceship Earth," and will relate the involvement of agriculture in the survival of man and the earth's ecological system. Located in the H.R. MacMillan Building.

SCHOOL OF ARCHITECTURE – Displays will include a prototype housing unit, a photographic history of the growth of UBC and an explanation of the "Venice Trip" currently being undertaken by Architecture faculty members and students. Located in the Frederic Lasserre Building.

CLASSICAL STUDIES DEPARTMENT – A dramatic presentation of *Clouds*, by the Greek playwright Aristophanes, a slide show of Greece and Italy and a facsimile of the Pompeian wall, with graffiti. In the Buchanan Building. (Almost all displays by liberal arts departments will be located in the Buchanan Building. Presentations will include stage plays, poetry readings and slide and film shows).

FACULTY OF EDUCATION – A total of 22 department displays will include classroom situations and current educational methods. UBC's educational television unit will also be on exhibit.

FACULTY OF LAW – In addition to a mock trial, using visitors as jurors, the Faculty plans a display of current litigation and a legal aid booth.

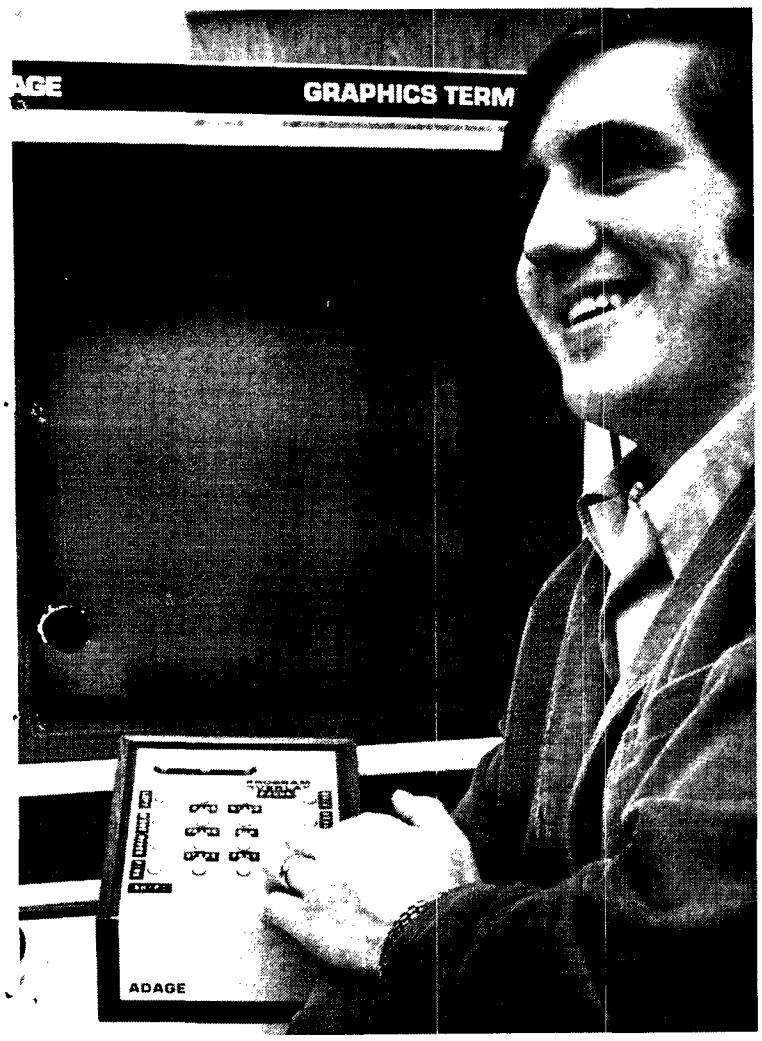
FACULTY OF MEDICINE – Demonstrations of complex equipment for medical diagnosis and research. Displays will be located in units of the developing Health Sciences Center immediately to the south of University Boulevard opposite the War Memorial Gymnasium, where the **SCHOOL OF PHYSICAL EDUCATION** will stage gymnastic displays and demonstrate work being carried out in the Fitness Performance Laboratory.

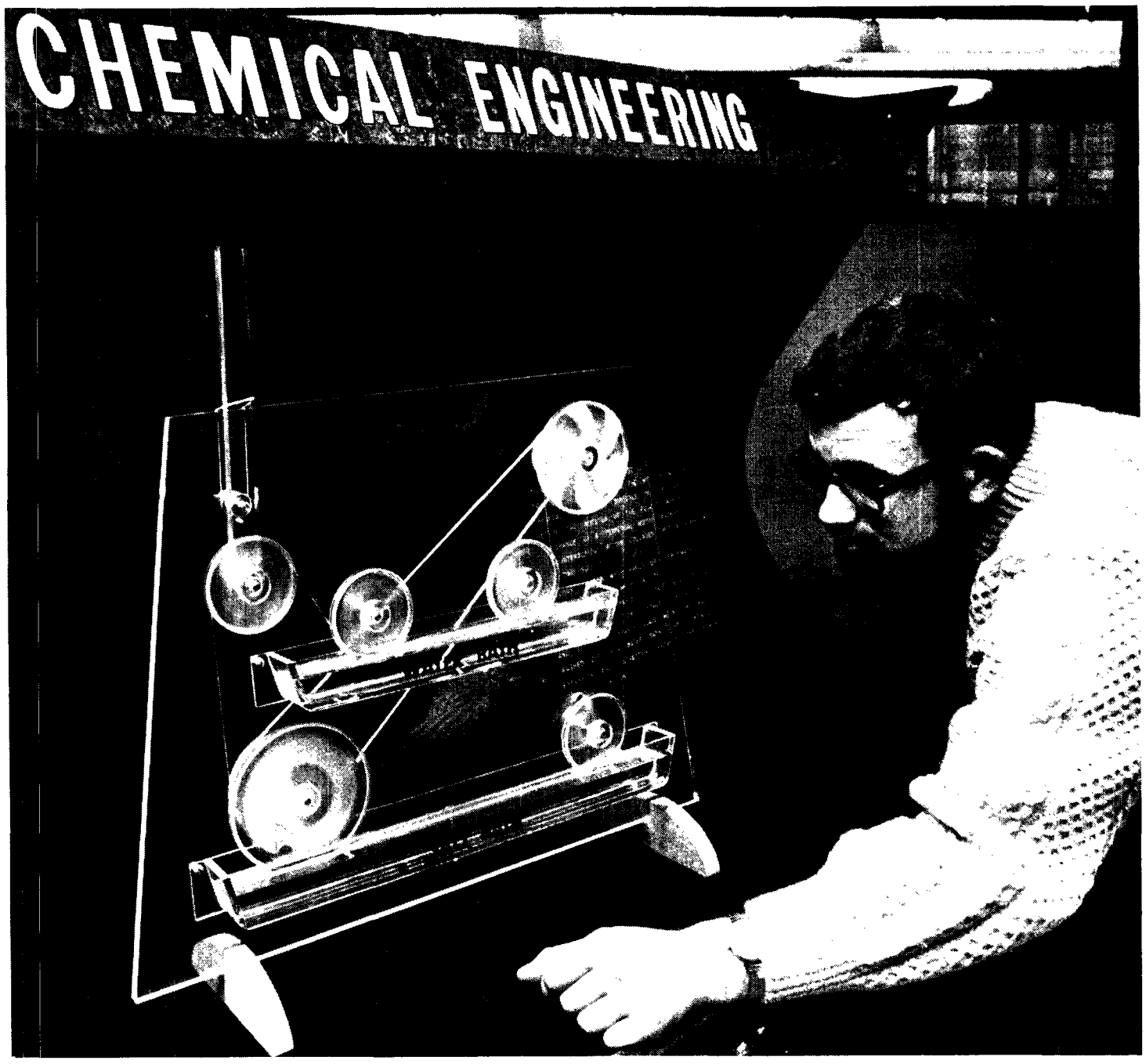
DEPARTMENT OF BOTANY – A total of 14 exhibits including fossil displays, ecological studies being carried out in B.C. and aquatic vegetation utilization. In the Biological Sciences Building, corner of the Main Mall and University Boulevard.

