



TWO-YEAR-OLD STONE CAIRN commemorates the G reat Trek, while several acres of cleared land and construction shacks hold the promise of the future for the 1451 students then attending classes at the young University of British Columbia. Picture was taken from the top of the Chemistry Building in 1924. For later pictures from the same point see pages three and four.

Medical researcher makes heart discovery

A University of British Columbia medical researcher, Dr. Paris Constantinides, has climaxed five years of research with the discovery of hitherto unknown properties of a chemical compound which may lead to effective treatment of arteriosclerosis.

Dr. Constantinides, a 35-year-old associate professor in the Anatomy Department of UBC's Medical Faculty, reports that he has been able to arrest the progression of arteriosclerosis in experimental rabbits and has obtained very strong indications of regression in the fatty material collecting inside the lining of the arteries, despite continued feeding on the diet that produced the arteriosclerosis.

The substances used by Dr. Constantinides in these experiments—sulfonated polysaccharides—were produced synthetically for the project by the UBC Chemistry Department. One compound of this family of sulfonated polysaccharides has proved very successful in these experiments and further study of this family of chemical compounds will be required to find the most effective one, he said.

FINDINGS HOPEFUL

"Our findings provide an experimental basis that make it hopeful that these fat splitting agents will be help-

ful in treatment of those kinds of arteriosclerosis that are caused by high blood fat levels," he says.

"But before clinical trials in humans are justified these compounds must be modified and studied in detail for any poisonous long range side effects," he adds. He estimates that this will take at least two or three years.

Dr. Constantinides was assisted in this project over the past several years by UBC students and qualified technicians. The University's animal nutrition department assisted in caring for the large number of rabbits used in the experiment.

Also closely connected with the project was Arthur E. Werner of the UBC Chemistry Department, who conducted the chemical experiments to produce the chemical compounds Dr. Constantinides used in his study.

The project was undertaken with funds supplied by the American Life Insurance Foundation for Medical Research and from the National Research Council.

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Scholars work to be students

There is a fine distinction in definition between "scholar" and "student". "scholar", according to Webster, stresses enrolment in a school; "student" is applicable to one who loves to study.

Paying strict attention to these definitions the majority attending UBC should be called "students". More than 50% of the 6356 enrolled this year have enough desire to learn that they are working themselves through college.

Of the 1536 first year "students", 528 are responsible for all expenses, including room and board, as are 2499 of all other students.

Almost 2000 "students" are responsible for all expenses except board and room and more than 1200 are responsible for incidentals only. The majority of these students "working their way" depend upon summer jobs, but more than 1000 are also depending upon part-time jobs held throughout the academic sessions.

Enrolment doubling

15,000 students by 1965

(See policy statement on page two)

UBC—faced with the immediate challenge of doubling student enrolment in 10 years—is planning for the biggest expansion in the history of Canadian higher education.

All Canadian universities are being faced with a similar challenge, but the expansion will be more rapid in British Columbia because of the rapid growth of population in the province and because a larger percentage of young people attend university in B. C. than in the rest of Canada.

Demands by industry and the professions for more and more trained personnel and demands created by the increasing population are expected to result in a student population of from 13,000 to 15,000 at UBC by 1965. Present enrolment is 6300.

This prediction, made in a report prepared by mathematics professor Dr. S. A. Jennings for presentation to the Gordon Commission on Canadian Economic Development, is considered conservative.

Based on studies recently published by Dr. E. F. Sheffield, director, education division of the Dominion Bureau of Statistics, it takes into account present enrolment in public and high schools, the birth rate and the anticipated increase in the percentage of young people who will be seeking higher education.

The report indicates that in addition to the problem of meeting the demands of close to 15,000 students 10 years from now there is also a national long range problem of providing educational facilities for a student population which will be constantly increasing over the next 30 years.

By 1975 an estimated 26,200 students will be seeking higher education in B. C. This total is expected to increase to 37,000 by 1985.

