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THE PRESIDENT'S REPORT 1970-1971

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, 1970, to August 31, 1971

Vancouver, Canada



The President of The University of British Columbia, Dr. Walter H. Gage, centre, is assisted in the day-to-day operations of UBC by two deputy presidents, Mr. William Armstrong, left, and Mr. William White.

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

Ladies and Gentlemen:

My report to you for the 1970-71 academic year deals, in large measure, with the major problems that currently confront the University in its continuing efforts to improve educational facilities for students and faculty members, and the progress which has been made in recent years in the revision of the curriculum, the improvement of teaching and the introduction of new programs.

As I note in my report, some of the problems which face the University seems as intractable today as when they first became apparent some years ago. On the other hand, it is possible to point to areas where progress has been made in attaining the goal of creating an environment where teaching, learning and research can flourish.

In dealing with these problems, as President of The University of British Columbia, I am encouraged by the support and active co-operation given to me by all segments of the University community, including the Board of Governors, Senate, faculty, students, alumni and staff.

Yours sincerely,

Walter H. Gage

President

Problems and Progress

In reviewing the material submitted to me for this report on the academic year which began on September 1, 1970, and ended on August 31, 1971, I was struck by two things. First, it is apparent that the many problems that confront the University are being dealt with on an intense and continuing basis at all levels of the University community, and second, that many of these difficulties are not amenable to quick and easy solutions. Many problems are little closer to solution today than when they became apparent some years ago, although in other cases notable progress has been made.

In dealing with these problems what is often lost sight of by many critics of University policies and programs is what I believe to be the overriding concern of all those who make up the University community — the creation for students and faculty members of an environment in which learning, teaching and research can flourish and the highest standards of excellence attained. In the first part of this report I should like to deal with some of the areas where, on the one hand, I feel the greatest problems lie and, on the other, where significant progress has been made in attaining this goal.

Perhaps the most acute problem area for UBC currently is that of providing modern buildings and facilities for students and faculty

members. The casual visitor to the campus cannot help but be impressed with the physical growth and development of the campus in the last decade. Much of this impression is deceptive however, and several important academic areas of the University continue to occupy sub-standard accommodation or are overcrowded in inadequate facilities.

Despite the completion in this academic year of a new west wing for the Biological Sciences Building, two departments which occupy this facility — Zoology and Botany — are still hard-pressed for space to accommodate undergraduate laboratories and cannot avoid night laboratories. The Institute of Oceanography, for example, which deals with an area of study of great importance for B.C. and Canada, is still partly housed in wooden army huts that seriously hamper the Institute's teaching and research program.

The Department of Chemistry has now reached the limit of innovation and renovation in space, and overcrowding of graduate and undergraduate laboratories has reached a point where safety has become a matter for concern. The department's recent efforts to develop new interdisciplinary studies in bio-organic, bio-inorganic and bio-physical chemistry are being restricted because of a lack of suitable laboratory space. A similar situation exists in the Faculty of Agricultural Sciences, where teaching laboratories are described by Dean Michael Shaw as being "grossly inadequate."

The Henry Angus Building, which houses the Faculty of Commerce and Business Administration and the social science departments of the Faculty of Arts, is also desperately overcrowded and in the near future some new facilities will have to be provided for one or more of the academic units accommodated in this building.

In addition, the University Library system continues to experience problems of overcrowding. Portions of some collections in the Main Library have had to be put into storage because of a lack of shelf space and there appears to be no relief in sight for the Faculty of Education



The new west wing of the Biological Sciences Building, shown at right above, provides office and laboratory accommodation for the Departments of Botany and Zoology and the Institute of Oceanography. Some of the work of the Institute is still carried out in converted wooden army huts brought to the campus at the end of World War Two.

curriculum laboratory, which experienced a 30.5 per cent increase in use in 1970-71.

And finally, the Faculty of Applied Science, which for many years has had plans for a new development between University Boulevard and Agronomy Road, has been able to realize its plans only in part. As a result, the Department of Mechanical Engineering is still housed in facilities which were built in 1925 and the Department of Civil Engineering is increasingly pressed for space in a building which also houses the University's Computer Centre and the Department of Computer Science.

The most serious barrier to correcting the conditions described above is the lack of adequate capital for the construction of new buildings. A survey of building needs currently being undertaken by a committee of the University Senate has revealed that there is an almost immediate need for some \$40,000,000 for new construction. The University's grant from the provincial government for capital purposes in the year under review is \$6,000,000 and if our grants continue at this rate it will take between six and seven years for us to meet the backlog of need. In the meantime, there will have been a further deterioration of existing facilities and new needs will have become apparent.

It should also be remembered that since the University was established at Point Grey 55.8 per cent of the cost of constructing new facilities at UBC has been obtained from sources other than general capital grants from the Province of B.C. Looked at another way only 44.2 per cent of the total cost of buildings at UBC has been borne by the provincial government out of general capital grants. The balance has been obtained as outright grants from alumni, students, the general public, industry and the Canada Council or borrowed from sources such as Central Mortgage and Housing Corporation or banks.

The lack of adequate facilities in some areas has at least two effects. Students and faculty members cannot hope to attain the standards of excellence they aspire to and the University's ability to attract

outstanding teachers and researchers is seriously handicapped. In the long run, the inability of the University to modernize its facilities can only lead to an erosion of the standards of higher education.

In last year's report I drew particular attention to the plight of the Museum of Anthropology, currently housed in the basement of the Main Library. UBC possesses one of the world's finest collections of art of the Indians of the Northwest coast of North America, but most of the collection gathers dust in dingy storage rooms because the present museum is too small to display the collection adequately.

In July, 1971, Prime Minister Trudeau announced in Victoria, at ceremonies marking B.C.'s entry into Confederation, that \$2.5 million of a \$10 million federal government gift to the province had been earmarked for a Museum of Man at UBC. Planning is now underway to develop a unique museum where the UBC collection will be available for viewing by the general public.