GEOLOGY AND GEOGRAPHY – The Department of Geology will display models of an offshore oil drilling rig and the west coast sea floor and one of North America's best mineral collections. The Department of Geography will use films, maps and slides to demonstrate the critical ecological balance between resources, urbanization and the physical limitations to B.C.'s potential. The Geology and Geography Building is located on the West Mall.

All campus Food Services will be operating during Open House and student guides will be in evidence on all parts of the campus to assist visitors in finding displays of interest to them.

The UBC Theatre Department's production of William Shakespeare's "As You Like It" opens March 6, the first day of Open House 1970 and continues until March 14 with a special performance for students at 12:30 p.m. on March 12. Costume mistress Mrs. Jessie Richardson is shown at right giving a costume fitting to Susanna KcKeown, a theatre and fine arts student, who plays the role of Phebe in the production. A "spaceship game" involving a computer will be one of the main attractions at the Computing Center's display in the Civil Engineering Building during Open House. The spaceships which can be seen on the screen below are guided by remote control boxes like the one being operated by programmer analyst David Twyver. The object of the game is for one spaceship to shoot the other down using the 32 torpedoes which each ship is equipped with. Spaceships behave as if they were in deep space. All pictures on Pages Two and Three by UBC Extension Graphic Arts.





Ingenious "perpetual motion" machine will be demonstrated in the chemical engineering building by its inventor, fourth year student Lee Dawson, at right. Dawson's machine consists of a protein fibre which runs on a set of pulleys through a salt bath and a water bath. In the salt bath the negative charges on the protein fibre are attracted to positive ions in the salt solution. This causes a rippling effect which tends to bunch the fibre. In the water solution the salt is washed out of the fibre, which causes it to expand. The result of the bunching and expanding effect is to cause the fibre to move continuously on a set of pulleys.

Two of the top four black and white prints in the Ben Hill-Tout Memorial Photographic Salon are "Spectators," above, by Dr. Michael Frimer, a research fellow in UBC's Surgery Department, and "Sue," below, by Keith Dunbar, a third year Arts student. Photos will be on display in SUB Art Gallery March 2–15 and during Open House March 6 and 7.

Prelude to Open House

As a special in-the-community feature of Open House 1970, the Extension Department will present four noon-hour downtown lectures by noted UBC teachers Dr. David T. Suzuki, Prof. Sam Black, Dr. Roy Daniells and Dr. Michael W. Ovenden. The lectures will be held at the Vancouver Public Library, 750 Burrard Street, from 12 to 1 p.m. March 2–5.

The program exemplifies the Extension Department's activities in helping to make the resources of the University available to British Columbians who wish to continue their education as adults.

Speakers, topics and dates are:

Geneticist Dr. David Suzuki, Department of Zoology, will speak on "Science, Technology and Social Responsibility" Monday, March 2;

Artist Prof. Sam Black, Faculty of Education, will discuss "Art and Life," Tuesday, March 3;

Poet and writer Dr. Roy Daniells, Department of English will speak "In Defense of the Ivory Tower" Wednesday, March 4; and

Astronomer Dr. Michael Ovenden, Department of Geophysics, will talk on "The Universe and Man" Thursday, March 5.

Sessions will be chaired by Mr. Gordon R. Selman, Director, Extension Department. There is no admission charge for any of the lectures. For further information contact the Extension Department, 228-2181.

Labor Leader Arts Speaker

UBC's 1970 Arts Week concludes today and tomorrow with an address by a noted Quebec labor leader and a panel discussion on American domination of Canada.

Mr. Michel Chartrand, former president of the Montreal Confederation of National Trade Unions, will speak on the labor movement in Quebec in the Old Auditorium at 12:30 p.m. today.

Tomorrow, the five speakers who have taken part in Arts Week will participate in a panel discussion on American domination of Canada at 12:30 p.m. in Buchanan 106.

In addition to Mr. Chartrand, panellists will be Canadian historian Stanley Ryerson, Mr. Robin Matthews and Mr. James Steele, of Carleton University, whose concern over foreign teachers at Canadian universities has sparked a nationwide debate, and former labor leader Jack Scott, who is now head of the Progressive Workers Movement.

Arts Week is presented by the Arts Undergraduate Society and sponsored by the Faculty of Arts.

Free Advice

The "Quo Vadis?" program of information and advice for students on academic programs and vocational opportunities takes place in the ballroom of the Student Union Building today and tomorrow.

The program, initiated last year by the Dean of Women's Office, attracted so much interest from both men and women students that it will this year be open to both.

Professors from all Faculties, graduates and students will be available for consultation and to provide assistance to students making decisions about their academic and vocational futures.

Women only will participate in the program today from 12:30 to 2:30 p.m. and both men and women are welcome at the same time and place tomorrow.

More Carrels Now Available

Over 150 additional study carrels have been made available for use by undergraduate students. They are located in the Auditorium Annex, the Mathematics building, and the Mathematics Annex.

Some 85 carrels are located in Room 154 of the Auditorium Annex and are open daily and for evening study until midnight.

Spaces for approximately 35 students are available in Room 124 of the Mathematics building and study hours are posted on the door.

Rooms 1119 and 1102 in the Mathematics Annex each have space for approximately 20 students and are open until midnight.

IT HAPPENS SOMEWHERE
IN B.C. EVERY DAY -
10 TIMES A DAY ON THE
AVERAGE - AND IT CAN BE....

A MATTER OF LIFE OR DEATH

A child reaches for a bottle of aspirins or a detergent container and swallows all or part of the contents.

The mother, always upset and sometimes hysterical, needs help in a hurry.

The kind of help she needs—fast, accurate and professionally sound advice—is now available in many BC communities through a rapidly-expanding poison control program which University of BC researchers have played a leading role in developing.

The heart of the program is a computer-based poison control information system, developed under the direction of UBC Mobile, assistant professor in the UBC Faculty of Pharmaceutical Sciences, which sponsored the project.

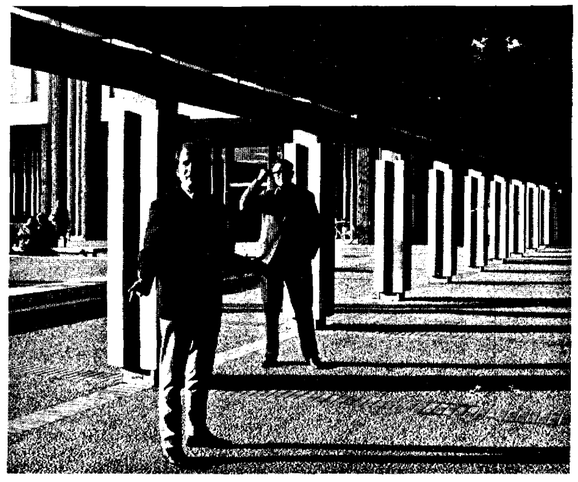
Forty-four major hospitals in BC have received sets of file cards which give detailed information on close to