At present 8.9 per cent of the 18-21 age group in B. C. attend University, compared with the Canadian average of 7.2 per cent. By 1965 the attendance percentage for this age group is expected to reach 11.3 per cent and by 1985, 16.1 per cent.

These figures are still considerably lower than the 1949-50 attendance percentage of 19.3 per cent in U. S. Universities.

President N. A. M. MacKenzie has a two-pronged answer to this problem of increasing enrolment.

"First," he says, "we must make a determined effort within the next ten years to provide adequate staff and equipment for expensive University faculties, schools and departments in fields such as medicine, engineering, forestry, law, architecture and others which would be costly to duplicate.

"I think the provision of adequate

(Please turn to page three)

See ENROLMENT

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Obligations accepted

UBC Reports is now being mailed to all alumni and friends for whom we have accurate addresses. Later this year it will go only to those who have indicated interest through the questionnaire. Needless to say, we hope that all of our readers have found this publication of interest to them.

In extending the circulation to the alumni, the University has accepted an obligation to keep its graduates informed about developments at UBC and in higher education in this Province. It recognizes that its responsibility to its students does not end with their departure from the campus.

But, frankly, there is self-interest involved in this decision as well. The University needs the continuing support and goodwill of its alumni.

We are not talking about money. We are talking about things much more important—sympathy, understanding and intelligent interest. The universities of Canada need well-informed friends every bit as much as they need money.

We believe that the alumni will give this kind of support when the facts are presented to them in a clear and factual manner. They are the beneficiaries of higher education and recognize its importance in our complex world.

Universities are even now facing problems in enrolment and costs which may, in the next few years, assume the proportions of a crisis.

The solution of these problems will depend, in the final analysis, upon an intelligent and informed public who support the principle of education in a democratic community. The nucleus of such a public is our growing body of alumni.

Music, drama, art

"Vancouver can now take its place beside Toronto as a foremost Canadian cultural centre, and is certainly far ahead in regard to internal activity and originality."

This comment was made by Lister Sinclair, Canadian scholar, playwright and critic, when he was in Vancouver last month to take part in the University's Shaw Festival.

Through such things as the Shaw Festival which had two completely sold out performances of the Canadian premiere of Shaw's epic "Back to Methuselah" in the 1000-seat University auditorium, the University is proud to be making its contribution to music, drama and the arts in Vancouver.

But University people are quick to point out that without the support of a large community ready and willing to support "culture", University productions would wither on the vine.

A firm broad base of community supported music, drama and the arts is considered by most University people essential to any institution of higher learning which is to be more than an advanced technical or professional school.

This is one of the reasons why University administrators now planning for the great increase in numbers of young people seeking higher education in British Columbia are insistent in their belief that before new universities or junior colleges are developed, the communities in which they are to be set should be culturally ready to support them.

The University of B. C. is happy to be making its contribution to the community through such productions as "Back to Methuselah" of which Shaw himself said anyone would have to be "mad" to attempt.

The UBC Summer School of the Arts outdoor production of Euripides' "Trojan Women" or the extension department's evening classes in glassblowing or Latin American and Chinese cooking are other examples—the kinds of things that the University dares when others won't attempt.

For making this possible, thank you, Vancouver.

University planning for 30,000 students

By DR. N. A. M. MACKENZIE.

By 1985 there are likely to be more than 30,000 young men and women in British Columbia seeking higher education. At least these are the figures which emerge from a statistical forecast prepared by the University for submission to the Gordon Commission on Canadian Economic Development. This forecast was carefully prepared, based on projections of the present birthrate, of the present school attendance rate, and on the projected percentage of the high school population who will at that time be seeking higher education. All these projections have been on the conservative side and it seems likely that the forecast will become an actuality.

Such forecasts have to be undertaken for long-term planning. My only quarrel with long-term forecasts is that they tend to stun the imagination rather than challenge it.