A second area of concern for the University in recent years has been that of teaching. In my report on the previous academic year I recounted how I have emphasized to deans and departments heads the necessity of hiring quality instructors and improving the quality of teaching. I also summarized in my last report the efforts that a number of faculties were making to improve classroom teaching. These efforts have continued in the 1970-71 academic year and I should like to describe some of them briefly.

In the Faculty of Arts two committees on instruction — the Committee on the Improvement of Instruction and the Committee for the Dissemination of Ideas About Teaching — were amalgamated into a single Committee for the Evaluation and Improvement of Teaching under the chairmanship of Prof. Cortland Hultberg.

The chief activity of this seven-man committee in the year under review was to conduct a survey of every department and school in the Faculty of Arts to determine the concrete steps which had been undertaken to assess teaching. The committee was concerned with the assessment methods that had been instituted and the plans that each of these academic units had for assessing teaching and improving the quality of instruction. The committee also offered to assist departments and schools in the establishment of machinery that would aid them in this assessment. The committee is also considering publication of a newsletter on teaching for distribution within the faculty.

The Faculty of Commerce and Business Administration introduced a new course and instruction evaluation which is more comprehensive than the one used in previous years. A faculty member was director of the project, which was carried out jointly with the Commerce student societies. Information gathered by means of a questionnaire was given to the instructor, the students and the dean and chairmen of divisions and is intended to be used by instructors to improve their teaching, by students in choosing their programs and by others to assist in the evaluation of courses and instruction in the faculty.

In addition, the faculty carried out an experiment in two courses to see if it was possible to obtain information about the effectiveness of a course while it was in progress. Procedures were developed which required frequent meetings between instructors and elected student representatives. It was found possible to identify a number of difficulties at an early stage and to take corrective action.

In the Faculty of Pharmaceutical Sciences, the Undergraduate Society conducted a constructive course evaluation using a questionnaire of its own devising. The program will be continued in future years.

In the Faculty of Education a committee has made a close study of methods of evaluating university teaching and it is expected that recommendations arising from this report will be implemented in the coming academic year.

In the Faculty of Applied Science, a Teaching/Learning Committee, formed in November, 1970, and made up of six faculty members and three students, has been active. The committee revised a questionnaire,

in use in the faculty for some years, to provide a more thorough evaluation of teaching and began preparation of a booklet for faculty members which will include three sections: one on the principles of good teaching, a second on the resources available on the UBC campus to faculty members who wish to employ visual and other teaching aids and a third section consisting of the teaching duties, research interests and background of each member of the faculty. The committee has also carried out an inventory of all teaching facilities in the faculty and made arrangements for upgrading those which were sub-standard and published an occasional newsletter for faculty members. The committee is also exploring the possibility of introducing a new system of instruction in which the student will pace his own learning process.

I said in my report last year that I believe that another means of improving teaching is the Master Teacher Award, established in 1969 by Dr. Walter Koerner, a member of the Board of Governors, as a tribute to his brother, Dr. Leon Koerner. The committee which screens nominations for the awards included representatives of the Graduate Student Association and the Alma Mater Society among its members in the 1969-70 academic year. Much to the regret of the committee and other segments of the University community, neither of these groups was represented on the committee in the 1970-71 academic year. The executive of the Graduate Student Association refused to name a representative to the committee, claiming that the impression that UBC was an institution dedicated to teaching was a misrepresentation of the facts and served to reinforce complacency with a promotion and tenure system that tended to reward those who have neglected teaching for research. Subsequently, the Students' Council endorsed the stand taken by the Graduate Student Association executive and also refused to name a representative to the screening committee.

The regrettable decision by these two groups fails, I believe, to take into account the fact that a stringent set of criteria has been developed to screen candidates for the award, criteria which were looked upon as

a means of gaining experience in the evaluation of teaching and which could be applied to all faculty members being considered for promotion and tenure. The University makes no effort to conceal the fact that too often students are forced to sit in overcrowded classrooms and that this situation can lead to impersonal relationships between students and faculty members, a condition which can give rise to the impression that teaching is secondary to other pursuits. But I have to take issue with the criticism that the University deliberately fosters an atmosphere in which it encourages its academic staff to sacrifice teaching for research and publishing. Anyone who is familiar with the history of UBC will know that, in large measure, it has built an enviable reputation based on the quality of its instruction. I am confident that I have the support of the majority of the faculty in my endeavors to ensure that teaching remains a most important function of The University of British Columbia.

Despite the refusal of the two student groups to name representatives to the committee, it decided to carry out its duties and in May named two Master Teachers — Prof. Peter Larkin, of the Department of Zoology, and Dr. Floyd B. St. Clair, assistant professor of French.

One area in which notable progress has been made in recent years is that of the revision of the curriculum to ensure that it meets the needs of today's students. I was impressed, in the reports I received this year from the faculties, with the wide-ranging changes which were instituted in the 1970-71 academic year and I will take this opportunity to summarize them.

In the Faculty of Law a completely revised curriculum was instituted, in which all but two of the courses in the second and third years are optional and in which there are more half-term courses than previously. The new curriculum was put into effect with very little difficulty and in its first year has appeared to work well.

In the Faculty of Science, the introduction of new undergraduate courses and the restructuring of some programs have continued the

trend toward greater flexibility in the undergraduate science programs. A combined honors program in Computer Science and Mathematics was introduced and an honors program in Geophysics established. Special courses in science for students from the arts faculty have proved to be increasingly in demand. The faculty has also noted that there has been a shift of interest on the part of science students, which is reflected in an increase in courses in the earth and life sciences and a decline in the physical sciences. It is believed that these shifts are in response to an increased interest in environmental studies and better opportunities in the earth science fields at the present time.

The Faculty of Forestry, in the academic year 1970-71, accomplished a major rearrangement and restructuring of its undergraduate course offerings. The object of this revision is to facilitate the entry of students into forestry by transfer from the regional colleges, to allow students to defer commitment to areas of specialization until their third year in the faculty, to provide increased flexibility in designing programs for gifted students and to improve motivation and orientation in the early years of study in the faculty.