Please turn to Page Two

See PHONE

TWO RARE BIRDS

KNOWN AS ENVIRONMENTAL PSYCHOLOGISTS CAME TO ROOST AT THE UNIVERSITY OF BRITISH COLUMBIA IN SEPTEMBER LAST YEAR. DR. RICHARD SEATON AND DR. JOHN COLLINS ARE BASICALLY PSYCHOLOGISTS WHO HAVE A BACKGROUND IN ARCHITECTURE. THEIR MAIN TASK AT UBC IS TO ASSIST IN THE CREATION OF AN IMPROVED LEARNING ENVIRONMENT. 'UBC REPORTS' EDITOR JIM BANHAM TOOK THE TWO NEW FACULTY MEMBERS ON A TOUR OF THE CAMPUS RECENTLY AND RECORDED THEIR COMMENTS FOR THE ARTICLE WHICH BEGINS AT RIGHT. IN THE DISCUSSION WHICH BEGINS BELOW, DR. JOHN COLLINS TALKS ABOUT THE CURRENT LEARNING ENVIRONMENT AT UBC AND HOW IT MIGHT BE IMPROVED. AND ON PAGE EIGHT DR. RICHARD SEATON DESCRIBES THE CHARACTERISTIC ACTIVITIES OF THE ENVIRONMENTAL PSYCHOLOGIST.



Tour of UBC Campus Proves To Be An Illuminating Experience

By JIM BANHAM
Editor, UBC Reports

Touring the campus with Dr. Richard Seaton and Dr. John Collins, UBC's environmental psychologists, is an illuminating experience.

They are constantly pointing out architectural anomalies and delights which the regular or intermittent campus user would either take for granted or scarcely notice.

Our tour began at the covered arcade adjacent to the Music Building in UBC's Center for Fine Arts (see picture at left above).

Dr. Seaton characterized the arcade as "silly and wasteful" because the structure did not meet the architectural yardstick of a "form which follows human function."

The arcade, Dr. Seaton went on, has no apparent function other than to serve as the framework for an enormous stone sculpture of the head of an Asian girl which sits on a pedestal at the far north end of the arcade. "It directs people along a north-south axis which leads from nowhere to nowhere," Dr. Seaton said.

One of the arcade's major functions at the moment, he continued, is to relate the bulk of the Music Building to the external surrounds and create a courtyard at the south side of the build[illegible] "The architect visualized something which is quite satisfying in a pictorial sense but relatively useless and very expensive," Dr. Seaton added.

He went on to say that because of the heavy annual rainfall on the campus he would like to see many times that amount of covered arcade space to provide protection for students and others. "UBC could buy a lot more arcade space much more cheaply than this," he said.

In the midst of the Fine Arts Center, Dr. Collins suddenly stopped at a point on the north side of the Frederic Wood Theatre where the brick and pebble-surfaced terrace ends and a short gravel walkway crosses a grassy area. (See picture second from left above).

This change of texture from a pebbly surface to gravel and grass he characterized as one of the "pleasant things about walking through the Fine Arts Center complex.

"If you want a delightful experience in non-visual architecture close your eyes and feel architecture through your feet and listen to it with your ears. As you cross the courtyard you feel the pebbly surface embedded in concrete and surrounded by the smooth brick but when you get to the gravel pathway, you have a number of textural options. "On the one hand, you can skirt the path, feel and hear the grass under foot, or you can walk on the path and experience the crunch of sandy gravel. It's a pleasant change in tactile and acoustical texture and an interesting thing for an architect to provide.

At the Frederic Wood Theatre, Dr. Collins stopped and asked the photographer accompanying us to take a picture of "those garbagey signs" plastered on the windows and the walls of the Theatre, terming this "visual pollution."

Then he walked into the Theatre lobby and pointed out a huge sign (see picture at right above), which cautioned students about taking food and beverages into the Theatre.

"It's an affront to the dignity of human beings to have big signs like this telling people what they can and cannot do," he said. "The students ignore it anyway," he added, pointing to a couple entering the theatre with food and plastic cups containing drinks.

In front of the Faculty Club we climbed into Dr.

Please turn to Page Eleven
See MAKE PLACES

A PSYCHOLOGIST LOOKS AT THE CAMPUS ENVIRONMENT

UBC REPORTS: Mr. Collins, perhaps we could begin with you telling us a bit about yourself—where you've come from?—and the kind of work you're doing at UBC in the Office of Academic Planning.

DR. JOHN COLLINS: I joined UBC at the beginning of this academic year. I came here from the University of Utah, after completing doctoral work in a new program—a combination of psychology of an environmental sort with a considerable emphasis on architecture theory, although I'm not a building designer in the architectural draftsman sense.

As for my work, it's still being defined. Part of my responsibility lies in deciding on the needs of the Academic Planning Office, how it can be of service to UBC as well as in terms of my own interests and the areas where I'm expected to advise.

My own interests lie in studying the campus and the University as a setting in which educational things happen. At some point there must be a reasonable amalgamation between the one concept of the University as a single, huge organism and the other concept of the University as a complex of individual human beings, the student, the instructor, and the student in the context of the instructional situation. In addition, I'm a teacher—I have one section of introductory psychology.

PLACE OF LEARNING

One thing that has struck me since coming here is the amount of official emphasis on UBC as a place for teaching. Only recently, in the report of the Senate Committee on Long-Range Objectives, have I seen much emphasis on thinking about the University as a place for learning.

UBC REPORTS: I'd like to talk about the idea of UBC as a teaching and/or a learning institution. Certainly there has been greater emphasis in recent years on the University as a teaching institution. Are you saying that the learning environment is in some way antithetical to the teaching environment or do you think of those two aspects as being in some sort of balance so that teaching and research are combined to create a learning environment?

DR. COLLINS: Your question suggests a separation of function that I may not subscribe to. We know from research that good things often go together: a good instructor tends to be a good researcher and vice versa. Consequently I would hesitate to say that a de-emphasis on research is necessarily going to result in a greater emphasis on learning. It may not even result in a greater emphasis on teaching.

NOT AT EASE

What often is overlooked is the fact that teaching has to be judged ultimately in terms of the student. One question which has to be investigated is "Does the information get transmitted in such a fashion that the student assimilates it?" Based on the assumption that the student has some facts at his disposal, he must be given the tools by which he can integrate this information into some kind of a whole. I suspect that what the student does in the classroom has to have some relevance to what he does as a member of society, as a member of the University community and as a human being.

UBC REPORTS: Can we talk about the current campus environment as you see it? It's probably fair to say that UBC has done two things: first, because of the large numbers of students we've created large classrooms for mass lectures but because the small group learning situation is regarded as desirable, we've also created seminar rooms or small classrooms. This is the kind of response UBC has made to the problems of the last couple of decades. Has this response created a good learning environment?

DR. COLLINS: That's a difficult question, but I would have to say that the University has not always created the kind of environment in which learning can flourish. UBC has created an environment which too often maximizes the separation of the student from the faculty member. This is expressed in a number of ways, one is that students do not feel at ease in approaching faculty members to ask an academic question, let alone just to talk with him.

I would guess that most first year students haven't the faintest idea where their instructors' offices are, much less have ever been there. Second, I would say that this attitude has been incorporated into the design of classrooms as conspicuous physical separations. A gulf has been created by putting a lectern, either a long table or a podium between the instructor and the student which means, "You stay away, you're back there and *I'm* going to tell *you* how it is." Another aspect of this is the raised podium in front of the classroom. This admittedly increases the view of the instructor by the student, but it also puts the teacher on a different social plane and confers on him a different status. Faculty offices have been made maximally disadvantageous to the student. In the Angus Building, for example, faculty members are six and eight floors above the campus. The student may know his instructor is housed in the Angus Building, but he may have no idea of how to get there. Students are amazingly reluctant to ask. If information isn't posted conspicuously on a directory and if the directory doesn't explain the location of each office in the building, that's the end of it. They just don't pursue it. I find, interestingly enough, a considerably more authoritarian student body here than I found in the States.

