146 ACRES ALLOCATED FOR RESEARCH

UBC to Develop 60-Acre Botanical Garden

The University of B.C. has allocated 60 acres of campus to the development of a major arboretum and botanical garden, President John B. Macdonald has announced.

SOUTH CAMPUS DEVELOPMENT

The land includes 14 acres of already developed garden and park and 46 acres of undeveloped land. A 4¼ acre area now known as the arboretum and rock garden will be phased out over three to five years as moveable trees are shifted to new areas under development, the President said.

Dr. Macdonald also announced that 146 acres of undeveloped land at the south end of the campus has been allocated in 21 tracts, ranging from 2 acres to 17 acres for field and research work in agriculture, forestry, pharmacy and the sciences, sites for the relocation of the B.C. Research Council, for a projected \$13 million nuclear research centre (TRIUMF) —see story on page seven—and a project under study by the National Institute of Astronomy.

"The Board of Governors has accepted the recommendations of the Academic Landscape Development Committee in making these highly significant long-term allocations of one-third of the campus," Dr. Macdonald said.

"The committee consists of members of the University faculty who are among the most expert in

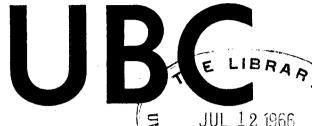
the area of arboretum and botanical garden development, and whose academic areas will be the most involved in the use of all the land allocated for teaching and research.

FAVORABLE CLIMATIC AREA

"The campus has long been recognized as one of the most favorable climatic areas in the world for an arboretum and botanical garden. The areas allocated are considered the most favorable on the campus for this purpose.

> Please turn to page four See DEVELOPMENT CONSISTENT





VOLUME 12, No. 3

Keports

JUNE-JULY, 1966

JUL 12 1500 PSITY OF BRITISH COLUVER 8, B.C. START MADE ON HEALTH CEN

Commerce Dean Named

Curriculum changes to cover advances in methods of business analysis have been forecast by UBC's new dean of commerce and business administration, Philip H. White, 41.

Dean White also foresees the offering of a doctorate in business administration by his faculty. Only one Canadian university, Western Ontario, now offers a Ph.D. in business administration.

Dean White succeeds Dr. G. Neil Perry, who resigned the deanship last September to become provincial deputy minister of education.

DEGREES FROM LONDON

Dean White has been professor and head of the division of estate management within the faculty since coming to UBC from Britain in 1958. He has been engaged in teaching and research in the areas of land appraisal, land economics and development, financing, taxation and investment. He holds the degrees of bachelor and master of science (estate management) from the University of London.

In Canada, Dean White has served on a number of commissions and committees concerned with land use and evaluation, and written papers on local taxation practices and the mortgage market. He is a regional vice-chairman for British Columbia of the Canadian Housing Design Council.

During the 1965-66 year. the faculty of commerce had 36 members and enrolled 899 students, increasing from 760 in 1964-65.

"Like most institutions in our society, the faculty is undergoing change," Dean White said. "We are confronted with a rapid rise by almost one-half in the last two years in our undergraduate enrolment, yet there is an urgent need to make substantial changes in the curriculum.

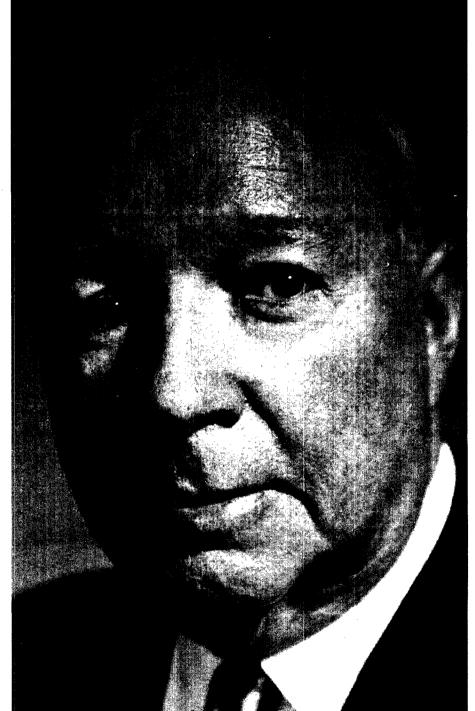
NEW METHODS

"These changes are required to incorporate the new methods of analysis and skills in business administration and to reflect the higher standings of those entering the University.