In the Faculty of Pharmaceutical Sciences a pilot project in clinical pharmacy was carried out in conjunction with Vancouver General Hospital. The object of the program is to train the student in the application of his knowledge to the treatment of the patient. It is the object of the faculty to have the program fully implemented by 1972 and to make this possible further curriculum changes in the fourth year are being elaborated.

The Faculty of Agricultural Sciences reports that new honors and major programs, introduced in every department in the previous year, are operating satisfactorily. The Faculty has also been actively developing links with allied faculties, such as Applied Science, Forestry and Science. A new program has been developed by members of the Department of Agricultural Mechanics and Engineering for the Faculty of Applied Science and increased emphasis is being placed on

environmental studies in the field of agriculture. A high proportion of the courses offered in the agricultural sciences faculty are concerned with the effects of environment on agricultural animals and crops and with environmental management, including the management of animal wastes and effluents.

The curriculum was in an active state of revision in other faculties and schools of the University. The Faculty of Education is preparing extensive changes to both its elementary and secondary programs and the Faculty of Medicine has several sub-committees working on various aspects of the curriculum. Long-range, major changes are in the offing. In the Faculty of Applied Science, an in-depth study of engineering programs is currently being debated and a major revision in the curriculum of the School of Nursing is under way, including the preparation of a program leading to a doctorate.

Equally important was a significant administrative reorganization of the Faculty of Medicine, which was put into effect at the beginning of 1971. The changes are aimed at up-dating the government and administration of the faculty after more than two decades of growth.

These examples will serve to illustrate that the University's curriculum and administrative structure, far from being static, are constantly under review and are changing in response to the needs of contemporary students and society.

A number of new academic and research programs were also introduced during the 1970-71 academic year.

An important development for the native people of British Columbia was the establishment at the University of an Indian Education Research and Resource Centre. The Centre, which is run almost entirely by native Indians, plans, among other things, to develop and distribute books, articles and other material which will help students, teachers and education committees to understand Indian cultural life and enable teachers to meet the needs of Indian children in their classrooms, sponsor courses and programs on Indian culture and vigorously

promote the involvement of Indian people in education decision-making.

The new centre is a co-operative project of the native Indian teachers of British Columbia, the Faculty of Education and the Centre for Continuing Education. Funds to support the work of the centre are being contributed on a long-term basis by the education division of the federal Department of Indian Affairs and Northern Development.

A Centre for Transportation Studies, supported by a four-year, \$360,000 grant from the Canadian Transport Commission, was organized to promote and encourage inter-disciplinary studies in the field of transportation, which is of major importance for Canada. The centre, which reports to the dean of the Faculty of Graduate Studies, partially funded 15 research projects undertaken by 12 faculty members in the academic year under review. The centre's largest research effort deals with a computer simulation of the Port of Vancouver, a project which has attracted attention from a number of international organizations. Early in 1971 Prof. Karl M. Ruppenthal, a member of the Faculty of Commerce and Business Administration and former director of the transportation management program at Stanford University, was appointed director of the Centre.

A development of singular importance for B.C. and Canada was the creation of a Water Resources Research Centre. Over the years a wide array of UBC scientists with competence in water resources research have carried out work in this area to the point where, in 1969-70, the equivalent of seven full-time professorial researchers were working in the field with financial support totalling about \$350,000.

Acting on the advice of a visiting committee of the National Advisory Board on Water Resources Research, the University decided to form a research centre to undertake mission-oriented water resources research projects to facilitate the achievement of national and regional social objectives and to train and educate water resource specialists and managers. A third aim of the Centre is to work toward effective liaison

with other institutions in society in the adoption and execution of the best possible policies of water management. The work of the Centre will be financed by a continuing grant of about \$350,000 a year from the federal government. Prof. Irving K. Fox, a leading expect in the field of water resources, joined the UBC faculty to direct the work of the Centre. Prof. Fox is the former head of the Department of Urban and Regional Planning and director of the Water Resources Centre at the University of Wisconsin, and was chosen to head the new UBC centre after an exhaustive search had been made for a competent director.

The Institute of Animal Resource Ecology continued to expand and in the academic year under review initiated the Vancouver Regional Simulation Study, a project unique in North America, which involves students and faculty members from 15 different University departments as well as representatives of the City of Vancouver, the Vancouver Regional District and the Department of Municipal Affairs of the provincial government.

The object of the study is to develop a simulation model of the Lower Mainland of British Columbia with the intent of producing a device by which citizens, politicians, civil servants and academics can explore the consequences of alternate policies of regional development.

Another development in the Faculty of Graduate Studies was the organization of an Institute of Applied Mathematics and Statistics. In its first year of operation the institute staged a number of seminars, inaugurated a statistical consulting service and supervised the work of five graduate students.

Several new academic programs were initiated during the year. In the Faculty of Graduate Studies a program leading to the degree of Master of Science in Business Administration was introduced and the faculty is currently considering proposals for six new doctoral programs and two master's programs. In the Faculty of Arts a program leading to a

Bachelor of Science degree in Geography and a Bachelor of Fine Arts studio program were initiated.

Finally, The University of British Columbia Press was established during the academic year to succeed the UBC Publications Centre, which was established in 1961. The Press, which plans to publish ten books in its first year of operation, will emphasize four general areas in its program — Asia and the Pacific, Canadian literature, western Canada and international law. These are all areas in which the former Publications Centre had been publishing.

In the 18 months prior to the announcement of the Press, a reorganization and expansion of the Publications Centre took place under Mr. Anthony Blicq, who came to UBC from Oxford University Press in England, and who will serve as director of the new Press. The existence of a University press on the west coast of Canada will provide a greater opportunity for the research and work being done in this region to be made known and available internationally. It should also serve as a stimulus to scholarly study of many aspects of western Canada. Before the end of the academic year the Press published its first volume, *The Royal Navy and the Northwest Coast of North America*, 1810 to 1914, by Mr. Barry Gough, a UBC graduate.