SOCIAL ATTITUDE

UBC REPORTS: Would you ascribe this to a different cultural background or do you think the environment of the campus is largely responsible for this attitude?

DR. COLLINS: Both. I think some of it is ascribable to the social attitude which is propagated by faculty. Many do not wish to have their authority assailed, and a freshman student is understandably a little reluctant to do it. Students in the States say, "Look, we've had enough. We refuse any further assignments or we refuse to do a particular assignment." That doesn't happen here. I would say that this attitude is of cultural origins, but much classroom architecture furthers a minimum of interaction between students and faculty.

DR. JOHN COLLINS

UBC REPORTS: What has been your reaction to UBC's physical environment, the buildings that people have to operate in?

DR. COLLINS: I'm committed to the notion that a university campus is not really the place for a *tour de force* of architecture. Somewhere between the rather grandiose concept of universities as architectural monuments and the existence of universities as bunches of army barracks is some reasonable, practical statement of a university as a set of social purposes which it aims to fulfill and the translation of those purposes into a set of architectural guidelines. British Columbia simply does not have the funds to build campuses such as we see in some places, nor do I think this is necessary.

UNITY OF DESIGN

UBC REPORTS: Do your remarks imply some kind of unity to university design, a unity that's lacking here at UBC?

DR. COLLINS: Not necessarily. A university is a number of different ventures, and personally I find highly diversified campus architecture more appealing than a single, unified concept. I find, for example, a more pleasant campus environment at the University of Victoria than at UBC or Simon Fraser. However, I am prepared to argue that SFU is a much more rigorously designed campus than either of the other two. I have a hunch that the design of SFU contributes considerably to some of the trouble they've had out there. It's easy to see, if you want to go out there on a rally day, how the campus can facilitate mob psychology. When it's said that a poll of students indicated that, say, 75 per cent supported an issue, it usually means that somebody on their soapbox on the mall harrangued the student body until there was sufficient mob psychology operating that he could afford to take a vote.

This means that physical spaces can constrain human behavior. The mall at SFU is a beautiful example of what we call a "non-bleeding" space. There is no way that a student caught in the mall during a rally can inconspicuously flow out of the space. If he chooses to leave he has to do so conspicuously.

Conversely, Sproul Plaza, the equivalent of the SFU mall at Berkeley, is a bleeding space. There are any number of exits and this may be a safety valve which prevents a group of people from becoming a mob.

UBC REPORTS: At UBC we've tended to create a number of separate environments. In zoning the campus for specific academic pursuits, are we isolating groups of students from other groups of students? And faculty from faculty?

DR. COLLINS: Certainly. However, I'm not prepared to say that this is totally bad. One of the things that any university has to do is to delineate a set of human purposes which it wishes to have served. The environmental psychologist may wish to take the position of an impartial scientist and say, "If you will specify those social purposes then I can suggest design implications that will help meet them." Remember, there are many, many ways to spend a million dollars for a proposed new building. Part of my function is to see that as many of those purposes as possible are met, but they have to be spelled out very explicitly in order to make rational decisions about how to spend the funds allocated. All too often, the university thinks it has done its job when it presents the architect with a "shopping list" of *things* it wants *in* a building and forgets that a building is intended to serve people rather than to contain objects. I fear that university architecture is trailing behind business in coming to realize that it is service as much as hardware that is the measure of quality.

SUGGEST IMPLICATIONS

If you arrive at the decision that you want students isolated from faculty and departments isolated from each other and you are prepared to defend that decision, I can suggest form implications. So can any good architect, but he rarely has time or the training to spell out the stated purposes. If, however, you want an amalgamated campus with a considerable amount of flow, interaction and interchange amongst faculties and

Please turn to Page Nine
See Remove

"WASTED FACILITIES ARE DISMAL AND MISTAKES CAN BE SERIOUS"

BY DR. RICHARD SEATON
Environmental Psychologist, UBC

Of all the new areas among modern applied psychologists, perhaps none is more exotic than the environmental psychologist. The species is relatively unknown in most university settings. Nonetheless, Vancouver, blessed with exotic mammalia ... a whale in the aquarium, a koala rented to the zoo ... has in its environment the presence of two environmental psychologists attached on a part-time basis to the Office of Academic Planning of the University of British Columbia.

What are characteristic activities of the environmental psychologist? The domain over which the environmental psychologist is interested extends to almost everything that happens to humans ... i.e., in some environment ... and the ER (as we can term him for short) has a curiosity about the interrelations of human happenings and places.

There are inevitably variants in the species. The ER's at UBC, for example, are less interested in environments for the few and more interested in satisfactory environments for the many; less interested in aesthetics of form and more interested in measurement problems in aesthetics; less interested in natural environments than in designed environments. These are slight variations in color of the breed, however, and generally the type at UBC are representative of the species.

There are perhaps two hundred ER's in the western industrialized countries, with under a hundred identified in the English-speaking world. Naturally, they tend to congregate, with notable families identified at the Universities of Strathclyde and London in the United Kingdom, at Pennsylvania State, City University of New York, University of Kansas, the University of Utah, and at Harvard — MIT combo in the US; and at the University of Sydney in Australia.

The activity patterns of the ER are as wide-ranging as his subject matter, but usually he can be found ruminating on research or consulting with designers or clients with money who want places built, or running hard to stay ahead of his students.

The research interests of the ER can be broadly categorized into phenomenology, ecology, social problems, social behavior, psychological theory, and methodology. The first three topics receive greatest emphasis at present. Here at UBC research interests of the ER's include: 1. Concern about how designed environments shape the behavior of individuals and the functioning of social units (e.g., working groups, couples, departments, teachers with students). Essentially another issue is the effect on users, who usually are in social groups. The shape of environments may promote or impede the smooth locomotion of individuals and the smooth functioning of social units.

BEHAVIOR AFFECTED

Thus we may find, for example, that the level of lighting in a dining hall relates to the speed with which meals are "processed" through daily feeding. We may find that the utilization rate of lounges on campus is a function of whether lounges are divided by screens. Meanwhile, in residences, we may discover that the most successful arrangements of spaces, especially designed to reduce intrusive pounding below levels attainable when the people are displaced in jumbled piles. In hundreds of ways, the design of environments appears to affect behavior. The environmental psychologist studies such effects.

2. The second ER belongs to the generation of environmental psychologists who want to apply psychological theory to environmental design and measurement. The great master Kurt Lewin has said, "there is nothing so practical as a good theory," and psychology has theories that will help environmental design. This work is just beginning.

3. Finally, the research focus of the ER's at UBC lies strongly on method of measurement. There are more things in heaven and earth than can be measured by the environmental psychologist, usually. However, measurement helps to clarify the merits of designed environments. The trouble is that built spaces are so cumbersome, complex and ever-changing that they are hard to measure. For a specific project in measurement methodology, see the box on this page.

Buildings are for people. Thus, one can put a power station out in the wilderness where it houses only electrical equipment and is rarely seen by anyone; such a structure exists only indirectly for people. With most buildings, things are otherwise; people live in them, work in them, visit them, are overshadowed by them.