"In our graduate program, enrolment is also expanding rapidly and the curriculum is in need of revision for the same reasons that have prompted changes in the undergraduate course.

"Furthermore, we need to provide a doctoral program in business administration. An aspect seldom men-

Please turn to page seven See EXPAND GRADUATE STUDIES



CHANCELLOR JOHN M. BUCHANAN

AS UBC'S CHANCELLOR

M. Buchanan Installed

Mr. John M. Buchanan, a member of the University of B.C.'s 1917 graduating class, was installed as Chancellor of the University June 3, the final day of UBC's spring congregation.

B.C.'s Lieutenant - Governor, The Honourable George R. Pearkes, administered the oath of office to Mr. Buchanan, who will hold office for three years.

The announcement of Mr. Buchanan's election to the chancellorship came on May 25 following a meeting

of the UBC Senate.

Of the 11,955 votes cast by the Convocation, Mr. Buchanan received 9,283. The other candidate for the post, UBC graduate student Randall K. Enomoto, received 2,625 votes. There were 47 spoiled ballots.

At the June 3 ceremony, Mr.

Please turn to page two See FIFTEEN SENATORS ELECTED

Construction of stage one of UBC's Health Sciences Centre-facilities for psychiatric treatment—has begun.

RETURN POSTAGE GUARANTEED

A \$3,437,517 contract was awarded June 29 to Frank Stanzl Construction Limited to enable construction to start July 1 as stipulated by the Mr. and Mrs. P. A. Woodward Foundation, which provided an initiating \$4 million gift toward the centre.

The psychiatric accommodation will contain 60 beds and will be part of the 410-bed teaching, research and referral hospital which is the core of the Centre.

The Centre will incorporate a total of 1,200,744 square feet of developed space, ranging from operating rooms to parking areas.

ESTIMATED COST

Asked about the estimated cost of the entire UBC Health Sciences Centre, President John B. Macdonald

"The estimated cost of the completed teaching hospital and associated structures is \$36 million, or \$35 a square foot.

"This relatively high cost per square foct is attributed to the complexity of the buildings which incorporate many modern features unique to this teaching hospital.

Costs have also been influenced by rising construction costs in Canada. The estimates are entirely in line with those of other teaching hospitals built recently on this continent."

Dean of Medicine John F. McCreary said: "The University of B.C. Centre will inaugurate a pioneering concept of integrated teaching of all the medical disciplines. We believe the centre will have for a period of time the most modern teaching facilities for the health professions anywhere in the world.

"It will also provide a referral centre to which doctors all over British Columbia can send patients with exceptional medical problems.

STUDY TOGETHER

"Most medical schools are designed primarily to train doctors and certain supportive groups, such as nurses. Of the 1.400 students in the Health Sciences Centre, only 320 will be training as doctors. The others will include those studying dentistry, dental hygiene, pharmacy, nursing, clinical psychology, social work, rehabilitation and other related disciplines.

"Students will learn together, work together, eat together and share so-cial life. It is believed they will graduate with understanding and appreciation for the particular skills of those in each of the other fields. For the first time under a system of this kind, we will be developing a true medical team.

"This approach is essential if we

Please turn to back page See HOSPITAL INCLUDES



AMS PRESIDENT Peter Braund, right, presented a scroll to UBC's retiring Chancellor, Dr. Phyllis G. Ross, during April at a ceremony in Brock Hall. Past AMS president Byron Hender, left, also took part. Mrs. Ross retired as Chancellor on

SCROLLS PRESENTED

AMS and University Honor Chancellor Ross

UBC's former chancellor, Dr. Phyllis G. Ross, was honoured by the University and its students prior to her

Record 2324 **Students** Get Degrees

A record 2,324 students received their degrees at UBC's three-day spring congregation in the War Memorial Gymnasium June 1-3.