In my report for the previous academic year I dwelt at some length on the many debates in the University Senate which were concerned with enrolment policy, long-range objectives and other matters of concern to the University community. During the 1970-71 academic year the Senate was again called on to debate several matters of widespread interest and I would like to deal with these briefly.

The question of foreign academics teaching in Canada and the need for increased emphasis on Canadian studies were the subjects of a number of debates and motions at several meetings of Senate late in 1970 and early in 1971. At a lengthy debate in December, 1969, Senate rejected a proposal that a survey should be undertaken of all courses in all faculties to determine which had relevance to either French or

SUMMARY OF REVENUE AND EXPENDITURE

(Excluding Capital Additions to Endowment, Student Loan and Capital Development Funds)
April 1, 1970 to March 31, 1971

| Revenue | GENERAL FUNDS | | TRUST FUNDS For Specific | | TOTAL | | 1969—1970 | |
|---|---------------|--------------|--------------------------|----------|----------------|-------------|--------------|-------------|
| | | Per cent | Purposes | Per cent | | Per cent | | Per cent |
| Province of British Columbia | | | | | | | | |
| Operating Grant | \$46,279,870 | 78.2 | \$ - | _ | \$46,279,870 | 61.6 | \$38,868,554 | 57.9 |
| Student Fees | 10,413,910 | -17.6 | _ | - · | 10,413,910 | 13.9 | 10,441,390 | 15.6 |
| Services | 1,884,265 | 3.2 | 994,869 | 6.2 | 2,879,134 | 3.8 | 2,242,338 | 3.3 |
| Endowment Income | | · | 1,027,121 | 6.4 | 1,027,121 | 1.4 | 1,256,888 | 1.9 |
| Sponsored or Assisted Research | | | 11,753,586 | 73.5 | 11,753,586 | 15.6 | 11,138,650 | 16.6 |
| Gifts, Grants and Bequests | - | - | 2,124,813 | 13.3 | 2,124,813 | 2.8 | 2,423,100 | 3.6 |
| Miscellaneous | 571,853 | 1.0 | 89,059 | 0.6 | 660,912 | 0.9 | 723,075 | 1.1 |
| | \$59,149,898 | 100.0 | \$15,989,448 | 100.0 | \$75,139,346 | 100.0 | \$67,093,995 | 100.0 |
| Expenditure | | | | | · | | | |
| Academic | \$42,633,534 | 72.1 | \$ 1,555,372 | 9.7 | \$44,188,906 | 58.8 | \$37,956,253 | 56.6 |
| Libraries | 4,617,039 | 7.8 | 39,307 | 0.2 | 4,656,346 | 6.2 | 4,060,977 | 6.1 |
| Sponsored or Assisted Research | (90,034) | (0.2) | 10,926,032 | 68.3 | 10,835,998 | 14.4 | 11,027,951 | 16.4 |
| Administration | 2,200,773 | 3.7 | 19,043 | 0.1 | 2,219,816 | 3.0 | 1,911,365 | 2.8 |
| Student Services | 905,660 | 1.5 | 438,906 | 2.8 | 1,344,566 | 1.8 | 1,190,709 | 1.8 |
| Plant Maintenance | 5,926,468 | 10.0 | 36,571 | 0.2 | 5,963,039 | 7.9 | 5,219,228 | 7.8 |
| Renovations and Alterations | 1,961,780 | 3.3 | - | _ | 1,961,780 | 2.6 | 2,278,982 | 3.4 |
| Scholarships and Bursaries | 858,742 | 1.5 | 1,462,7 6 2 | 9.2 | 2,321,504 | 3.1 | 2,230,267 | 3.3 |
| General Expenses | 145,269 | 0.3 | (77) | (0.0) | 145,192 | 0.2 | 152,783 | 0.2 |
| Land, Buildings and Equipment | | _ | | | . - | | 603,907 | 0.9 |
| Ancillary Enterprises (Net) | 84,730 | 0.2 | | | 84,730 | 0.1 | 4,804 | 0.0 |
| | \$59,243,961 | 100.2 | \$14,477,916 | 90.5 | \$73,721,877 | 98.1 | \$66,637,226 | 99.3 |
| Reserves carried forward from 1970-71 to meet Expenditures in | | | | | | | | |
| 1971-72 — General Purposes | (\$ 94,063) | (0.2) | _ | | (\$ 94,063) | (0.1) | \$ 115,372 | 0.2 |
| Specific Purposes | | · | 1,511,532 | 9.5 | 1,511,532 | 2.0 | 341,397 | 0.5 |
| | \$59,149,898 | 100.0 | \$15,989,448 | 100.0 | \$75,139,346 | 100.0 | \$67,093,995 | 100.0 |
| | | | | | | | | |

English Canada. While Senate felt such a survey was neither appropriate nor desirable, several participants in the debate clearly wished Senate to make a statement about the necessity of encouraging Canadian content in appropriate courses.

In January, 1971, Senate returned to this topic and debated at length a motion encouraging faculty members "in the preparation and presentation of their courses to include significant Canadian content, where it is appropriate to fulfill the objectives of the courses." This proposal fared little better than the previous one and the matter was referred to a committee for study.

Finally, at its February meeting, Senate approved the following motion without discussion:

"Whereas members of Senate are concerned that students, in their academic progress, should have broad opportunities to understand the Canadian heritage and assess the future of Canada:

"Senate recognizes our continuing commitment to encourage Canadian as well as international outlooks and urges faculty to renew its concern to ensure that Canadian content and illustrative material are available to students where appropriate to the academic objectives of courses offered."

As a followup to these debates Senate approved a motion at its March, 1971, meeting calling on the University's Board of Governors "to actively provide funds to increase the research capability of the University in matters of Canadian concern ..." The intention of the motion was to place on record Senate's belief that to put on courses of a university calibre, appropriate back-up research, particularly in the humanities and social sciences, was needed.

