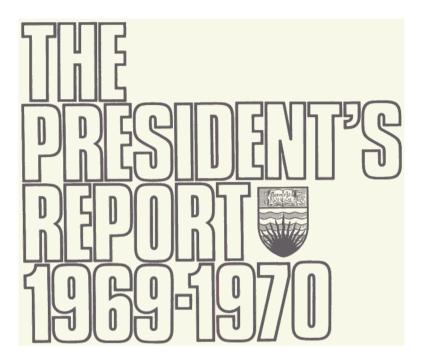
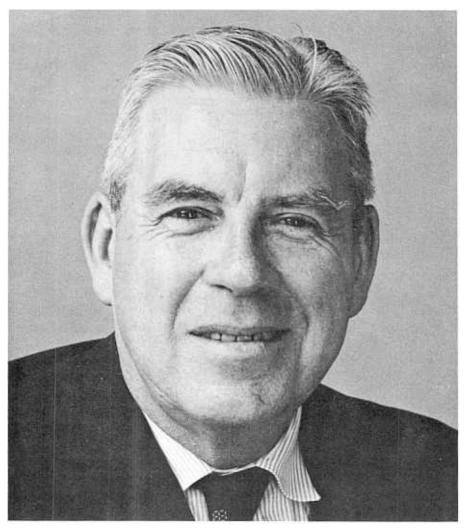


THE UNIVERSITY OF BRITISH COLUMBIA



The report of President Walter H. Gage to the Senate and Board of Governors of The University of British Columbia for the academic year September 1, 1969, to August 31, 1970

Vancouver, Canada



PRESIDENT WALTER H. GAGE

The Senate and Board of Governors, The University of British Columbia.

Mr. Chancellor, Ladies and Gentlemen:

My report to you for the academic year 1969-70 is, in a sense, a continuation of my report for the previous academic year. The reason for this is that many of the studies and investigations which began in 1968-69 came to fruition in the year under review and were discussed at all levels of University government, including the Senate and Board of Governors.

It seems appropriate here to pay tribute to those members of the University community, including teaching staff, students and alumni, who have given unstintingly of their time to serve on committees assigned to grapple with the many problems facing the University. Even a cursory reading of the results of their efforts should be enough to convince the reader that their goal is the improvement of the educational environment for those who teach and learn at the University of British Columbia.

Echoes of the debates which have taken place over the past two years will doubtless continue to be heard for some time. It is my earnest hope that future discussions will be carried on in the spirit of good will which has characterized the debates of the past.

Yours sincerely,

Walter Hage

Walter H. Gage.

RESPONSE TO SELF-EXAMINATION

Few institutions in our society spring to life more quickly than universities. UBC is no exception to this observation and the academic year which began on September 1, 1969, was typical. The first day of the 1969-70 academic year found the campus deceptively quiet because it happened to fall on Labor Day, a national holiday. Literally overnight, however, the campus was transformed into a medium-sized town prepared to provide daily for the needs of more than 25,000 people.

On September 2, the vanguard of the predicted 21,800 Winter Session students who would register for the 4,500 courses listed in the calendar began to arrive on the campus. A good percentage of UBC's more than 1,500 faculty members and administrative personnel were involved in the process of registering and advising these students on their programs, and a significant proportion of the 2,230-member employed staff were readying classrooms and laboratories for the start of lectures on September 8 or were on hand to provide the multitude of essential services, such as housing, books and the direction of traffic and parking, all of which are a part of a modern, comprehensive university community. Within a week of one another, on September 3 and 10, the Board of Governors and Senate of the University met to begin the year's debates and make decisions about the University's finances and academic programs. Each would meet ten or more times during the academic year to receive recommendations from a multitude of sources — the president, committees both standing and ad hoc, the 12 Faculties, various campus organizations and individuals. Those who have observed the inner workings of a university will know that, by and large, institutions of higher learning are complex democracies that operate by consensus achieved in countless meetings of committees, large and small.

Neither the Board nor the Senate met for the first time in the 1969-70 academic year with a clean slate before them. In my report on the previous academic year I began by saying that most of the problems that beset higher education — financial, academic and philosophical — were minutely examined, vigorously debated and, hopefully, more sharply brought into focus. These debates by students and faculty members led to the establishment of a number of committees which were charged with bringing in reports and recommendations which would determine the size of the University both in the short- and long-run, the future structure of the University and a host of other issues.

Before reviewing the major decisions which were arrived at in the year under review, I should point out that it was a "new" Senate which held its first meeting on September 10, new in the sense that the three-year term of office of most members had expired at the end of the 1968-69 academic year. In that year elections had been held in accordance with the *Universities Act* and in many cases faculty members who had served for the previous three years again found themselves members of Senate.

The fact that many individuals continue in this way to serve on University governing bodies has led to charges by radical elements that 6 these bodies are self-perpetuating groups which are sunk in inertia and are uninterested in new ideas and effecting change. Those who have followed the deliberations of Senate in recent years will know that it has not shirked from debating radical proposals, some of which are detailed later in this report. It should be apparent, too, that an overlapping membership ensures that a governing body has a reservoir of people who are knowledgeable about University affairs and are able to bring a certain amount of historical perspective to bear on matters under discussion.

The Senate which met for the first time on September 10, 1969, was also larger than in previous years as the result of a recommendation approved in the 1968-69 academic year calling for an increase from four to 12 in the number of student representatives. Under the terms of the *Universities Act*, the Joint Faculties of the University had been required to elect an additional eight representatives to balance the increase in student numbers and the result was that the total number of Senators had increased to 101.