I would like to take a middle range view of the growth of our student enrolment. We can, I think, expect with confidence that we will have more than 10,000 students by 1964. This is not too alarming, does not stun, but rather stimulates, because we have had 9400 students on the campus in the years of greatest veteran enrolment, 1947-48. How are we to plan for future enrolments? What should be our attitude towards sheer size? And what should be the relation between standards and numbers? These are all questions about which I feel at least partially competent to express an opinion, in relation to a university of between 10,000 and 15,000 students. The 30,000 will come later.

I think the province should look forward to equipping and staffing adequately the existing expensive

University faculties, schools and departments, in fields such as medicine, engineering, forestry, law, architecture, education, etc., which it is not likely to want to duplicate. We must make a determined effort within the next ten years to see that these faculties, schools and departments are well staffed, adequately housed and supplied with the facilities and equipment that really first class professional training requires. I think further that we should make a great effort to see that the present proportion of young women who come to us from outside the city of Vancouver are adequately housed, and that dormitory accommodation is also provided for a fair percentage of the young men of the province. I think further that the development of the University Library, and together with it, the development of Graduate Studies and a research programme adequate to serve the needs of British Columbia culturally and socially no less than scientifically and industrially, should be undertaken.

JUNIOR COLLEGES LATER

When all this has been done, I think we should prepare to consider some measure of decentralization of higher education. But we should not undertake this, which is inevitably much more expensive than the maintenance of one university, no matter how large, until we feel assured that the essential needs of the then existing faculties, schools and departments are being properly met and adequately maintained. The question of decentralized higher education inevitably involves considerations of control, and it is my firm belief that there should in the future be only one University of British Columbia, with only one governing board, no matter what branches of the University exist in what localities.

I would like to think that at the proper time junior colleges might be developed in centres of the province which have in themselves adequate

cultural facilities to maintain a good standard of higher education. This will be more expensive than having one institution, but it may be desirable both in the interests of the cultural development of the province, and in order to avoid de-personalized education at Point Grey.

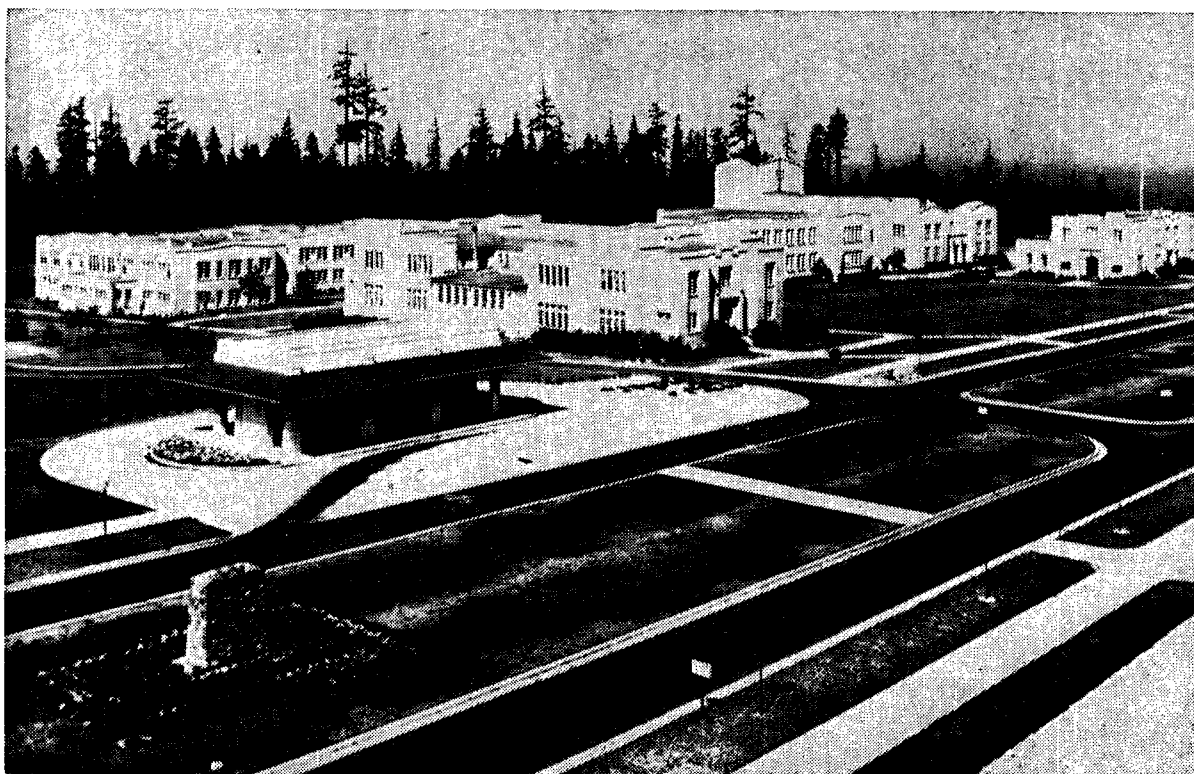
The relationship between the size of an institution and the impersonality of the institution is a complex one. Impersonality, the danger of the student losing his individual sense of identity, is in my opinion more a factor of the ratio of faculty to students and of the provision of human-sized residence units, and of the decentralized organization of the university itself, than it is of mere size in itself. A small institution without good facilities, without good teachers, or without enough good teachers, is certainly in no way better than a large institution adequately organized and adequately staffed.