At the same meeting Senate debated and approved a motion adopting the policy of advertising vacant faculty and administrative positions nationally in at least one Canadian publication in addition to the magazine *University Affairs*, published by the Association of Universities and Collges of Canada. The motion also called for UBC to

send notice of such vacancies to every Canadian university which offers graduate training in the concerned discipline(s). In order to provide for emergency appointments Senate approved a second motion approving such appointments without advertising but requiring Senate to be informed when emergency appointments are made.

Earlier in the academic year Senate received a report on pollution research from a committee established as the result of a Senate resolution in the previous academic year. The committee found that UBC faculty members in many varied disciplines are involved in teaching and research in the field of pollution and many meaningful research projects are in the planning stage. The report also suggested that the overall problem of pollution should be approached on an inter-disciplinary basis so that all aspects of the problem and the possible effects of a suggested course of action may be considered.

The University took two steps later in the academic year to ensure that potential pollution problems on the UBC campus were dealt with. Mr. William Rachuk, UBC's radiation protection officer since 1966, was appointed campus pollution control officer and will be responsible, as part of his additional duties, to ensure that departments and faculties dispose of chemically or biologically dangerous materials safely. In July, 1971, the University's Board of Governors approved the expenditure of \$140,795 for the purchase and installation of equipment designed to dispose of dangerous chemical wastes. The new facility will be built at the extreme southern end of the South Campus research area, where a unit for disposing of pathological waste is already located.

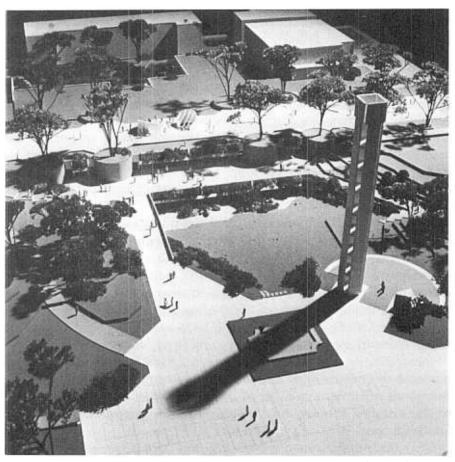
The Senate also approved the establishment during the academic year of two committees that will undertake major studies. The first, chaired by Prof. Robert M. Clark, the Academic Planner, will deal with undergraduate student performance. Included in the committee's terms of reference will be an investigation of the role of examinations, marks, various standards in marking at UBC and a comparison of marking

standards at UBC with those of other leading universities. A second major study, to be undertaken by a committee under the chairmanship of Dr. A.J. McClean, dean of the Faculty of Law, will investigate and advise on possible changes in the *Universities Act*.

At the February, 1971, meeting of UBC's Senate, the University Librarian, Mr. Basil Stuart-Stubbs, reported on the operations of the Library system for the previous year and detailed for Senate the enormous growth of this important campus facility in the previous decade. His statistics reflect an astounding growth to meet the ever-increasing needs of the University community, not just for books, but for maps, government documents, periodicals and the multitude of printed and visual materials needed for reference and scholarship. Over a period of ten years, to cite only a few statistics, Library loans increased 320.9 per cent, reflecting the increasing intensity of library use; Library expenditures increased 216.7 per cent; staff increased from 103 to 394 and branch libraries for mathematics, ecology, forestry and agriculture and social work were established.

This growth has not been accomplished without growing pains. Library facilities on the campus are often strained to the limit and the number of study spaces available — 5,000 at the time the report was made to Senate — is well below the number which should be provided for a student body of some 20,000. Some relief from overcrowding is in sight, however. During the 1970-71 academic year the Board of Governors awarded a contract for construction of a new \$3.3 million Sedgewick Undergraduate Library to seat 2,000 students and house 180,000 volumes. The new Library is being constructed under the Main Mall of the University, an architectural solution which makes it possible to preserve the northern red oaks lining the Main Mall and which will permit the University to reopen the Mall to pedestrian traffic after the building is complete.

The growth rate of the Library has not slowed during the academic year. By the end of 1971, Mr. Stuart-Stubbs predicts, UBC's Library



New Sedgewick Undergraduate Library, shown in model form above, is under construction under the Main Mall of the University between the Mathematics Building, top left, and the Ladner Clock Tower, which dominates the plaza in front of the Main Library. When construction of the new Library is complete, the Main Mall of the University will be re-established as a pedestrian walkway linking the north and south sections of the central campus. The new Library will contain some 180,000 yolumes and seat 2,000 students.

will be the second largest in Canada, with a collection exceeding a million and a half volumes, 700,000 government documents and 1,300,000 microforms. In order to rationalize book collections and their use, the Librarians of the three public universities are co-operating to ensure that there is no unnecessary duplication and undue effort in acquiring new material. Already arrangements have been made for the mutual use of University collections by all faculty members and graduate students and special loan arrangements are being planned for undergraduate students at universities and colleges. During the academic year nearly 10,000 items were lent or copied by the UBC Library for other institutions in the province.

During the 1970-71 academic year the Board awarded contracts to enable construction to start on the following projects: the Sedgewick Undergraduate Library, the Geological Sciences Centre, a new classroom and laboratory unit for the Departments of Civil and Mechanical Engineering, an office and seminar annex to the Buchanan Building, a building to house the Divisions of Audiology and Speech Sciences and Medical Genetics of the Department of Pediatrics and the Department of Health Care and Epidemiology, all part of the Faculty of Medicine; phase two of the Physical Education Complex and the purchase of equipment to burn dangerous chemical wastes. In addition, the Board approved a number of contracts related to the development of the TRIUMF Project, the new cyclotron being constructed on UBC's South Campus.

Only three units were completed during the academic year: the new west wing of the Biological Sciences Building, the addition to the Thea Koerner Graduate Student Centre and stage one of the TRIUMF sub-structure. The addition to the Graduate Student Centre was financed by the graduate students through a special levy collected as part of the Centre's membership fee.