One of Senate's first tasks was to consider a report from its *ad hoc* Committee on Enrolment Policy which, in the previous academic year, had been asked to make recommendations on enrolment policy for the 1970-71 session. The central recommendation from the committee, chaired by Dean Philip White of the Faculty of Commerce, was one proposing to limit the enrolment of students entering the first year for the first time to 3,400.

The effect of the new ruling would be to reduce by approximately 300 the number of students in this category entering the University. Looked at another way, acceptance of the proposal would mean that, in effect, UBC's requirement for admission was raised from 60 to 65 per cent. Senate accepted the proposal, not without a lengthy debate, when it was made clear that this restriction by the University would not deny higher education to B.C. students since there were sufficient places available in other institutions, chiefly regional colleges. Later in



On November 1, 1969, Senate held the first of several special meetings to discuss the report of its Committee on Long-Range Objectives, chaired by Prof. Cyril Belshaw, seated at extreme right above. Prof. W.D. Liam Finn, standing at far end of table, addressed Senate on the chapter of the report dealing with admission policies. Other committee members who spoke to other chapters of the report are seated in the foreground. They are, right to left: Prof. Belshaw; Prof. Robert M. Clark, UBC's academic planner; Prof. John Norris, Department of History; and Dr. Ranton McIntosh, professor of education. Also at the head table are President Walter Gage, chairman of Senate; Senate secretary and Registrar J.E.A.Parnall; and Mrs. Frances Medley, recording secretary of Senate. Picture by the UBC Photo Department.

the year Senate also agreed on approximate maximum enrolments for most of the Faculties of the University.

The proposals that gave rise to perhaps the most important and lengthy debates in Senate during the academic year came from the Committee on Long-Range Objectives, chaired by Prof. Cyril Belshaw, the head of the Department of Anthropology and Sociology. The committee, which began its work in the previous academic year, was charged with suggesting policies for the growth and direction of the University in the ensuing decade. The committee considered a wide variety of topics, including goals for the University, enrolment and admission policies, and academic structure and organization. In the previous academic year the committee had presented the first four chapters of the report, which included proposals for enrolment limitation and changes in the academic organization of the University.

Early in the 1969-70 academic year the full report of the committee was available and Senate decided to hold a number of special Saturday-morning meetings to discuss it. The first of these took place on November 1. Five members of the committee spoke to specific chapters of the report for ten minutes each followed by 20 minutes of discussion on each chapter. It was agreed that no decisions would be made at this first special meeting and that discussion would continue at subsequent regular Senate meetings.

It was not until February 7, 1970, that Senate held another special meeting to deal with the proposal regarding limitation of enrolment. At the conclusion of a three-hour debate, Senate voted to limit the total undergraduate enrolment on the present campus to a maximum of 22,000 students and to limit the annual rate of increase of total enrolment in graduate studies to 15 per cent and set a ceiling of 5,500 graduate students. The total effect of the decision is to set a limit of 27,500 students on UBC's enrolment and to provide a mix of 20 per cent graduate students and 80 per cent undergraduates. It was estimated that UBC will reach the upper limit of undergraduate

enrolment within five years, but it may take up to ten years to reach the graduate enrolment ceiling.

At another special meeting on March 18, Senate debated the other central issue contained in the report of the Committee on Long-Range Objectives, dealing with the organizational structure of the University. The committee itself divided 6-5 on this issue, the majority favoring some modification of the existing structure, the minority proposing to divide the University into a number of federated colleges.

The majority recommendation was embodied in clause four of Recommendation 27 of the report and was that: "The present type of structure of faculties, departments and schools be retained with modifications to make the system more responsive to changing conditions, without the adoption in principle of a federated college scheme." After a lengthy debate Senate approved this clause of the proposal which obviated the necessity of discussing the federated colleges proposal.

Senate also approved another clause of the same motion calling for the establishment of an ad hoc committee to recommend changes in the groupings of faculties, schools and departments and later approved the first clause of the proposal calling for Senate to "support the concept that greater efforts be made to create a more personalized environment for faculty and students on the campus"

All too briefly I have tried to summarize the decisions that were made on a few of the 39 recommendations which were contained in the report of the Committee on Long-Range Objectives. Space does not permit me to detail the disposition of all the proposals. Some were defeated, others were tabled and some have been referred to Faculties or other Senate committees for discussion. I think it safe to say that the report confronted the University with the necessity of making decisions on a number of important issues which had to be resolved for the future benefit of faculty members and students.

In the course of the year Senate spent many hours debating motions,

most of them introduced by student Senators, which have been described as having political overtones. Some of these motions were defeated, but several of them resulted in the establishment of special committees which began their work in the 1969-70 academic year.

Among the motions approved were ones calling for:

• A wide-ranging inquiry on education of Indians in B.C. and their situation at UBC;

• A study of the sociological background of UBC students, and

• A report on what the University is doing to solve the pollution problem and what its programs for teaching and research are in this area.

Later in the year the Committee to Study the Native Indian Situation at UBC placed before Senate an interim report which suggested that native Indians who are now students at UBC should be hired in the period May through August of 1970 to travel in B.C. to inform potential Indian students of the educational opportunities open to them. Senate agreed to this proposal and three Indian students were hired for the summer program with funds provided by the President's Contingency Fund and the Leon and Thea Koerner Foundation.