In addition, some of the 869 students who completed their degree requirements last fall walked in procession and received their degrees from Chancellor Phyllis G. Ross.

GRADUATES UP

The number of spring graduates was up by 215 students from a 1965 total of 2,109.

A feature of the ceremonies was the increased number of students who had completed degrees in graduate studies. A total of 233 students received graduate degrees (up from 152 in 1965), including 64 Ph.D.'s, an increase of 11 over last year.

Honorary degrees were conferred June 1 and 2 on:

Mr. Alexander Y. Jackson, one of Canada's foremost painters and a founding member of the renowned "Group of Seven" school of Canadian

Miss Martha E. A. Moscrop, of Vancouver, internationally-known for her pioneering studies in the field of social work:

Mr. Loyd A. Royal, director of investigations for the International Pacific Salmon Fisheries Commission in New Westminster;

NOBEL PRIZE WINNER

Sir John Carew Eccles, professor of physiology at the Australian National University and a 1963 Nobel Prize winner in medicine for his research on nerve cells;

The Honourable Paul Martin, Secretary of State for External Affairs in the federal government, and

Dr. G. Neil Perry, deputy minister of education for British Columbia and former vice-president and dean of the faculty of commerce and business administration at UBC.

retirement on the final day of spring congregation June 3.

TEXT OF SCROLL

President John B. Macdonald presented a scroll to Dr. Ross on behalf of the University at the June 3 congregation. It read as follows:

"As a member of the Senate and the Board of Governors of the University of British Columbia for many years, and as Chancellor of the University from 1961-1966, Dr. Phyllis Ross has devoted to its welfare those qualities of mind and character that had already found expression in an outstanding career of service to community and nation. Her concern with maintaining traditions and standards has not only given meaning to the distinction of high office, it has also revealed itself through active participation in the work of committees engaged in the shaping of University policies, and through the sincerity and eloquence of her congregation addresses. The warmth of her unfailing interest in the hopes and needs of students has been equalled only by her graciousness as the representative of the University to the world at large. Proud of her achievements as a distinguished alumna, the University is even more grateful for her affection and loyalty, for her valued contributions to its life and work, and for her inspirational and continuing confidence in its growth and destiny."

In replying, Mrs. Ross said she would value the scroll and the sentiments it expresses "as a most precious reminder of my years as Chancellor of this great University, and as one of the proudest moments in my career." AMS PRESENTATION

In April the Alma Mater Society also presented a scroll to Dr. Ross. It

"To a citizen who has exemplified the ideals of excellence which fifty successive years of UBC students have striven for.

"To a graduate who, as student, as alumnus, and as Chancellor has contributed immeasurably to the quality of student life at the University of British Columbia.

"To an individual whose friendship this student body values and whose association with us we hope will continue into the future.

"A grateful student body takes this occasion to express its appreciation for your service."

COMMENT By Dr. John B. Macdonald

Private Donors Can Reward Quality

An extract from a recent letter written by the President to Dr. Hans Rosenhaupt, director of the Woodrow Wilson National Fellowship Foundation, Princeton, N.J.

Few people would question the desirability of providing the maximum in educational opportunity to all who can make good use of it, but the quantitative considerations tend to smother concern for quality.

Twenty years in an environment of expansion has made many administrators and faculty prone to judge success in quantitative terms. How many more students and alumni? How many more faculty? How many new buildings? How fast have salaries increased? How much have the government grants grown?

REGRETTABLE CRITERIA FOR JUDGEMENT

These criteria obviously are important but it is regrettable when such questions become the principle or only bases for judgment or the starting points for establishing policy.

When this happens, quality will suffer. The university may be tempted to apply low standards of admission in order to grow faster, in order to attract larger government grants, in order to employ more faculty, and justify larger library expenditures, etc. all for the purpose of being bigger and therefore more prestigious and more influential. Departments sometimes insist on compulsory courses resulting in large enrolments, at least in part to justify a larger faculty in their particular field.

On the other hand, universities may find it hard to persuade governments to provide more support simply to improve the institutions qualitatively.

Quality is less tangible and less susceptible to mensuration than quantity. These pressures in the relationships between universities and governments are by no means universal, but they are widespread. They point to the area of greatest value for the work of foundations or other private supporters of higher education.