The Board gained one new memeber during the academic year. His Honor Judge A. Leslie Bewley, of the Provincial Court and a UBC

graduate, was appointed to the Board by the Lieutenant-Governor-in-Council. Mr. Arthur Fouks, a long-time member of the Board, was elected chairman of the Board for the 1971-72 academic year during the current academic year. He will succeed Mr. John Liersch.

Few people realize the significant amount of responsibility which is carried by the Board, which acted as public trustee for nearly \$91,000,000 in government grants, student fees, research funds and private gifts, grants and bequests during the 1970-71 academic year. It is also responsible for the operations of the University's ancillary services, which in 1970-71 generated more than \$6,700,000 in revenue from services provided to students, faculty members and the general public. Each Board member also served on Board and University committees that meet regularly to set policies for many important University activities. Their duties, often onerous, involve them deeply in University affairs and the province is fortunate to have a group of people so dedicated to the advancement of higher education and the creation of opportunities for learning for the youth of the province.

One of the more gratifying increases in the UBC budget in the past five years has been the funds devoted to research at the University. Between 1966 and 1971 funds received from all sources for research have risen from \$7,376,293 to \$15,588,863. Among the chief beneficiaries of this increase are graduate students, many of whom receive financial support from the grants applied for by faculty members. The federal government is the largest contributor to research at UBC. In 1970-71, federal funds made up 73.7 per cent of the total received.

I think it worth mentioning here that the University took steps during the academic year to establish safeguards to protect students and researchers in projects which involve human subjects. The guidelines for the protection of individuals involved in such experiments were developed by a committee chaired by Prof. Melvin Lee, director of the

School of Home Economics, and established by the head of the Faculty of Graduate Studies, Dean Ian McTaggart Cowan. As a result of Dr. Lee's report the University has established a series of faculty screening committees which review all projects which involve human subjects. These screening committees are charged with ensuring that:

- The safety, welfare and rights of the subjects are adequately protected;
- The amount and kind of information communicated to the subject are appropriate to secure "informed consent" within the best definition of that term:
 - Suitable precautions are taken to minimize risks; and
- The subject is made aware that he has the right to withdraw from the experiment at any time.

I have also been impressed, in the faculty reports sent to me for the 1970-71 academic year, with the many outside interests pursued by faculty members. In most cases, these are extensions of teaching and research duties at the University. These activities have always been encouraged by the University, so long as they do not interfere with the faculty member's primary responsibility to his students. I should like to list a selection of these activities to indicate the range of activities undertaken by UBC's teaching staff.

Dr. H. Peter Oberlander, Director of the School of Community and Regional Planning, served as chairman of the Vancouver School Board before going on leave of absence to become first secretary to the Minister for Urban Affairs in the federal government in Ottawa.

Prof. S.L. Lipson, head of the Department of Civil Engineering, was elected president of the Association of Professional Engineers of B.C.

Mrs. Margaret Neylan, associate professor in the School of Nursing, was elected president of the Registered Nurses' Association of B.C.

Prof. A.R. Thompson was president of the Association of Canadian Law Teachers, the fourth UBC faculty member to hold that post, and was one of the organizers of an important conference on the Arctic International Wildlife Range held in Whitehorse in October, 1970.

Dr. Kathleen Cole of the Department of Botany, was appointed editor of *Psychologia*, the journal of the International Physological Society. Dr. Janet R. Stein, of the same department, was president of the Canadian Botanical Association.

Prof. G.M. Volkoff, head of the Department of Physics, was reappointed for a further three years to the National Research Council of Canada.

Prof. W.S. Hoar, of the Department of Zoology, was appointed editor of the *Canadian Journal of Zoology*.

Prof. Peter Larkin was appointed to the Science Council of Canada. Prof. R.W. Wellwood became the first Canadian to be elected president of the Forest Products Research Society, an important international organization of forest industry executives and scientists.

Dean B.E. Riedel, head of the Faculty of Pharmaceutical Sciences, was appointed chairman of the Canadian Council on Animal Care.

In the Faculty of Agricultural Sciences Dean Michael Shaw was awarded the gold medal of the Canadian Society of Plant Physiologists for his research and contributions to that group; Dr. J.F. Richards, of the food science division became the president-elect of the Canadian Institute of Food Technology, and Dr. George Winter, of the agricultural economics division, was appointed chief of the United Nations Development Plan in Syria.

Space does not permit me to list the dozens of other faculty members who hold executive posts on learned societies or have made public service contributions to the community.

Service to the community is by no means confined to faculty members. I have always been impressed, in my talks and meetings with students, with the number of times they mention their involvement with young people through community centres and other projects. This involvement may consist in working on a voluntary basis with the mentally ill, or for political parties or as coaches for athletic teams. The variety and range of this valuable activity would alone fill this report if it could be documented.

A significant number of students were involved, during the summer of 1971, in projects financed and sponsored by the grants under the federal government's Opportunities For Youth program. Some of these programs were developed by students and faculty members in various UBC departments, but in other cases projects were developed and executed by students on their own initiative.

In the Fraser Valley near Hope, B.C., for instance, students working under the direction of UBC archaeologist Prof. Charles Borden excavated an ancient Indian pit house village. Many of the students were paid from an OFY grant. Seven UBC students in architecture and fine arts constructed two outdoor play areas for children, one of them at UBC's Pre-School for the Mentally Retarded on Acadia Road. Eleven UBC anthropology students were involved in a project designed to preserve the spoken languages of B.C. Indians.

The Alma Mater Society was the recipient of \$105,000 in OFY grants to run or administer 15 projects, which resulted in the development of a Women's Studies program, now being offered as an evening non-credit course in the Student Union Building. Other projects included preparation of a report on the condition of cycling facilities at UBC, a study of day-care facilities in Vancouver, a music appreciation program and an investigation of the publishing industry in Canada.