Another issue which was debated by Senate in the course of the academic year was the question of the size of classes and the quality of teaching at the University. A motion which asked that a limit of students per class be set at 25 for the next academic year failed largely because the resources which would have been required to implement the motion were beyond UBC's capacity to marshal. It was estimated that implementation would have required, over and above what we now possess, 3,514 undergraduate and graduate classes, 1,209 new faculty members and \$16,000,000 to pay them, and more than \$45,000,000 worth of new construction.

I do not wish to give the impression that the University is unaware of the problem or that it callously disregards the problem of overcrowded classrooms, a situation which some students experience regularly. I have



Prof. Sam Black, left, professor of art education in the Faculty of Education, and Dr. John Hulcoop, associate professor of English, were the second and third recipients of the Master Teacher Award during the 1969-70 academic year. The Award, established by Dr. Walter Koerner, chairman of UBC's Board of Governors, in honor of his brother, Dr. Leon Koerner, is designed to encourage and recognize good teaching. The winners of the Award divide a \$5,000 cash prize that goes with the honor. Pictures by the UBC Photo Department.

emphasized on many occasions to deans and department heads that every possible effort must be made to keep class sizes within reasonable limits and that increased emphasis must be placed on hiring quality instructors and improving the quality of teaching.

It should be noted that in the 1969-70 academic year 49 per cent of our undergraduate classes, and 58 per cent of all classes, contained fewer than 25 students. In addition, the Faculties of the University have not been idle in attempting to deal with the problem of improving classroom teaching. A number of deans have reported to me on the steps they have taken to improve teaching and I would like to take this opportunity to list some of them.

In the Faculty of Arts a Committee on the Evaluation and Improvement of Teaching has been established to initiate and co-ordinate various efforts within the Faculty to improve teaching and work out effective means of assessing it.

In the Faculty of Applied Science a Teaching-Learning Committee has been formed to make recommendations on ways of improving the evaluation of teaching and to actively co-operate with faculty members who request assistance in improving their teaching capabilities.

The dean of the Faculty of Agricultural Sciences is of the opinion that the program offered in his Faculty is one of the most effective and up-to-date in Canada as a result of the recent revision of the programs of all departments. Dean Michael Shaw says he has personally tape-recorded some of his own lectures and recommends this procedure to his faculty as a useful means of self-assessment.

Other Faculties, chiefly the smaller ones, have instituted meetings with faculty members and students to discuss teaching and many Faculties have active student-faculty committees concerned with the assessment of teaching.

An allied problem which has been much discussed on the campus in the current academic year is that of tenure and promotion for members of the teaching staff. In the Faculty of Arts its tenure and promotions committee is demanding of all departments and schools the clearest indication of the evidential basis, especially in regard to teaching, of all promotion and tenure recommendations. The Faculty of Science's committee on promotion and tenure invariably weighs evidence of good teaching before making recommendations, the dean has reported to me.

Yet another means which I believe encourages good teaching is the Master Teacher Award, established in 1969 by Dr. Walter Koerner, the chairman of our Board of Governors, as a tribute to his brother, Dr. Leon Koerner. A stringent set of criteria has been developed by the committee which screens nominees for the award. Among other things, candidates are expected to have a comprehensive knowledge of the subject they teach and be habitually well-prepared for class. They are expected to have enthusiasm for their subject and be able to arouse interest in it among students. They are also expected to communicate effectively at levels appropriate to the preparedness of students and utilize methods of evaluating student performance which search for understanding of the subject rather than the ability to memorize.

The committee which screens nominees spends many hours assessing the nomination letters and visiting the classrooms of eligible faculty members. Making a decision on who is to receive the award from many outstanding candidates is not an enviable task.

In the current academic year the committee named two Master Teachers: Prof. Sam Black, professor of art education in the Faculty of Education, and Dr. John Hulcoop, associate professor of English. Certificates of merit were awarded to Prof. Geoffrey Durrant, former head of the Department of English; Mr. Cortland Hultberg, assistant professor of music; Dr. Karl I. Kobbervig, associate professor of Spanish, and Dr. C.R. Hazell, associate professor of mechanical engineering.

The Board of Governors, like the Senate of the University, also underwent some personnel changes at the beginning of the current academic year. Three members – Dr. Koerner, Mr. Arthur Fouks and 14

Mr. John E. Liersch – were re-appointed by the Lieutenant-Governorin-Council, and two other members – Mr. Richard M. Bibbs and Mr. Donovan Miller – who had been members of the Board elected by the Senate, were given three-year appointments by the Lieutenant– Governor-in-Council.

Mr. Stuart Keate, who had served as the Senate's third representative on the Board, retired from both the Board and Senate when his term expired at the conclusion of the last academic year. In the first month of the academic year Senate elected three persons from its own membership to serve on the Board for three years as prescribed by the *Universities Act.* The three elected, all graduates of the University, are Mrs. John M. Lecky and Mr. Paul Plant, both former presidents of the UBC Alumni Association, and Mr. David Williams, a member of Senate elected by Convocation.

As in the past, the Board of Governors continued to experience problems resulting from a shortage of operating and capital grants. The University has made some notable progress in recent years, but the fact remains that many classes are still overcrowded, some extremely important research facilities, such as Oceanography, continue to operate in wooden army huts brought to the campus at the end of the Second World War, and our faculty-student ratio, while not the worst in Canada, is still higher than it should be.