Accordingly, in designing buildings, architects meddle with people's lives. To what end? Nowadays, many are asking that question. No longer are the old established forms and rules accepted as good in their own right. Instead, a concern for situational ethics is becoming widespread, where the social or physical forms are judged by their value for human individuals and groups. It is recognized that every social action — even the building of a power station in the wilderness — has potential long-run effects in physical or social ecology. It therefore becomes incumbent upon those who plan designed environments to be aware of how built places affect human beings directly or indirectly through shaping our environment, and of how wise and intelligent management may respond to these effects.

VALUE ISSUES

Immediately, issues of values arise. Mostly, decisions in environments may be more subtle than many judges, which is not to deny whether aesthetics or high rise effects are intended. The lighting in a university dining hall is either good or bad in itself; from the management's viewpoint, the brighter the better, but can the same be said from the customer's?

The architect — unless he is a maverick like Howard Roark in Ayn Rand's The Fountainhead — accepts his responsibility to serve human purposes, but properly he refuses to define them. Instead, he gets the "client" or sponsor — typically a committee of administrators — to commit the spending of construction funds — to decide what effects they want to achieve by building anything. In other words, he asks them to define their purposes.

The question is vital, and clients do not enjoy being asked to do it. What they typically want is a piece of hardware, selected from catalogues, spread on floor plans, for the designer to set. "What do you want the place to do to — or for — people?" seems irrelevant. Sometimes, if the question is honestly answered, it develops that the client's purposes can be better met if no building is done and the money is spent otherwise. Again, clients sometimes feel that perhaps their underlying motives will not reflect brightly in the light of public exposure. Always, the specification of intentions involves issues of philosophy which are difficult for clients to resolve.

Yet the architect must insist on knowing the clients' purposes. He knows that his design will shape users' conditions for decades. Now this is rightly to be done so that decisions are made by those who are personally affected as well as by decision-makers. He also knows that his design will be judged on how well it does what it was supposed to do. No construction is good or bad in abstraction; any place is merely an instrument that serves (or fails to serve) human purposes efficiently and economically. When he does not know those purposes, the architect cannot design efficient and economical buildings — nor can clients do so, for economical design requires sophisticated analysis of physical arrangements having measured effects on users.

OPEN HOUSE EXPERIMENT

Visitors to UBC's 1973 Open House on March 2 and 3 can take part in an experiment designed to evaluate human responses to buildings in the campus Centre for Fine Arts.

Different groups of about 200 individuals each will be asked either to visit the Centre's buildings or to look at models, drawings or photographs of them and evaluate them in terms of their appearance.

The responses of the differing groups to the various building forms will be compared to determine whether or not buildings are evaluated in different ways when they are displayed in different ways, according to Dr. Richard Seaton, an environmental psychologist in the Office of Academic Planning.

"We hope to find that a building can validly be evaluated by using models or drawings to simulate it before it is built," Dr. Seaton said. "If so, then various alternative designs for a new building can be tested against one another in simulated form so that more pleasing and useful designs could be developed by people's responses to them before construction."

In the long run, he added, the experiment is designed to lead to some generalizations about the measurement of human response to the design and environment of buildings.

Open House, he said, is an ideal event for such an experiment since the crowds will be large and therefore unbiased about the purposes of the buildings in the Centre for Fine Arts.

The environmental psychologist serves in planning buildings in an adjunct capacity. He suggests to the client how a variety of kinds of "users" are to be affected by anything built. He emphasizes that buildings are valuable insofar as they serve the values of diverse users. Every building has a set of four "constituencies": 1. Those who pay for it; 2. those who inhabit or regularly spend their working hours in it; 3. those who use it occasionally as visitors; and 4. those whose environment it impinges.

In the campus environment of a public university, a large community of people pay for construction, since public money is used for construction, which is inhabited by students and staff. Consider, for example, buildings which are inhabited by janitors, offices which are inhabited by faculty and staff, and buildings which are inhabited by nobody. All such places have "visitors," including students, parents, suppliers, friends, faculty, etc., and all places

Please turn to Page 11
See SEATON

Dr. Richard Seaton [illegible]

Remove Fixed Seating in Classrooms

Continued from Page Seven

students, then you do not allow specific groups to pull themselves away (as is the case with a number of faculties here). But the decision whether to do that must lie mutually with the academicians and the planners and the students.

UBC REPORTS: Would you say then that the kind of campus that has been created in the last couple of decades at UBC has reflected a lack of purpose on the part of the University about its educational goals?

DR. COLLINS: Sometimes, yes. It does reflect an overlay of several campus planning notions. One is the Main Mall with the East and West Malls running parallel to it. Another is a concentric plan, with the proposed new Sedgewick Library under the Main Mall at its centre and various nodes of activity contoured around it at two, five or ten minutes walking distance from the Library. Any one of these plans is quite viable, but several plans, none of which has been thought out thoroughly, can only lead to more confusion.

My recommendation is that someone or some group must decide which campus planning notion ought to be implemented for the student-faculty mix and off-campus constituencies to which we plan to cater in the next ten years.

UBC REPORTS: One of the ideas behind the new Student Union Building was that of a unifying factor on the campus which would, by its location and the services [illegible]ed, try to create a more cohesive feeling among students. Do you feel that SUB meets that need?

DR. COLLINS: It certainly attempts to. All you need do is walk in there any time between 8 a.m. and 5 p.m. and see the degree to which the building is used. One index (if only one) of the success of a building is the number of people who use it.

SUB SUCCESSFUL

I don't know yet whether any one student spends great amounts of time there, nor do I know the kind of student that spends time in SUB. But I think the Student Union Building is, in many respects, a singularly successful building.

One thing that campus planners must realize is the f[illegible] that UBC is located, geographically and climatologically, in an area which is grey a good part of the year. A disturbing percentage of the buildings match that fog grey almost exactly. I maintain that on a good foggy day it's possible to walk into and out of a building and never see it!

I think this contributes to a depressing overtone to the University at certain times of the year. All you have to do is walk through the Education-Health Sciences area to realize how grim this can be. The Music Building, the Student Union Building, the new West Mall faculty-seminar annexes have broken away from this. I would like to see a considerable number of buildings dotted about which alleviate the monotony of the concrete grey. Concrete is a very beautiful building material—it is one of the most workable and plastic materials we have. In high sunlight areas, which UBC is not, concrete against the blue sky is very striking. But against a foggy sky or against a sky which is grey much of the year, I think it's questionable. The University of Victoria has done much better than UBC and SFU in having a warmer look.

UBC REPORTS: If you could adapt existing buildings to improve UBC's intellectual environment, what would you do?

DR. COLLINS: There are several things that I would do. First, I'd point out that UBC is failing to meet the needs of the disadvantaged student. By disadvantaged I mean the student who is in a wheel chair or on crutches or the student who is blind.

One of the problems is that there are numerous sets of stairs. A student who is in a wheel chair cannot negotiate stairs alone but can very easily negotiate a ramp as steep as an ambulatory person can. It would be desirable to have a three foot wide ramp at every set of stairs.

In the case of the blind students, things are more complicated in some ways and simpler in others. A blind student can negotiate stairs if he knows where they are. We find in designing for the handicapped that traumatically blind students seem generally to be able to form a mental map of the campus more quickly than do congenitally blind students.

My feeling about classrooms is that they must be made sufficiently flexible so that any reasonable kind of faculty-student pattern of interaction can obtain. The first thing I would like to see is that all instructional spaces, with the exception of a minimum number of auditoriums, had fixed seating removed and single, moveable desk-table combinations inserted. These are no more expensive than fixed seating. Secondly, I would carpet the classrooms. Let me hasten to point out that industrial carpeting is about as cheap as tile to install. But the maintenance costs on carpeting are much less than for tile or for hard floors. Carpeting cuts down the noise level and creates a more homey feeling.