UBC also made a contribution this past summer to the problem of transient youth by making available a dormitory facility in Fort Camp to house up to 56 persons daily. The UBC hostel operated under the direction of the campus Housing Administration and was staffed by several UBC students who had previously served as dons or resident fellows in other residences. Occupants of the hostel — many of them students at other universities — were referred to UBC by a City of Vancouver service which co-ordinated hostel facilities for the



The federal government's Opportunities for Youth program provided funds to aid a number of projects carried out under the auspices of University departments. The picture above shows excavations made at an ancient Indian pit house village near Hope in the Fraser Valley. The project was under the direction of Prof. Charles Borden, of the Department of Anthropology and Sociology.

Vancouver area. Three meals a day were supplied to the transients by UBC's Food Services department. The costs of operating the hostel were borne by the provincial and federal governments. The hostel was described by a City of Vancouver official as being "one of the most efficient and well-run hostel programs in the system . . ."

I have already mentioned briefly the Women's Studies program which was initiated this year by an active group of women students. This group, and others on the campus, have received encouragement and support for their endeavors from the Office of the Dean of Women. Dean Helen McCrae and her able assistants organize and sponsor a number of programs for women on the campus, including Continuing University Education (CUE), a group which assists mature women returning to the campus to begin or again take up their education, to adjust to the campus environment. The Office also sponsors a series of free noon-hour films and a program entitled "Quo Vadis," which acquaints students with the broad range of educational opportunities open to them at UBC. These are but a few of the valuable programs which the Dean of Women's office sponsors each year.

The Faculty of Forestry, in 1971, has been sponsoring a number of events to mark the fiftieth anniversary of the commencement of forestry instruction at UBC. The first of these events was a successful open house attended by more than 4,000 persons at the faculty's 12,000-acre research forest near Haney, B.C., where a wide range of scientific work is being carried out by UBC faculty members and interested individuals from other institutions and government departments. The forestry faculty has recently adopted a new and far-sighted management concept for the forest called "best-use" forestry, under which zones of the forest will be selected and integrated with other zones on the basis of best use. The faculty's fiftieth anniversary was also marked by several lectures and symposia sponsored by the faculty and students.

Anniversaries are always pleasant occasions and I am grateful to all 30

facets of the University community for the congratulations which they offered to me in 1971 on reaching the fiftieth anniversary of my association with UBC as a student, teacher and administrator. I was particularly pleased that the first letter of congratulations which reached me was from the Alma Mater Society. As I look back over my half-century of association with UBC I am deeply conscious of the many friends - faculty members, students and members of the community-at-large - who have helped me personally and made contributions to the growth and development of The University of British Columbia. Some of the most gratifying experiences I have had at UBC have resulted from my experiences with students, whom I regard as the most important segment of the University community. I am often asked by members of the general public why UBC has, by and large, escaped the extreme problems which have beset some of our sister institutions. I believe this stems from the pattern which was set in the early days of the University when it was assumed that students could accept responsibility for the management of their own affairs and actions. In many instances, students at other universities have been endeavoring to gain the kind of autonomy which our students have had since the University opened its doors in 1915. The close relationship between the University and its students has, I believe, been a major factor in avoiding confrontations.

CENTRE FOR CONTINUING EDUCATION

The 1970-71 academic year marked the first full year of operation for the Centre. This name and a revised organization for policy development were approved for the Department of University Extension to reflect changes in program activities. These include an increased focus on professional continuing education, more complex and sequential general education courses and greater integration with other academic bodies on the campus. The Council for the Centre for Continuing Education — a body created to formulate general program policy for the Centre — was established during the year. The

membership of the Council includes representatives of the faculties with which the Centre works to offer programs, members of the community, students participating in Centre courses and some members of the Centre's professional staff.

The Centre is also playing an active role in a second new body, the President's Co-ordinating Committee on Continuing Education, which is making a study of campus policy in relation to continuing education.

Enrolment in the programs sponsored by the Centre remained at about the previous year's level of 21,000: 3,313 in credit courses; 10,113 in general interest courses and 6,997 in professional programs. This has been a source of some satisfaction in view of the fact that participation in continuing education courses at some other Canadian universities dropped sharply, possibly because of unfavorable economic conditions.

Increased attention is being given by the Centre to the improvement of its programs through the use of course evaluations, development of publications expressly designed for in-course and post-course use and through contact with community groups and agencies.

In the past year, particular attention has been given to expanding opportunities for students who wish to obtain credits toward a degree through part-time study. Offerings of both lecture and correspondence courses increased, particularly at the third- and fourth-year levels, a reflection of the increasing role being played by regional colleges in the higher education picture in B.C.

SUMMER SESSION

The enrolment at UBC's 1971 Summer Session was 4,340, compared to 5,141 the previous year, a decline in 1971 of 15.5 per cent. As always, it is difficult to point to specific reasons for decreases in enrolment, but Prof. Wilfred Auld, the director of the Summer Session, speculates that decreased economic activity, changing student attitudes toward higher education and the increased availability of educational opportunities through regional colleges, may account for the enrolment

decline. Another factor may be the increasing enrolment in the inter-sessional period from May to July in courses offered through the Center for Continuing Education. School teachers continued to make up more than one-half of the Summer Session student body, 56.1 per cent in 1971.

CONGREGATION

The University's 1971 Congregation to award honorary and academic degrees took place on May 26, 27 and 28 in the War Memorial Gymnasium. Honorary degrees were conferred on Canada's Governor-General, His Excellency D. Roland Michener; Dean John W. Ker, dean of the Faculty of Forestry at the University of New Brunswick, a native British Columbian, graduate of UBC and professor of forestry at UBC from 1948 to 1961; and Prof. Emeritus F.G.C. "Freddy" Wood, the first native British Columbian to be appointed to the UBC faculty, founder of the UBC Players' Club and a familiar figure of the UBC campus for 35 years. The Frederic Wood Theatre in the Norman MacKenzie Centre for Fine Arts is named for Prof. Wood.