During the 1969-70 academic year the Board awarded contracts to enable construction to start on the following projects: an addition to the Thea Koerner Graduate Centre, an extension to the George Cunningham Building for the Faculty of Pharmaceutical Sciences, the Instructional Resources Centre in the Health Sciences Centre and the first stage of a new residence development on the former wireless station site adjacent to the Student Union Building. I would like to emphasize here that the bulk of the funds to enable UBC to undertake these projects will come from special financing entirely outside regular provincial government capital grants and fund drives. The addition to



A \$2,000,000 addition to the Woodward Biomedical Library, which houses UBC's collection of books in the medical and life sciences, was completed during the 1969-70 academic year. The extension is a personal gift to UBC from the late Mr. P.A. Woodward and increases the Library's book storage capacity from 100,000 to 200,000 volumes. The extension also more than trebles the Library's seating capacity from 300 to 1,000 students.

the graduate student centre is being financed by the graduate students through a special levy collected as part of a membership fee, the Instructional Resources Centre is being built with funds from the federal Health Resources Fund and a generous gift from the late Mr. P.A. Woodward and the money to build the new residences is being borrowed from Central Mortgage and Housing Corporation and a bank. The CMHC loan will be repaid over a 50-year period from the rents charged to students living in the residences.

During the academic year the Board accepted as being complete the following buildings: a new swine research unit, office and seminar accommodation on the West Mall, a new traffic and security office on Wesbrook Crescent, an addition to the Thunderbird Winter Sports Centre, and new gymnasia for the Faculty of Education to replace a gymnasium demolished when construction of the Student Union Building began. On UBC's south campus, the TRIUMF project, a new cyclotron largely being financed with federal government funds, continued to progress. A combined office, workshop and laboratory building was completed in this academic year and contracts were let for the excavation and sub-structure of the accelerator building and for the prefabrication of the accelerator's main magnet.

Another project completed in the academic year was a major addition to the Woodward Biomedical Library, which houses the University's book and journal collection in the health and life sciences and is a key unit in the developing Health Sciences Centre. The addition, made possible by a gift from Mr. and Mrs. P.A. Woodward and a matching sum from the 3 Universities Capital Fund, means that the Library's book collection can be increased from 100,000 to 200,000 volumes and the seating capacity from 300 to 1,000. The addition was officially opened on June 10, 1970. This was followed on June 11 and 12 by a symposium on the contributions made to medicine by scientists of the Commonwealth.

The Board also pledged an initial \$930,000 toward the construction

SUMMARY OF REVENUE AND EXPENDITURE

(Excluding Capital Additions to Endowment, Student Loans and Capital Development Funds)

April 1, 1969 to March 31, 1970

	GENERAL FUNDS		TRUST FUNDS For Specific		TOTAL		1968—1969	
Revenue_		Per cent	Purposes	Per cent		Per cent		Per cent
Province of British Columbia			<u> </u>	····	<u></u>		· · · · · · · · · · · · · · · · · · ·	
Operating Grant	\$38,868,554	75.4	-	- .	\$38,868,554	57.9	\$31,186,572	53.7
Student Fees	10,441,390	20.3	-	·	10,441,390	15.6	10,038,684	17.3
Services	1,523,814	3.0	\$ 718,524	4.6	2,242,338	3.3	1,936,039	3.3
Endowment Income		 :	1,256,888	8.1	1,256,888	1.9	1,045,742	1.8
Sponsored or Assisted Research			11,138,650	71.5	11,138,650	16.6	11,365,670	19.6
Gifts, Grants and Bequests		·	2,423,100	15.5	2,423,100	3.6	2,107,271	3.6
Miscellaneous	679,264	1.3	43,811	0.3	723,075	1.1	372,318	0.7
Ancillary Enterprises (Net)	<u> </u>			· · ·			2,350	0.0
	\$51,513,022	100.0	\$15,580,973	100.0	\$67,093,995	100.0	\$58,054,646	100.0
Expenditure								
Academic	\$36,300,462	70.5	\$ 1,655,791	10.6	\$37,956,253	56.6	\$31,890,921	54.9
Libraries	4,048,030	7.9	12,947	0.1	4,060,977	6.1	3,638,329	6.3
Sponsored or Assisted Research	(78,563)	(0.2)	11,106,514	71.3	11,027,951	16.4	10,704,279	18.4
Administration	1,904,034	3.7	7,331	0.0	1,911,365	2.8	1,680,210	2.9
Student Services	804,036	1.6	386,673	2.5	1,190,709	1.8	988,682	1.7
Plant Maintenance	5,154,468	10.0	64,760	0.4	5,219,228	7.8	4,657,085	8.0
Renovations and Alterations	2,278,982	4.4			2,278,982	3.4	1,017,514	1.8
Scholarships and Bursaries	828,742	1.6	1,401,525	9.0	2,230,267	3.3	1,941,725	3.3
General Expenses	152,655	0.3	128	0.0	152,783	0.2	148,308	0.3
Land, Buildings and Equipment	· · · · · · · · · · · · · · · · · · ·	_	603,997	3.9	603,907	0.9	_	-
Ancillary Enterprises (Net)	4,804				4,804	0.0	·	·
	\$51,397,650	99.8	\$15,239,576	97.8	\$66,637,226	99.3	\$56,667,053	97.6
Reserves carried forward from						- -		
1969-70 to meet Expenditures in				· · · · ·				
1970-71 – General Purposes	115,372	0.2	· -		115,372	0.2	(53,508)	(0.1)
- Specific Purposes	· _		341,397	2.2	341,397	0.5	1,441,101	2.5
	\$51,513,022	100.0	\$15,580,973	100.0	\$67,093,995	100.0	\$58,054,646	100.0