RCLE OF THE PRIVATE DONOR

The private donor can more easily reward quality. He can endow a chair, or provide adequate fellowships to the best students, or support the work of an outstanding individual or department or help develop enriched teaching programs, or underwrite student exchange plans, or encourage inter-disciplinary enterprises.

All of these examples are ways of making the university better, rather than just bigger. If public universities are to perform as they should, quality will have to be given as much attention as quantity. The greatest hope for more attention to quality lies in enlightened attitudes and policies of the private friends of public institutions.

FROM PAGE ONE

Fifteen Senators Elected

Ross as Chancellor.

As Chancellor Mr. Buchanan is a member of the Senate, an ex officio

Summer **Program** Launched

More than 6,000 students are expected to register for UBC's 47th academic summer session July 4-August 19.

The full-time teaching staff of nearly 250 persons includes 63 visiting faculty members from other parts of Canada, including 40 from the United States, seven from England, and one each from France and the West Indies.

Bulk of the students registering for the academic program will be school teachers improving their teaching qualifications.

In addition to the academic program, UBC's extension department will offer a variety of non-credit courses in continuing education for

Nearly 2,000 persons are expected to register for the extensi which includes courses on the archaeology of B.C. and a four-day seminar on India and its problems as a developing nation.

Other programs include beginning, intermediate and advanced French conversation, two fine arts lecturers on the Vancouver Festival production The Threepenny Opera, five weekly affairs lectures, three art workshops and a course on film production.

A diploma program in adult education, designed for those who wish to administer adult education programs without a graduate degree is being offered for the first time this year.

A twelve-day residential workshop on emotionally deprived children to explore their needs and develop appropriate instructional material and methods will be held on the campus August 1-12.

Full information regarding the noncredit program is available from the extension department offices.

member of the Board of Governors and chairman of Convocation, made up of all UBC graduates and members of the faculty.

Mr. Buchanan received his bachelor of arts degree from UBC in 1917 and was a student at the B.C. branch of McGill University for two years before UBC opened its doors in 1915.

He is best known for his long association with British Columbia Packers Ltd. which he joined in 1928 as an internal auditor. He was with the company until his retirement in 1964 and served as vice-president, general manager, president and chairman of the

He is a former president of the Fisheries Council of Canada and chairman of the Fisheries Association

Mr. Buchanan was a participant in 1953 in early meetings relative to the formation of the International North Pacific Fisheries Treaty and was a member of the Commission established under the Treaty from 1954 to 1964.

He was president of the UBC Alumni Association in 1949-50 and a member of the UBC Senate and Board of Governors from 1951 to 1957.

In 1951 the UBC Alma Mater Society presented the Great Trekker Award to Mr. Buchanan for his continuing contribution to University affairs.

The fifteen Senators elected by Convocation for three-year terms are as follows (in alphabetical order): Mr. Richard M. Bibbs, West Vancouver; Mr. David M. Brousson, West Vancouver; Mr. F. James Cairnie, North Vancouver; Mr. Charles M. Campbell, Jr., Vancouver; Mr. John Guthrie, Prince George; Mr. J. Stuart Keate, Vancouver; Dr. Hugh L. Keenleyside, Vancouver; Mr. Stuart S. Lefeaux, Vancouver; Mr. David F. Manders, Lytton; Mr. Donovan F. Miller, Vancouver; Mr. Justice James A. Macdonald, Vancouver; Mrs. Hugh J. MacKay, Revelstoke; Mr. J. V. Rogers, Trail; Mrs. B. E. Wales, Vancouver; Mr. David R. Williams, Duncan.

> 2 **UBC REPORTS** JUNE-JULY, 1966 VOLUME 12, No. 3



DR. OSCAR SZIKLAI, associate professor of forestry at UBC, demonstrates the cross-pollination process which is part of a program aimed at developing improved varieties of Douglas fir. Pollen from selected trees is suspended in water and sprayed on the female flowers of Douglas fir by co-workers such as graduate student Gyula Kiss, left. The

flowers are then covered by a plastic bag to prevent further pollination. When the Douglas fir cone is mature, seed is extracted, x-rayed and germinated and the seedlings planted out on UBC and forest company plots. Some seedlings developed in the program are growing twice as fast as naturallygrown trees.