The faculty member who prefers a certain amount of social distance from students can easily do so by staying

in front of the classroom, by standing on a podium or using a lectern. The other kind of faculty member who prefers a more informal, closer relationship need not employ these restraints. I find it educationally crippling in my class of some 75 students not to be able to stand in the middle of them, not to be able to walk up to the individual student because I have to dodge seats, not to be able to break the class into small groups of five or six students to work on individual problems.

I'd suggest that in future buildings, we build in these flexibilities. Another thing which UBC has been slow in exploiting are the advantages of media educational techniques, such as closed circuit television and taping particular lectures or demonstrations to be shown to large classes.

Another very useful function of closed circuit or taped presentations is to allow the instructor to observe and improve his own lecturing techniques.

SHUTTLEBUS SYSTEM

Also lacking at UBC is the sufficient expression of community interest and activity. There are some reasons for this. One of them is the two- or three-mile separation of the campus proper from the community as a result of the Endowment Lands. There are a number of solutions, such as the establishment of a downtown campus centre. Another is the University offering a broader program of extension courses than it now does. This, happily, is being carried out now to some extent. Another thing that I think should be discussed is the establishment of a shuttlebus system to West Broadway, the Hydro transit terminal and from the parking lots to the campus proper. I will argue for free shuttle service that loops around the campus.

UBC REPORTS: It's questionable that such a service would discourage students from wanting to drive cars to the campus.

DR. COLLINS: I do think we are doing students a grave and unjustifiable disservice by placing parking lots as far from campus facilities as they are, and a shuttlebus service should include a system of stops that would bring parking areas closer to the campus. I'm sure there are better solutions than the present one.

UBC REPORTS: One aspect of planning which must be frustrating is that of trying to predict what students are going to do. An example of this was the placement of the lawn areas and the walkways to the Student Union Building. The lawn areas on the west side of that building were laid down during the summer, and the moment the students arrived they began to carve walkways straight across the grass. Would it not be better to leave these areas open until the students arrive and then let them carve out their own pathways?

MAJOR ERROR

DR. COLLINS: Yes, many campuses do exactly that and it works quite well. You've raised a very interesting issue, though, that of trying to predict student activities. Another is trying to force certain kinds of activities. Architects are somewhat "big brotherish" in trying to provide aesthetic experiences while the user is walking from point A to point B. I'm not really sure that it's the architect's right to enforce where and how I go, or to provide for me his concept of aesthetic experiences. I do think it's the architect's responsibility to provide the opportunity for such experiences, but only if I wish to take advantage of them on the way. In the case of SUB the major error was in the positioning of the building so that the major access to the building runs north and south instead of east and west, unless UBC plans extensive development on the east side of campus.

Some people are thinking along these lines for future campus planning, but I have a strong suspicion that the major pedestrian access of the campus is going to continue to be east-west and not north-south. There is an interesting misconception of the Main Mall—that it provides a north-south walkway. If you stand on the Mall and look at what happens, you'll find nobody walks north-south, everybody walks east-west. The suggestion that no walkways be put down for a year after a building is complete is very apt. You simply watch where students go, and then put in walkways.

Another thing that needs to be looked at in terms of environmental planning are the three major constituencies which use campus facilities. The first of these is the student, certainly the largest user, but of short duration. He may be here in thousands, but he is usually only here for four years and six or seven at the most. The second constituency is the faculty—a considerably smaller number, but a much more permanent user of campus facilities. And thirdly, there is the constituency which we might call the viewer, or observer of the campus; parents of the students who come to the campus for an afternoon, the general public which comes to a play or a concert or to use campus facilities occasionally. They are here only for a limited period of time and don't have the opportunity to become intimately acquainted with buildings, traffic patterns and campus customs. This group is frequently made to feel unwelcome because information and directions are not made easily available to them.

BUILDING SIGNS

I am strongly opposed to the practice, for example, of using names only in building signs, for example, Hennings Building, Angus Building, when it could just as easily be the Hennings Physics Building, the Angus Social Sciences Building. Every parent knows what his son or daughter is majoring in but does not know the building in terms of the faculty member for whom it was named.

UBC REPORTS: How does UBC compare with other North American universities in devoting attention to the architectural and environmental aspects of higher education?

DR. COLLINS: In one sense, UBC is not as far along as most other major universities having even larger academic planning staffs and whose concerns include the physical development of campuses and the consequences thereof on the educational processes. On the other hand, to my knowledge, UBC is the first North American university to hire personnel specifically trained in environmental psychology and sociology. There are four U.S. universities offering doctoral training in the environmental aspects of human behavior, but I'm afraid that even these schools aren't capitalizing on their own resource personnel as well as they might. In short, I would say that in the past two or three years, UBC has taken several important steps toward a more user-oriented campus design.

POISON CENTER ON DISPLAY

The Poison Control Center described in the article on Page Five and on this page will be on public display during UBC's triennial Open House March 6 and 7.

A computer retrieval system which provides immediate information for the treatment of individuals who have been poisoned will be demonstrated by Mr. Glen Moir and his team of assistants in the Faculty of Pharmaceutical Sciences.

The demonstrations will take place in room 160 of the George Cunningham Building for Pharmacy. The display will also include material on drug abuse.

The simple card file under the right arm of assistant professor of pharmacy Glen Moir contains data on close to 1,700 commercially-available products which could have toxic effects if swallowed. Moir and a research team developed the card file index for use in B.C. hospitals. Small flags on the map behind Moir denote the 44 hospitals which now have the index. Photo by UBC Extension Graphic Arts.

Poison

Continued from Page Five

1,700 commercially available products which have toxic or potentially toxic properties.

The cards provide information on the toxicity of each product, symptoms which may occur if it is ingested and methods of treatment.

The B.C. Telephone Company is co-operating in the project by listing in its regional directories, along with such other emergency services as police and fire, the telephone numbers for poison control centres at local hospitals.

Development of the information system involved several years of painstaking research by Mr. Moir as principal investigator, assisted initially by pharmacist Wendy Mar Eng and subsequently by pharmacist Gillian Willis. Additional part-time help was provided by two fifth-year science students and several senior nursing students.

Others who have played major roles include the staff of the UBC computing Centre, particularly assistant director A.G. Fowler and programmer John Campbell, and Dr. A.A. Larsen, director of the division of epidemiology for the provincial department of Health Services and Hospital Insurance.

Financial support for the project was provided by two national health research grants plus grants from the Canadian Foundation for the Advancement of Pharmacy and the Leon and Thea Koerner Foundation.

One of the first matters the UBC research team had to consider in planning the poison control information program was the nature of information sources available.

GAPS IN DATA FILLED

Canada does not have an agency, such as the U.S. National Clearinghouse for Poison Control Centers, for collecting, editing and distributing information on national products. The federal Food and Drug Directorate does make available non-edited information submitted to it from industry which is in turn supplied to recognized poison control agencies. Information from this source required further extensive checking by the UBC research team to fill in gaps in essentail data. Another source used by the team was feedback data associated with case reports of poisoning submitted by hospitals to the provincial Health Department.

The gathering and processing of data for use in the poison control cards was meticulously checked for accuracy and comprehensiveness at every stage.

Material for each monograph or poison control card was checked for any additions or corrections necessary by a poison control review board consisting of Dr. John Dean, department of pediatrics, UBC faculty of medicine, who is also head of the poison control centre at Vancouver General Hospital; Dr. J.E. Halliday, professor of pharmacology; Mr. J.E. Smith, director of pharmacy services, Royal Jubilee Hospital, Victoria, and Dr. R.S. Tonkin, department of pediatrics, faculty of medicine, UBC.