of a new Geological Sciences Centre, to be built directly west of the building occupied by the Department of Geophysics. At present the Department of Geology is housed in one of the original campus buildings constructed in 1925 and five old army huts on the West Mall. Despite the fact that the department exists in these sub-standard conditions it is the largest geology department in the western world and its graduates have directly or indirectly contributed to the discovery of \$13 billion worth of mineral deposits in B.C. and \$35 billion in Canada. UBC is asking mining and oil companies and firms related to the mineral industry to contribute \$3,100,000 toward the new building. I am confident that this goal will be reached.

In March, 1970, the University agreed to purchase the residence halls of St. Mark's College on Chancellor Boulevard at the northeast corner of the campus. For a purchase price of \$457,235, the University acquired 30,000 gross square feet of space which has been converted into office space for faculty members and a facility to house the University's Center for Continuing Education. The board of management of the College undertook to sell the residence halls to UBC in order to eliminate a burden of debt and to enable it to turn its energies more directly to the religious and intellectual life of University men and women.

THE UNIVERSITY LIBRARY

In October, 1969, the University unveiled a unique and exciting plan for construction of a new undergraduate library named for the late Garnet G. Sedgewick, the now almost legendary professor of English who died in 1949. The plan for the new library was developed after a number of intensive studies which indicated that a new library unit should be built immediately to the west of the existing Main Library. This would have meant that the new library would have to be constructed on the Main Mall of the University, resulting in the destruction of the trees lining the Mall and the elimination of the open 20 vista to the north.

The solution proposed was a plan to build the library *under* the Main Mall while at the same time preserving the 40-year-old northern red oaks which line the Mall. Caissons will be built around the tree roots and incorporated into the building. When the project is complete, the Main Mall will be re-created over the top of the completed library and the pedestrian walkway linking the north and south parts of the central campus will be re-established.

The new library will provide 2,000 study spaces on two floors and the stacks will provide space for 180,000 volumes as compared to the 80,000 volumes housed in the existing Sedgewick Library in the Main Library building.

Despite the prospect of a new library for undergraduate students, UBC's Librarian, Mr. Basil Stuart-Stubbs, reported to Senate in January, 1970, that even to maintain the Library system at its present level will require more capital expenditure than is now planned. "To improve it," he added, "will cost even more."

He also reported that the Library is rapidly running out of shelf space for its expanding collection, a situation which has forced the Library to begin putting little-used books into storage.

In the year he reported on, the Library recorded another significant percentage increase -16.73 – in the number of loans, from 1,389,916 in 1967-68 to 1,622,451 in 1968-69.

The report also paid tribute to the work of Dean Ian McTaggart Cowan, head of the Faculty of Graduate Studies, who stepped down in the previous year as chairman of the Senate Library Committee after 22 years of service. I can only reiterate the words of the report in paying tribute to Dean Cowan: "The Library, the Senate, the University and generations of students are in his debt."

ACADEMIC DEVELOPMENTS

In this section of my report I would like to describe briefly some of the major academic developments which took place in the year under



Plans for a new Sedgewick Undergraduate Library, to be constructed under the Main Mall, were unveiled during the 1969-70 academic year. To preserve the line of northern red oaks lining the Main Mall, the roots of the trees will be encased in concrete and made part of the interior of the building. When the Library is complete, the Main Mall will be re-created and will serve as a pedestrian walkway linking the north and south areas of the central campus. Picture above shows the excavation for the Library and a few of the temporary metal caissons surrounding the tree roots. Picture by the UBC Photo Department. review. All of these developments have come to the Board and Senate only after exhaustive investigation at the departmental and Faculty level and in some cases would have reached fruition earlier had it not been for a shortage of funds. I want to emphasize that these developments are not haphazard and are only approved after long and careful study at several levels of University government.

Early in the academic year the Institute of Animal Resource Ecology came into existence in the Faculty of Graduate Studies. This organization, like all bodies that bear the name Institute, is intended primarily for graduate students who have obtained their first degree and are embarking on research and course work in highly specialized fields. The forerunner of the Institute of Animal Resource Ecology was the Institute of Fisheries, which has been incorporated into the new Institute. The Institute of Fisheries was headed for many years by Dr. Peter Larkin, who developed that organization into one with a world-wide reputation for the excellence of its research and the quality of its students. I am delighted that Dr. Larkin, while he has chosen not to head the Institute of Animal Resource Ecology, is nevertheless remaining at UBC as a professor of zoology and will continue to play a significant role in the studies in the new Institute.

Prof. Crawford S. Holling, the director of the Institute of Animal Resource Ecology, is also the chairman of the management committee of the Resource Sciences Centre, which is currently utilizing a \$500,000 grant from the Ford Foundation. The Institute brings together scientists from a wide variety of disciplines, ranging from zoology through forestry and agriculture to community and regional planning, to tackle problems in ecology and environmental management. One of the basic tasks of the new Institute will be to train a new kind of scientist who is able to marshal a wide variety of resources to deal with pollution and other environmental problems facing our society. I fully expect that the results of the program now being developed in the Institute will be widely felt in years to come. The Institute of Astronomy and Space Science also came into existence at the beginning of the academic year as the successor to the Institute of Earth and Planetary Sciences. The new Institute will offer a program leading to advanced degrees in such areas as astronomy, the structure of the moon and planets and the origin and evolution of the solar system.