NATURE GIVEN HELPING HAND

Forester Aims to Produce Bigger, Better Douglas Fir

A University of B.C. forester who fled his native Hungary during the 1956 revolution is giving nature a helping hand in a research program designed to produce bigger, better Douglas fir trees.

The object of the program, which is under the direction of Dr. Oscar Sziklai, associate professor of forestry at UBC, is the breeding of a superior type of Douglas fir distinguished by fast growth, increased volume and improved form.

PROFOUND EFFECT

If the project does produce a better Douglas fir - and there is already some evidence that it will - forest companies may be able to grow a tree of greater volume in up to half the 80 years it now takes to harvest a naturally-grown tree.

The project, if successful, will have a profound effect on the B.C. forest industry. In 1964, for instance, Douglas fir made up 27 per cent of the total cut in B.C. forests, more than any other single type of tree.

The 402,500,000 cubic feet of Douglas fir harvested in that year was valued at 'an estimated \$300,000,000.

The improved program began in 1957 as a result of discussions between Dr. Sziklai and Dr. Orr Ewing, a research forester with the B.C. Forest Service. Two years later the Tree Improvement Board was formed, made up initially of six B.C. forest companies, the B.C. Forest Service and UBC.

The starting point in Dr. Sziklai's research process is the preservation of the best naturally-grown trees to be found in Douglas fir stands on the B.C. coast and Vancouver Island.

PLUS TREES FOUND

Through intensive timber cruising, 415 of these giants, called "plus" trees, have been found. All are distinguished by outstanding height, diameter and form.

The trees are located on Vancouver Island between Nimpkish and Sooke and on the mainland between Bella Coola and Chilliwack. The oldest plus tree is estimated to be around 600 years old.

From the top branches of these plus trees Dr. Sziklai selects small twigs

called scions which are grafted on small seedlings located on University holdings.

UNIQUE CROSS

When the scions flower after five or six years pollen from the male flower is removed and used to pollinate the female flower on another seedling in the same plantation. The result of this process, says Dr. Sziklai, is a unique cross, impossible to obtain naturally. Some months later, in late August or early September, the pollinated female flowers, which have now developed into cones, are removed from the tree and the seed extracted. Dr. Sziklai and his research team then x-ray the seeds to determine which

\$10,000 Award For Religious Studies Lecturer

A religious studies lecturer at the University of British Columbia will spend five months doing research in India in 1967 on a \$10,000 fellowship from The Society for Religion in Higher Education of New Haven, Connecticut.

The award is to Reverend Joseph I. Richardson, dean of Carey Hall at UBC, and a lecturer in the department of religious studies.

Dr. Richardson, who has lectured on Indian religions at UBC since 1961, will prepare for the research project at the University of Washington. He will spend seven months studying Indian anthropology and two Indian languages beginning September 1.

In April, 1967, he will travel to India where he will spend a further five months analysing the changes resulting from the impact of western culture on one of the main schools of Hinduism.

> 3 **UBC REPORTS** JUNE-JULY, 1966 VOLUME 12, No. 3

of them are viable, or capable of germination.

The good seed is germinated under ideal laboratory conditions and the seedlings which result are sent to the holdings of companies participating in the experiment.

About 4000 seedlings germinated in this way have been planted out and Dr. Sziklai says some of them are growing twice as fast as naturallygrown trees in the same area. It will be 10-15 years before these hybrid Douglas fir flower and pollen can be obtained for further crossing.

Meanwhile Dr. Sziklai is involved in a second experiment at UBC's 10,-000-acre Research Forest north of Haney in the Fraser Valley.

COMPARE RESULTS

There he is pollinating 24 out of 154 naturally grown and speciallyselected trees with pollen taken from other such trees on the UBC campus. The seed which results will go through the same process as that the scion plantations and the growth results compared.