ADEQUATE FACULTY-STUDENT RATIO

The University of British Columbia was fortunate in its early years in attracting to its service an exceptional number of exceptionally well-qualified and stimulating teachers. It has been called upon by force of circumstances to grow at what is to many—and to me—a startling rate. Up to the present time, though startled, I have been supported by the willingness of the teaching staff and the total University Community to meet the challenge of the increasing numbers who have come to us.

The problems of our immediate growth are to my mind not such as should stun the imagination. They are problems which we can solve if we receive the support that we need

to provide adequate academic facilities, adequate housing, and above all, an adequate ratio of faculty members to students. Furthermore, if we can in the next ten years solve these particular problems, and provide for a University enrolment of between 12,000 and 15,000 students, I feel quite confident that those who come after us will meet the challenge of providing for the 30,000 young men and women in the province who will want higher education in 30 years time. But we must all be aware before we start the process of decentralization that decentralization itself is something you have to pay extra for, and we should know that the province is willing to pay for it.



SEVEN-YEAR-OLD STONE CAIRN in a beautifully landscaped setting reminded the 2132 students of 1929 that they had a worthy tradition to uphold. Modern buildings of a semi-permanent nature (still used to more than capacity) provided adequate accommodation. Picture was taken from the top of the Chemistry Building on August 10, 1929.

Development fund sets two records in 1955

The UBC Development Fund established two new records in its 1955 appeal, according to the final report issued by Kenneth P. Caple, Chairman of the Trustees of the Fund.

Total of the 1955 appeal was \$79,500 contributed by 4700 donors, 3900 of them alumni and 750 friends, companies and organizations.

Total direct contributions to the Fund amounted to \$76,448.27 as compared with \$50,201.20 in 1954. Number of direct donors increased from 2,860 in 1954 to 3226 in 1955.

Other projects initiated by the Fund directors but not included in the audited Fund statements include two company scholarship programs and the Re-build the Brock appeal.

Most successful single campaign in 1955 was that sponsored by the joint Vancouver Rowing Club-UBC committee which raised, through the Fund, \$24,000 to send the VRC-UBC crew to Henley.

Chief beneficiary of unassigned donations is the President's Fund (\$17,000) which Dr. N. A. M. MacKenzie uses to meet pressing current needs. Another \$3000 was allotted to Alumni Regional Scholarships, providing 12 deserving first year students with \$250 scholarships. This was an increase of two scholarships over last year.

Contributions by friends, companies, and organizations added \$10,890 for research and teaching purposes and \$8,844.20 for scholarships and bursaries.