Later in the academic year the Board appointed Prof. Maurice Pryce, an internationally-known theoretical physicist who joined our Department of Physics in 1968, as director of the Institute.

Another major development for UBC was the announcement in April, 1970, that the National Research Council had awarded UBC a \$538,600 negotiated development grant to aid research in the fields of astronomy and astrophysics. The funds will aid a number of research projects in the fields of radio astronomy and plasma physics. Some of the funds will be used to develop a high-precision radio telescope with a 15-foot diameter to study radio emissions from atoms and molecules in interstellar space.

UBC has also been involved for some years in the plans to construct a new 157-inch telescope near Osoyoos in the Okanagan. The project was terminated by the federal government as a result of a cut-back in its spending, but not before a mirror blank for the telescope had been cast at the Corning Glass Works in New York State. After lengthy negotiations with the federal government, the assets of the telescope project were turned over to a consortium of six Canadian universities, including UBC. The consortium, known as WESTAR, an acronym for Western Telescopes for Astronomical Research, is organizing a public appeal for \$10,000,000 to complete the telescope. In the meantime, the mirror blank and the machine to grind it, as well as other miscellaneous equipment, have arrived on the UBC campus where they will be stored until there are sufficient funds to begin the grinding.

Another major project approved by the Board in the 1969-70 academic year was a blueprint for the development of a 77-acre 24

Botanical Garden on the UBC campus. The University is not starting from scratch in the development of areas of botanical interest. Fourteen of the 77 acres making up the UBC Botanical Garden are now partly or fully developed and include Totem Park and the Nitobe Memorial Garden. The major addition projected under the new plan is a 14-acre site immediately adjacent to the Thunderbird Stadium to include a research-administrative centre with greenhouses and conservatories. The second major development planned for the future will take place on a 30-acre site between the present Marine Drive and the partly complete Southwest Marine Drive boulevard. This area will consist of semi-cleared, native-stand forest with trails and will include special rhododendron and azalea collections and feature native plants of B.C. It is anticipated that most of the funds for the development of the garden will come from private donations and from the federal government, since it is hoped the project will form part of a National Botanical Garden system.

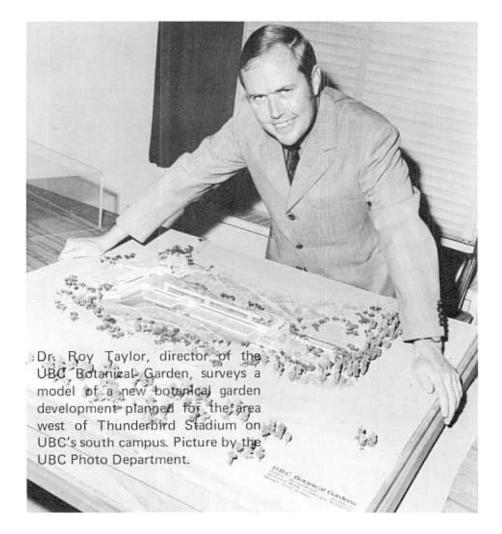
Above all the Garden will have major importance for the research and teaching programs of the University. The research program is designed to provide for the development of a centre concerned with the biological aspects of the flora of B.C. and related western North American regions. Special teaching programs are also planned and many courses now offered by various University departments will be enhanced through association with the projected Botanical Garden.

The 1969-70 academic year also saw the beginnings of another project characterized by inter-university co-operation. The project in this case is the Western Canadian Universities Marine Biological Organization, made up of representatives from the Universities of B.C., Alberta, Calgary, Victoria and Simon Fraser University. During the year the Board approved the establishment of a non-profit, educational society to forward WCUMBO's interests and received a feasibility study recommending establishment of a marine biology station at Bamfield on the west coast of Vancouver Island. The University of Victoria has received permission to buy a 190-acre site at Bamfield, where there exists a building formerly occupied by Canadian Overseas Telecommunications. The building, in addition to providing a facility for research, is situated on a site with a varied shoreline, has a protected anchorage and is accessible by public transportation.

The Senate of the University was not the only body to receive reports in the academic year calling for major changes. In November of 1969 the Faculty of Education began debate on the report of the Commission on the Future of the Faculty of Education, which had been established by Dean Neville Scarfe in 1968 to explore the general question of how the Faculty should be organized to facilitate the study of education and the education of teachers. The Commission, chaired by Dr. George S. Tomkins, brought down a 125-page report containing 85 recommendations.

In general, the report called for a top-to-bottom revision of the administrative structure and academic program of the Faculty of Education. The major recommendations called for adoption of a single, five-year Bachelor of Education degree program; changes in the graduate degree program calling for sharp differentiation between a Doctor of Education degree emphasizing practical studies and a Doctor of Philosophy degree program emphasizing theoretical studies; appointment of an associate dean of development and planning to act as an "agent of change"; student participation in decision-making at the operational level; and granting of separate Faculty status to the School of Physical Education and Recreation.

The release of the report was followed by Faculty meetings and establishment of a steering committee to guide implementation of the recommendations. Many of the recommendations set out in the report will have to be forwarded to the Senate and Board of Governors for approval.