Dr. Sziklai is resigned to the fact that his project will be a lengthy one and that he may not see the end results. "However," he said, "I am a fifth generation forester and I have three sons, one of whom I hope will also become a forester. It is he who will see the end results of this project."

Dr. Sziklai came to Canada in 1956 with the Sopron School of Forestry which fled Hungary during the famed uprising of that year. The faculty and students of the school were given a home at UBC and eventually 116 of them graduated with UBC degrees. Most are now employed in the forest industry in Canada,

TREE BOARD

The original six companies which made up the Tree Improvement Board are the MacMillan Bloedel Co., B.C. Forest Products, Canadian Forest Products, Crown Zellerbach Canada Ltd., Tahsis Co. Ltd. and Rayonier Ltd. Three other companies - Pacific Logging Co. Ltd., Weldwood of Canada Ltd. and Evans Products Co. Ltd. - have joined the Board since then.

Romance **Studies** Divided

The University of B.C.'s department of Romance studies was divided into a department of French and a department of Hispanic and Italian studies June 1, President John B. Macdonald has announced.

The reason for the division is a steady growth in enrolment in these areas at both the undergraduate and graduate levels, the president said...

The recommendation for division of the department was made by the faculty of arts and has been approved by the Board of Governors and the Senate of the University.

BONGIE NAMED HEAD

Dr. Laurence L. Bongie, a UBC graduate who received his doctorate at the University of Paris, was named head of the department of French effective June 1, Dr. Macdonald said.

UBC's arts dean, Dr. Dennis M. Healy, said the Romance studies department has become too large, and its activities too particularized, to permit efficient operation as a single administrative unit and realization of its full promise.

Division into a department of French and a department of Hispanic and Italian studies is the most practical and economic form of reorganization, he said.

At present UBC enrols about 2,000 students in French, 1,000 in Spanish and 220 in Italian. The new department of Hispanic and Italian studies will also continue to offer instruction in Portuguese and Rumanian.

GRADUATE DEGREES

Most students are enrolled for undergraduate courses but each section also offers graduate degrees. A total of forty students, including eight Ph.D. candidates, were enrolled for graduate studies in the past academic

There are approximately 60 teachers in the Romance studies department, more than half of them in French.

French is a long-established discipline at UBC, Dean Healy said, and one that holds a unique place in the cultural and political life of Canada.

"It is the most widely taught language in the schools and there seems little doubt that it will remain for many years to come the largest language group in the University," he said.

Prof. Bongie has been acting head of the department of Romance studies since October, 1965, when Dr. Healy resigned as department head to become dean of arts.

STANDS HIGH

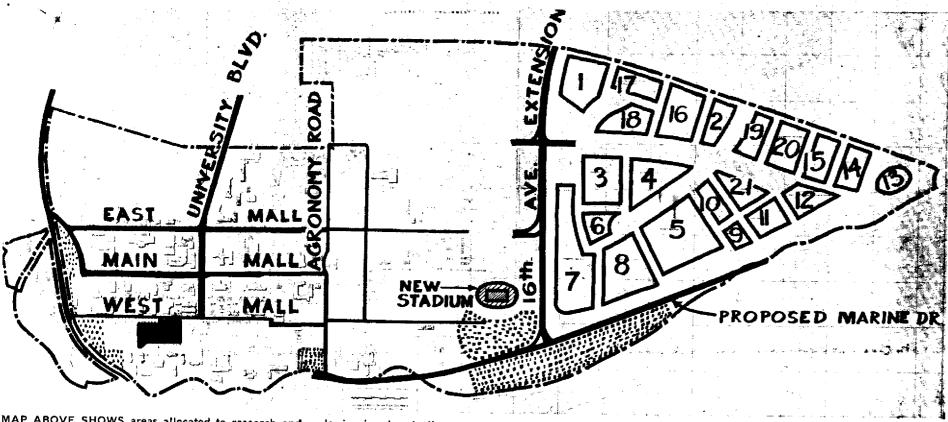
Dr. Bongie is a native of Saskatchewan and graduated from UBC in 1950 with the bachelor of arts degree. On graduation he was awarded the French Government Medal and Book Prize for the highest standing in French and was also the recipient of the French government scholarship for graduate study in Paris.