STORED IN COMPUTER

The material on each card was proofread an average of five times before being sent to the printer for publication and distribution to hospitals.

When a hospital receives a set of cards the staff members involved are given a user training and orientation program to ensure that they are familiar with the operation of the system.

It took the UBC research team more than two years to assemble the information and process the data on the 1,700 products dealt with initially. Information sometimes became outdated because of the time lag involved between preparation and publication.

The information gathered has now been stored in the memory banks of the UBC computer which has been programmed for rapid selection, storage and retrieval of poison control information. Additions and corrections to data can now be made quickly and easily.

The object of the computer-based information system is to study methods of data-processing the various essential categories of information relating to toxicity of drugs and other commercial products having toxic properties and the symptoms and treatments involved in cases of overdose or accidental poisoning.

A second objective is to expedite and facilitate processing and updating of product information and provide a model system for the rapid processing, storage and retrieval of information on drugs and commercial products for use by hospitals with computer facilities.

Thirdly, it is hoped computer studies will provide solutions to current problems related to the inadequacy of poison control and related information and the multiplicity of poison control information sources and the inefficiency and error potential involved in use and interpretation of data from such sources.

Symptoms are listed on the information cards according to logical and standardized rules, from onset symptoms to those which might appear at a later time. In addition to updating cards the computer can create a variety of cross-indices which will make it easier for doctors and nurses and subsequently for drug information service personnel to find the information they need more quickly.

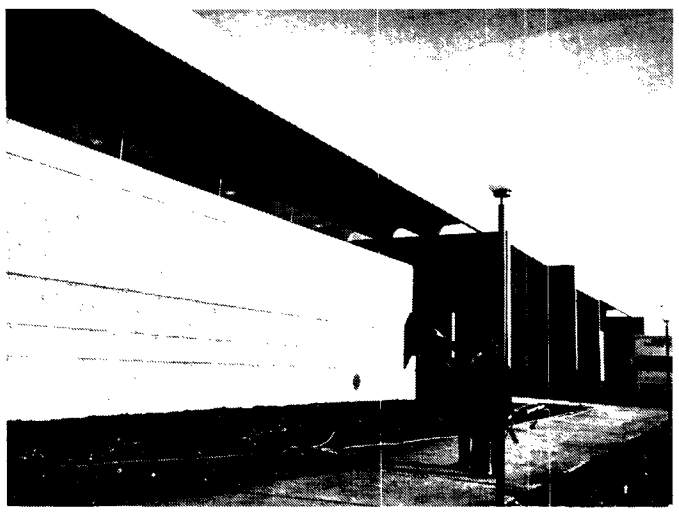
Distribution of the cards to hospitals is the responsibility of the provincial health department. Hospitals receiving the system agree to report all incidents of accidental or intentional poisoning and provide an evaluation of the information provided by the new system. In addition, public health nurses follow up with home visits and interviews with parents where cases of poisoning have occured.

This type of feedback information, essential to the evaluation of the program, is provided to both the provincial health department and the UBC research team for analysis.

NEW HEADQUARTERS

Sets of card files are now being supplied to Saskatchewan hospitals and it is hoped that the system will eventually be expanded farther beyond the borders of B.C.

When UBC's Health Sciences Centre—a major medical complex—is completed in the 1970's, it will probably become the headquarters for a provincial poison control centre. The centre would operate on a 24-hour basis and doctors anywhere in the province would be able to phone in and get immediate information on poison cases.



FROM PAGE SEVEN

Make Places out of Outdoor Spaces

Collins's car to drive to the south end of the campus to look at the new gymnasia for the Faculty of Education. As we pulled out of the parking space, Dr. Collins pointed to a set of doors in the north wall of the Frederic Wood Theatre and said: "Look, there are doors that rarely get used. If you're an architect and say 'door' then make it a door that serves human function."

At the Education gymansia, Dr. Seaton stopped outside the west end of the building and said, "The architect had an interesting problem here of how to handle a blank wall." (See picture at left above).

MAKE A BLANK WALL USEFUL

"One wonders," he continued, "whether the concrete wall couldn't have become as useful to people as the glass at the top of the wall, which lets light in and allows one to see out.

"The architect has attempted to make the wall interesting with a projecting buttress and by breaking up the surface with decorative lines at various levels, but it seems as though he was embarrassed by the richness of his surfaces.

"On the whole, this is a good building and sincere effort, but this external wall could have been used in such a way that it could have said 'this is a gymnasium.'

"For instance, why couldn't this wall have been used as an informal, outdoor handball court, or why couldn't hockey nets be set up against the wall for athletes to practice shooting into."

BACKBOARD FOR TENNIS

"It could even have been a backboard for tennis practice," Dr. Collins put in.

"Right," said Dr. Seaton, "and then there would have been a case for projecting the north wall of the gymnasium out even further than it now is to create a sheltered niche. Then you're genuinely using the external form for a purpose."

Our final stop was the open grass and concrete area on the west side of the Student Union Building. (See center picture above).

There was a faulty pre-assumption made about SUB, Dr. Seaton said, namely, that the axis of transit to the building was north-south.

Instead of following the concrete paths to the main entrances to the building, which were aligned on the north-south axis, students cut across the two large, grassy areas in front of SUB. New paving had to be laid down across the grass to correct the situation.

Many of the concrete pathways to the building are walkways which lead nowhere, Dr. Seaton pointed out. The main pathway ("Look at the width of that path," Dr. Seaton exclaimed, "you could run a drag race on it") ends abruptly at the East Mall and then narrows to a cramped asphalt walk which "sneaks around the corner of the Library."

Dr. Seaton next turned his attention to the flagpoles adjacent to SUB which double as notice boards for advertising student events. (See picture at right above).

"Why are the signs old and falling off and why are some of the notice boards empty?" Dr. Seaton asked. "Because nobody reads them. This exposed space, where there's no shelter or protection, is a place that nobody comes to. It has no quality of leading you in and focusing your attention. It's just a bunch of poles in the air."

LOOK AT THE WHOLE PICTURE

This sort of situation is a serious one on the UBC campus, Dr. Seaton added. "We don't have outdoor spaces that are places. It seems as though we plunk a building down in the landscape without looking at the relationship of one building to another in terms of human uses and traffic patterns. We're wasting the environment by not making places out of it."

SEATON *continued from Page Eight*

form part of the perceived and effective environment of all users.

Emphasizing the diversity of users, the environmental psychologist will attempt to make clear to decision-makers that campus constructions are valuable insofar as they serve the different purposes of inhabitants, visitors, and the public in the milieu surrounding. Then he tries to suggest to those decision-makers that *their* purposes will best be served if *users'* purposes are served.

The issue is central to design, for all users in and about a built environment have purposes of their own which they will attempt to promote, good design or no. If no firm path is built to the west door of the Student Union Building, then a path will be trampled into the lawn. If lecture halls are designed with imposing podia for lecturers, then those who are antipathetic to one-way classroom monologues will stay away.

BUILDING PURPOSES

There is nothing radical in such perspective. Just as a power relay station in the wilderness is shaped to the character of the machinery it encloses, so ordinary buildings should be shaped to users' propensities.

Once building purposes are worked out, the next problem is designing to meet them. For instance, a purpose of the incipient new Sedgewick Library is to encourage student search and discovery among books. A number of design attributes derive from this purpose, including provision for a variety of kinds of individual and *group* study spaces, central location of stacks *between* study areas, provision for small supports to lean on while browsing, pull-out shelves in stacks to make notes on, restrooms immediately proximate to stack and study areas, a degree of visual privacy in stacks, as well as other features deriving in part from systematic studies in libraries on student attention spans, duration of visits to stack areas, and the like.