The University Senate approved the award of academic degrees to 4,396 students in the 1970-71 academic year. A total of 1,171 were awarded in November, 1970, and 3,225 in May, 1971.

FACULTY AND STAFF

A number of heads and directors were appointed to UBC departments, schools and institutes during the 1970-71 academic year. They are as follows:

In the Faculty of Applied Science, Prof. Samuel Lipson became head of the Department of Civil Engineering; Prof. Donald A. Moore became head of the Department of Electrical Engineering, and Dr. Muriel Uprichard was appointed director of the School of Nursing.

In the Faculty of Medicine Dr. Leonard C. Jenkins was named head of the Department of Anesthesiology.

In the Faculty of Science Prof. Robert Scagel was appointed head of the Department of Botany. In the Faculty of Graduate Studies Dr. Barrie M. Morrison became director of the Institute of Asian and Slavonic Research; Dr. Mark W. Zacher was appointed director of the Institute of International Relations, and Prof. Noel Hall was appointed director of the Institute of Industrial Relations.

One new dean was appointed in the academic year. Dr. Albert J. McClean succeeded Prof. George Curtis as dean of the Faculty of Law. Dean Curtis was head of the Faculty of Law from the time it was founded in 1945 and has made a significant contribution to legal education in B.C. and Canada. He is currently on a well-deserved leave of absence in England and will return to teach at UBC.

A total of 17 members of the teaching staff and one senior member of the administrative staff reached retirement age in the 1970-71 year. Each of them had made significant contributions to the teaching and research programs of the University. Many have been re-appointed to the UBC faculty and will continue teaching and research duties.

Those who reached retirement age were: Prof. Kenneth Argue, Education; Prof. S.M. Boyles, Education; Miss Pauline Capelle, associate professor of Nursing; Prof. Mollie Cottingham, Education; Miss Edith Deyell, associate professor of Education; Prof. Claude Dolman, Microbiology; Miss Emma Harris, associate professor of Education; Prof. W.G. Heslop, Civil Engineering; Prof. Leonard C. Marsh, Education; Dean V.J. Okulitch, Science; Prof. R.U. Ratcliff, Commerce and Business Administration; Prof. Barnett Savery, Philosophy; Prof. C.E. Smith, Education; Miss Dorothy Washington, assistant professor of Education, and Prof. D.J. Wort, Botany.

I know that it will not be taken amiss by those named above if I draw particular attention to the retirement of Dr. Vladimir Okulitch, who was a faculty member at UBC from 1944 on and who served as dean of science for seven years. A UBC graduate, Dr. Okulitch was widely known for his professional work in the fields of geology and paleontology, and was almost equally well known as a photographer

whose prints were accepted and won prizes in photographic salons. Dean Okulitch guided the Faculty of Science through a difficult period of expansion and growing student enrolment and we shall miss his wise counsel in a number of University bodies.

An important segment of the University of B.C. community is the employed staff, which provides a myriad of support services for faculty members, students and the general public. Many University activities would come to a standstill were it not for the dedicated efforts of this important group of people. To provide a measure of recognition for the employed staff, a Twenty-five Year Club was formed during the 1971-72 academic year. To be eligible, members must have been employed by the University for a quarter-century or more.

The following persons qualified for membership in the academic year under review: Mr. Percy Archer, Physical Plant; Mr. Dave Armstrong, Department of Plant Science; Mr. Tom Battensby, Department of Plant Science; Mr. Lloyd Bowers, Physical Plant; Mr. Ed. Bull, Department of Chemistry stores; Mr. Fred H. Colburne, Physical Plant; Mr. David Dougherty, Physical Plant; Miss Jessie Field, Department of Classics; Mr. Alex Fraser, Department of Physics; Mr. Laurie Funnell, Physical Plant; Miss Eleanor Hanna, Department of Finance; Mr. Jack Hunter, manager, University Bookstore; Miss Mildred Kastner, administrative assistant, Faculty of Applied Science; Mr. Norman Keith, Physical Plant; Miss Laura Koch, Department of Food Services: Miss Allison Law, Registrar's Office; Miss Marjorie Longley, School of Nursing; Mrs. Anne McCullough, administrative assistant, Faculty of Agricultural Sciences; Mr. George McGee, Department of Food Services; Mr. John McLean, Director of Staff Personnel and Ancillary Services; Mr. Eugene McLintock, Purchasing Department; Mr. Danny Maloney, Physical Plant; Mr. Jim Martin, Physical Plant; Miss Eleanor Mercer, University Library; Mr. George Rogers, Physical Plant; Mr. Norman Smith, Physical Plant; Mr. Harry Tansley, Physical Plant; Miss Muriel Upshall, University Health Service; Mr. Don Pearce, Department of Plant Science.

Among those who have retired after completing 25 or more years of service at the University are three women: Miss Myrtle Kievell, of the Registrar's Office; Miss Margaret Lalonde, of the Department of Finance, and Miss Verna Newson, of the President's Office.

The University is deeply grateful to these long-time employees for their faithful service.

Finally, it is with regret that I report the deaths of a number of active and retired members of the University faculty.

Dr. John Sandness, assistant professor of Plant Science, died on September 25, 1970.

Prof. Kenneth B. Harvey, a member of the Department of Chemistry and assistant dean of Science, died September 27, 1970.

Prof. Emeritus of Classics Harry T. Logan, died February 25, 1971. Prof. Emerita of German Joyce Hallamore died on April 3, 1971.

Prof. Logan, who died at the age of 84, was one of the original members of the UBC faculty and was associated with UBC for 52 years as teacher, author, editor, administrator and member of UBC's Board of Governors and Senate. He was head of the Department of Classics from 1949 to 1953.

Prof. Hallamore's career at UBC as a student, teacher and head of the German department, spanned 43 years. She was a highly regarded teacher who was honored on her retirement by the publication of separate books of essays on German literature by faculty members and graduate students in the German department.