More than one-third of the total raised came from personal contributions by individual graduates. They include a \$1000 Class of 1955 Memorial Loan Fund, \$639.71 donated to the Class of 1929 student assistance fund, \$820.15 toward construction of the University's new Home Management House, and \$106 contributed by the Seattle branch of the alumni association for scholarship purposes.

ENROLMENT

(Continued from page one)

dormitory accommodation, development of the library, graduate studies and a research program adequate to serve the needs of British Columbia should be undertaken.

"When all this has been done, then I think we should prepare to consider some measure of decentralization of higher education. I think that at the proper time junior colleges might be developed in centres of the province which have adequate cultural facilities to maintain a good standard of higher education."

Top administrative officials are already drafting a master plan designed to meet this immediate upsurge in enrolment with the necessary buildings, facilities, equipment and staff.

The University's planning, based on the predicted doubling of enrolment, calls for a substantial building program over the next ten years, in addition to the \$10,000,000 which has already been voted by the provincial legislature.

The funds already granted are going toward a new Arts building, a medical sciences centre on campus, student residences and essential operating services.

In addition, however, forecasts point to the need of building expansion for commerce, biological sciences, the library, chemistry, education, forestry, law, agriculture, dentistry and music.

In addition to capital funds for building expansion, an increased operating budget will be required to provide adequate facilities and enough good teachers.

Subsidy available for aggie courses

Funds are available to subsidize travel expenses for those attending the extension department's agricultural short courses next month, agriculture supervisor Graham Drew has announced.

Applications are still being received for the Dairy Herd Management Course from March 5 to 10 and the Tractor Operation and Maintenance Course March 12 to 23.

High school

Students to visit campus

A university graduate is a valuable asset to any community.

With this in mind the faculty and students of UBC are giving whole-hearted support to a conference designed to acquaint high school graduating students from all parts of the province with all the resources that the University has to offer.

The conference, which is being held early in March this year, began in 1948 as a Teacher Training project to interest more students in continuing their education. The first High School Conference drew 52 delegates from schools in the Lower Mainland. It has now grown into a 200 delegate conference inviting students from every school in B.C. and in the Yukon.

Organized by a student committee on the campus, the conference strives to provide the high school students with as much information about the University as possible.

The two-day program includes addresses by and discussions with faculty and student leaders, sample lectures, tours of the library and campus and free time for the delegates to investigate UBC on their own.

COURSE PLANNING

Greatest emphasis during the conference is placed on discussion of the faculties for study at UBC: how one can choose a suitable course, what his qualifications must be and how he can prepare himself for a specialized field of study. Each delegate is expected to pass on this and other knowledge he has gained from his conference experience to his graduating fellows.

Top government economist heads staff appointments

John J. Deutsch, who has been Assistant Deputy Minister in the Federal Finance Department since January 1, 1953, and Secretary of the Treasury Board since January 1, 1954, has been appointed professor and head of the Department of Economics and Political Science. He replaces **Dean Henry F. Angus**, who is retiring June 30 to take the post of chairman of the Public Utilities Commission.

Dr. Gordon M. Shrum, who has been head of the Physics Department since 1938 and is Director of the B. C. Research Council, has been appointed Dean of the Faculty of Graduate Studies. From 1937 to 1953 Dr. Shrum was also Director of the Extension Department; from 1937 to 1946 Officer Commanding of the UBC Contingent Canadian Officers Training Corps.

Dr. F. H. Soward, University historian, head of the History Department and Director of International Studies, has been appointed Associate Dean of Graduate Studies. Dr. Soward was special assistant to the Under Secretary of State for External Affairs from 1943 to 1946 and a visiting lecturer for the National Defence College in 1954.

Dr. Myron M. Weaver has resigned as Dean of the Faculty of Medicine for reasons of health. Dr. Weaver will remain a teaching member of the staff in medicine, while Dr. **Rocke Robertson**, head of the Department of Surgery, continues as acting dean until a new dean has been appointed.



JOHN J. DEUTSCH
... riches to rags?