CENTER FOR CONTINUING EDUCATION

In 1968 Senate approved the establishment of a Committee on Continuing Education to review overall policy relating to this increasingly important aspect of University operations. The committee, which was widely representative of various campus viewpoints, placed before Senate in June, 1970, a report which focussed on three major areas:

1. The place of continuing education as a responsibility of the University;

2. Principles of budgeting; and

3. The organization of continuing education at UBC.

Senate approved a number of general recommendations from the committee, which included statements that UBC should recognize that it has growing responsibilities for degree programs for part-time students, continuing education for professional groups, and university-level non-credit programs dealing with liberal and scientific studies, public affairs and community projects; and that the contributions of teachers to continuing education programs should be given full weight in connection with career recommendations in faculties, departments and schools.

Senate also agreed to a recommendation that the name of the Department of Extension should be changed to the Center for Continuing Education to connote the more strongly integrated role for continuing education at UBC. The new name means that UBC as an institution will place greater emphasis on the continuing education of graduates and education at an advanced level.

The concept of a Center also represents many of the changes in extension programs which have occurred in recent years. More courses are now planned on a sequential and systematic basis than in the past and emphasis is being given to those programs which build on undergraduate and professional education. And, to a much greater 28

extent than in the past, experimental projects and interdisciplinary courses are especially designed to focus on urgent community problems and the unique interests of adults.

The Senate also approved the creation of a policy council for the Center which will create a University-wide forum for the discussion of major new programs and provide advice on matters which go beyond the concern of one Faculty.

In recent years there has been a significant increase in the number of people taking advantage of extension programs. During 1968-69 there was a 24-per-cent increase over the previous year in enrolment in credit programs, and an additional 16-per-cent increase in the 1969-70 academic year. A total of 21,238 persons took part in all the programs offered in 1969-70, including 3,325 in part-time credit courses, 11,212 in non-credit, liberal arts courses, and 6,701 in continuing professional education programs.

SUMMER SESSION

The director of UBC's Summer Session, Prof. W.H. Auld, reports that registration for the 1970 Summer Session declined to 5,141 students from the previous year's registration of 5,627. In contrast, registration for the May-July evening credit courses, offered through the Center for Continuing Education, increased to 825 from 671.

The proportion of teachers attending Summer Session continued to decline in 1970. Ten years ago teachers made up 71.2 per cent of the Summer Session enrolment; in 1970 teachers made up only 54.6 per cent. Enrolment in the courses offered by the Faculty of Graduate Studies increased from 384 to 426.

GIFTS, GRANTS AND DONATIONS

The University continues to derive a significant amount of money for operating and capital purposes from generous gifts, grants and donations by corporations, foundations, associations and individuals. In

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the 1969-70 academic year more than 1,400 donors gave \$6,640,407 to the University for a variety of purposes and projects, including research, student aid and building funds.

The Alumni Fund, sponsored by the UBC Alumni Association and chaired by Mr. M. Murray McKenzie, raised a record sum of \$288,891 from 10,118 individuals.

Of particular importance was a \$600,000 gift from Dr. Cecil Green and his wife, Ida, who have already provided \$200,000 to the University to enable it to purchase the former residence of Senator S.S. McKeen on Northwest Marine Drive. The residence, now known as Cecil Green Park, houses the UBC Alumni Association and the University Resources Council.

The \$600,000 gift, payable over a period of three years, will enable the University to bring distinguished visiting professors and teachers to the campus for periods up to a year. The gift will be invested and the income used for salary or salary supplementation, library purchases or any other expenses connected with the appointments. Dr. Green was a student at UBC from 1918 to 1921 and his latest generous gift will serve to enhance the University's teaching and research program.

Space does not permit me to give details of all the donations which have been made to enrich life on the campus. The University is deeply grateful for the generous support which it receives annually from sources outside regular government grants.

OPEN HOUSE

The University's triennial Open House, a joint effort by the faculty, staff and students of UBC, was held on March 6 and 7, 1970. Virtually every building on the campus was open during this two-day period to allow the general public to discover the variety of activities that go to make up life at UBC. Estimates of the number of people who visited us for Open House 1970 vary from 80,000 to 100,000.



Dr. Cecil Green, a former student at UBC, will give the University a total of \$600,000 over a three-year period to provide an endowment fund to bring distinguished visiting professors and teachers to the campus for periods up to a year. The students of the University are to be especially commended for many hours of hard work in preparing and manning displays. Without their dedicated work the event would simply not have been possible.

MUSEUM OF ANTHROPOLOGY

During the summer of 1969 the bulk of UBC's unique collection of West Coast Indian art was on display in Montreal in the former United Nations Building on the site of Expo '67. The exhibit drew record crowds and international publicity and was retained in Montreal over the winter for further display in the summer of 1970.

My purpose in mentioning the display is to point out that UBC still has no facility where all of this valuable and irreplaceable collection of artifacts can be shown to the people of British Columbia. Most of the collection gathers dust in dingy storage rooms in the basement of the Main Library because the present Museum of Anthropology is too small to display it properly.

The collection has been brought together over a period of 20 years as a result of the efforts of Prof. Harry Hawthorn, of the UBC Department of Anthropology and Sociology, and his wife, Audrey, who serves as curator of the Museum. Over the years numerous benefactors, including Dr. H.R. MacMillan and Dr. Walter Koerner, have given generously to enable the University to add to the collection.