Once such a purpose is defined, the environmental psychologist convenes with the architects and user groups to generate such derivative spatial forms and arrangements. If facilities are not used – because they are bleak, hidden or under-identified, lacking privacy, or whatever – then money is wasted in providing them. Thus facilities *first* must relate to our intentions for users and second must be designed to encourage use. The E.P. draws on his research knowledge and theory to contribute to form solutions meeting these two requirements.

Earlier it was suggested that measurement clarifies thinking about the merits of designed environments. Thus it is useful to specify purposes in terms of concrete *objectives* where possible: e.g. the per capita stack browsing time in the new Sedgewick Library may be increased 10 per cent over present rates. Specific objectives force planners to give serious attention to implementing stated purposes. Objectives also allow *measurement* of the effectiveness of planning months or years later after construction is complete.

Research (user behavior and opinion studies) conducted by the environmental psychologist on completed buildings serves three purposes: 1. it reveals errors in planning; 2. it exposes needed adjustments and correctable flaws and 3. the feedback it provides increases the odds that "next time" past errors will be avoided (because they are known).

HUMAN REACTIONS

In his research role, the E.P. has a gay time; it always fascinates him to study human reactions to slight changes in the environment. In his advisory role, the E.P. is somber and deliberative, for large sums of money are to be spent on structures affecting many persons; wasted facilities are dismal and mistakes can be serious.

It was indicated earlier that as a design consultant, the environmental psychologist properly does not define purposes of academic buildings, relegating that responsibility to the client or users. This would seem to imply ethical irresponsibility. Yet the E.P. cannot deny an ethical commitment in the design or research work he conducts, and where he disagrees with stated building aims, he tries to change them.

ETHICAL BALLAST

The E.P. retains an ethical ballast by adherence to several beliefs based on behavioural evidence. Firstly, as noted above, users modify environments which do not suit their purposes. Secondly, buildings serve many purposes, and usually most purposes of most users are satisfied. Thirdly, environmental design can always avoid "the tyranny of architecture" by providing a variety of options to users, so that if one feature does not suit them there is an available alternative which they can use. Fourthly, designers can always reduce obstacles and barriers to use of available facilities by convenient arrangement, clear identification, liberal access, proximity, provision for a medicine of privacy screening against social surveillance, and so on. Fifthly, there is no harm in putting a little fun in things especially through variety of shapes and appearances. These are environmental-psychological principles which tend to override explicit implementation of any particular stated building objectives.

Finally, good design extends beyond the domain of the environmental psychologist, for architectural form often delights in its own right even though its details may not suit behavioral criteria. The E.P. can only continue to study and wonder at the world we design.

UBC REPORTS Volume 16, No. 7—Feb. 26, 1970. Published by the University of British Columbia and distributed free. J.A. Banham, Editor; Barbara Claghorn, Production supervisor. Letters to the Editor should be addressed to the Information Office, UBC, Vancouver 8, B.C.

UBC ALUMNI Contact

Dr. W.C. Gibson, professor of the history of medicine and science, studies an old letter by Dr. Frank Wesbrook, the first president of UBC. The Alumni Fund has approved a grant of $1,500 to assist the publication of a biography of Dr. Wesbrook, which Dr. Gibson has written. Bill Loiselle photo.

Pool Project Given $12,000

The UBC Alumni Association has agreed to contribute $12,000 toward the covering of Empire Pool. The Alumni board of management approved the grant, subject to certain conditions, at a recent meeting following the presentation of a proposal by the University Recreation Committee. Money for the contribution will be provided out of donations to the 1969 Alumni Fund.

At the meeting, the Recreation Committee outlined the need for a more readily available recreational swimming facility on the University campus. The committee noted that Empire Pool lies unused for seven months each year while winter session students are on campus. The committee envisaged the pool being covered by a plastic bubble roof, which would be removed in summer. The total cost is estimated at $125,000.

"Our Association is very pleased to be able to participate in this project," said Jack Stathers, executive director of the Alumni Association. "We think the most important advantage to covering the pool is that it would give 21,000 students opportunity to do some recreational swimming on campus during a time of the year when they are studying hard and when convenient, casual recreation is pretty important to them."

The Alumni grant is designed to match a $6,000 contribution pledged by the Alma Mater Society and a $6,000 gift requested from the graduating class. The recreation committee hopes to receive contributions also from the UBC Board of Governors, private donors, and revenue from pool operation.

The Alumni board of management pledged the $12,000 subject to the UBC Board of Governors approving the project and submitting it to tender by April 30, 1970. At such time, if the project has not started, the pledge becomes null and void. The Alumni Associaton has made its pledge condition also on the pool being used primarily for recreational purposes.

* * *

There's still hope for alumni wanting to see Expo 70 in Japan. A few seats are still available on the Alumni charter flight going June 20 to July 12. Return fare is $337. Further information: 228-3313.

$17,000 BURSARY PLAN

Alumni Aid Needy Students

The UBC Alumni Association has launched a major program of providing financial aid to qualified, needy UBC students. At a recent meeting, the Alumni board of management voted to grant $17,000 to support two new bursary schemes. The money is to come out of contributions to the 1969 Alumni Fund.

"The Association has noted for some time that many students have been experiencing difficulty in financing their University education," said Ian Malcolm, director of the Alumni Fund. "It is for this reason that we've decided to give more emphasis to this side of our academic awards program. We want to do as much as we can to ensure that highly qualified students are not prevented from attending UBC due to financial need."

The board of management approved the granting of 10 John B. Macdonald Alumni Bursaries annually in the amount of $350 each. These new awards are to be made on the basis of academic ability and need and will be given to students entering UBC from a B.C. regional college.

The other new program approved, the UBC Alumni Bursary Plan, was granted $13,500 to be awarded to students in varying amounts. These bursaries are to be granted on the basis of financial need and academic standing.

At a recent meeting the Friends of UBC (U.S.A.) Inc. approved the southern California UBC Alumni Branch's plan to establish a $500 scholarship. This annual award is to be made to a qualified American student entering UBC, with priority consideration being given to a student from California. It will be financed by Friends of UBC (U.S.A.) Inc., through the Alumni Fund.

These new awards will mean that in 1970 the Alumni Fund will allocate a record $55,000 to support the Alumni scholarship and bursary program. Through its various phases, the program will assist more than 100 students in studying at UBC. The lion's share of this support will provide 64 N.A.M. MacKenzie Alumni Scholarships of $350 each to qualified freshmen from all over B.C.

Considerable support will continue to be provided for the other key scholarship programs. These include 10 N.A. M. MacKenzie American Alumni Scholarships, awarded annually to qualified American students attending UBC; the $500 Daniel M. Young Memorial Scholarship, awarded annually to a qualified American student entering UBC; and the $200 UBC Nursing Division Alumni Scholarship, awarded to one or more qualified nursing students.

Increased support for scholarships and bursaries is made possible through donations to the Alumni Fund, which have come in at a healthy rate during the current campaign. Malcolm commented: "We're hoping to exceed our 1969 target of $250,000 so we can continue to expand our programs aimed at fostering academic excellence at UBC."

• JUMP ON A JITNEY • AND • TRUCK ON DOWN TO •

ALUMNI OPEN HOUSE

MARCH 7

• CECIL GREEN PARK UBC ALUMNI ASSOCIATION TOURS • REFRESHMENTS VISUAL DISPLAYS • SLIDE SHOW • 6251 N.W. MARINE DRIVE BEHIND FORT CAMP RESIDENCES • 228-3313 •