It is the University's continuing hope that in the near future funds will become available to permit construction of a modern building to house the collection.

CONGREGATION

The University's 1970 Congregation to award academic and honorary degrees took place May 27-29 in the War Memorial Gymnasium. Honorary degrees were conferred on the Hon. John Nicholson, Lieutenant-Governor of B.C.; Prof. Raymond Firth, one of the world's 32

foremost anthropologists; Prof. Jacob Biely, one of Canada's leading agriculturalists and former head of the Department of Poultry Science; and Mr. John Buchanan, a UBC graduate who retired as Chancellor of the University in 1969.

The Senate of the University approved the award of 4,422 academic degrees in the 1969-70 academic year. A total of 1,171 degrees were awarded by Senate at the meeting in November, 1969, and 3,251 were approved at the May, 1970, meeting.

FACULTY AND STAFF

Finally, I would like to chronicle some of the senior appointments made by the Board of Governors in the past year and list some of the more important honors and awards won by members of the faculty.

New deans were appointed to head the Faculties of Arts and Applied Science during the 1969-70 academic year. Prof. Douglas Kenny, former head of UBC's Department of Psychology, succeeded Prof. John Young as head of the Arts Faculty. Prof. Young took leave of absence in 1969 to become chairman of the federal government's Prices and Incomes Commission. He resigned as dean of the Faculty of Arts in order to continue his assignment in Ottawa for another year.

Prof. Kenny is a graduate of UBC and was named associate dean of arts in 1969. He became the acting dean when Prof. Young accepted his assignment in Ottawa. Dean Kenny has been deeply involved in University affairs since he became a faculty member in 1950. He is a former president of the UBC Faculty Association and has participated in the work of a large number of key University and Senate committees.

In February, 1970, the Board appointed Prof. W.D. Liam Finn, the head of the Department of Civil Engineering, as dean of the Faculty of Applied Science. Dean Finn had been acting dean of the Faculty since August, 1969, following the untimely death of Prof. Frank Noakes.

Dean Finn, a graduate of the National University of Ireland and the



During the 1969-70 academic year the Board of Governors appointed Prof. W.D. Liam Finn, left, to the post of dean of the Faculty of Applied Science and Prof. Douglas Kenny to the post of dean of the Faculty of Arts. Pictures by the UBC Photo Department. University of Washington, joined the UBC faculty in 1961. He brings to his post new projects and ideas aimed at increasing the engineer's ability to deal with contemporary problems facing B.C. and Canada. High on his list of priorities is an expansion of teaching and research in water resources and pollution engineering.

A number of UBC faculty members became the heads of senior national organizations or had awards conferred on them for their services.

Prof. Roy Daniells, University Professor of English Language and Literature, was elected president of the Royal Society of Canada to succeed Prof. Claude Dolman, research professor of microbiology at UBC.

The Wildlife Society of the United States bestowed its highest award on Dean Ian McTaggart Cowan, head of the Faculty of Graduate Studies. He was named the 1970 recipient of the Aldo Leopold Award for service to wildlife conservation as a research biologist and teacher.

Dr. Robert W. Stewart, professor of oceanography at UBC, was elected a fellow of the Royal Society of Great Britain, one of the world's most prestigious scientific bodies. Prof. Stewart is one of 28 Canadians – three of them at UBC – who have been elected fellows of the Society.

Prof. George Volkoff, the head of the Department of Physics, was appointed a member of the National Research Council by the Governor-General-in-Council. He succeeds Prof. William Hoar, the head of UBC's Department of Zoology.

A large number of our faculty reached retirement age during the 1969-70 academic year and I take this opportunity to acknowledge the significant contributions they have made to the teaching and research programs of the University. It is a pleasure to report that many of them have been re-appointed to the UBC faculty and will continue to carry out teaching and research duties.

Those who reached retirement age in 1969 were: Prof. Archie Peebles, Civil Engineering; Prof. T.M.C. Taylor, Botany, and Prof. Harry V. Warren, Geology.

In 1970 the following persons reached retirement age: Dr. J.C. Berry, Animal Science; Prof. Charles E. Borden, German and Anthropology and Sociology; Dr. R.C. Cragg, Fine Arts; Miss Rachel Giese, Hispanic and Italian Studies; Mr. F.C. Hardwick, Education; Prof. Vladimir Krajina, Botany; Prof. E. Leimanis, Mathematics; Prof. H.M. McIlroy, Mechanical Engineering; Dr. D.C.G. MacKay, Psychology; Prof. M.W. Thompson, English.

Regrettably, I have to report the deaths of four professors emeriti of the University: Dr. Frank Buck, professor emeritus of horticulture; Dr. Frank Dickson, professor emeritus of biology and botany; Mr. John Davidson, professor emeritus of botany; and Mr. Watson Thompson, associate professor emeritus of English.

Professors Buck, Dickson and Davidson were among the earliest appointees to the UBC faculty and are members of that small coterie of teachers who are still remembered with awe by graduates. Prof. Buck was responsible for much of the landscaping of the central campus and Professors Dickson and Davidson were pioneering botanists and conservationists in our province. The new UBC publication *Davidsonia*, issued by the Botanical Garden staff, is named for Prof. Davidson. Mr. Thompson will be remembered by students in the Faculties of Arts and Applied Science as an outstanding teacher.

In conclusion, I want to express my gratitude to Mr. James Banham of our Information Services staff for his assistance in compiling and editing materials for this report.