He attended the University of Paris where he received his doctorate in 1952. The following year he joined the UBC faculty.

Dr. Bongie is an expert in 18th century French literature and has published numerous articles in American and British journals.



PROF. LAURENCE BONGIE



MAP ABOVE SHOWS areas allocated to research and new arboretum at the south end of the UBC campus. Areas designated as the University Botanical Garden and Arboretum are heavily dotted and extend from the north campus to the new south campus development west of the new stadium and between the present Marine Drive and a new proposed Marine Drive. Fol-

lowing is a key to the new research areas in the south campus development: 1. Institute of Fisheries; 2. TRIUMF accelerator; 3. Poultry Science; 4. Animal Science; 5. Plant Science; 6. Zoology-wildlife; 7 and 8. Forestry Botany; 9. Greenhouses; 10. Rhododendron nursery; 11. UBC Buildings and Grounds nursery; 12. UBC Buildings and Grounds receiving and storage;

13. Burning area; 14. UBC Buildings and Grounds yard; 15. UBC Buildings and Grounds vehicles; 16. B.C. Research Council; 17. National Institute of Astronomy; 18. University reserve; 19. UBC reserve - tentative tree nursery; 20. UBC reserve - field works. 21. UBC reserve. The total area allocated to research areas on the south campus is nearly 146 acres.

CONTINUED FROM PAGE ONE

Development Consistent with Master Plan

consistent with the master plan for the entire 990.47-acre campus which has been under development for several years with the guidance of a leading firm of campus development specialists.

AREAS ACCESSIBLE

"Furthermore, all the areas are highly accessible for public use and

Chairman of the Academic Committee on Landscape Development is Dean of Agriculture Blythe Eagles and the members include Dean of Science Vladimir J. Okulitch; Dean of

DENTISTRY DELETIONS RESTORED

UBC's faculty of dentistry has returned to its original plan to enrol 40 students by 1967 as a result of a Board of Governors decision to reinstate deletions made to a construction contract awarded last year.

The Board has restored \$591,-707.73 to a \$4,433,617 contract awarded in June, 1965, to Dawson and Hall Ltd. for construction of a faculty of dentistry building and additions to adjoining basic medical sciences buildings. Funds for construction of the project have come from the 3-Universities Capital Fund and the provincial government.

The Board decision to reinstate the deletions resulted from assurances from the federal government that grants would be forthcoming from the new \$500,-000,000 Health Resources Fund established last July. Deletions in the original building plans were ordered when it was found that tenders for construction were higher than anticipated.

In addition to restoring enrolment to 40 students from a planned 20, the reinstatement means that plans can now proceed for a dental hygiene program and provision of space for graduate, postgraduate and continuing education programs, said Dr. S. Wah Leung, dean of dentistry.

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H. N. Towers, head of the department of botany; Dr. V. C. Brink, chairman of the division of plant science; and Dr. R. W. Wellwood, professor of

forestry.

Dr. Macdonald said the developed 14 acres allocated to the arboretum and botanical garden (dotted areas on map above) commence at Marine Drive and Crescent Road, lying between these two routes, and progress southwest (8.6 acres) to take in the Nitobe Memorial Garden (2.2 acres). This block includes the University rose garden and gardens around the Faculty Club and Thea Koerner Graduate Centre. "It is recognized that some of this land may be required in future for building additions," Dr. Macdonald said.

Totem Park, (3.1 acres) at Marine and Agronomy Road, also is included. EXTEND 16TH AVENUE

The largest areas allocated include 44 acres in mostly undeveloped land further south along Marine: a 30 acre tract lying between the present curving route of Marine Drive and a proposed new straight route, and a 14acre tract lying between the straight

Board of Governors

Calls for Tenders

in operation in 1967.

Marine route and the new Thunderbird Stadium now under development at UBC.

An extension of Sixteenth Avenue planned by the provincial department of highways will join Marine at the heart of the new major arboretum and botanical garden area, providing very easy public access.

"The possibilities here are striking." Dr. Macdonald said. "For instance, the University's large rhododendron collection can be located here along these public routes and provide in the springtime one of the sights of British Columbia."

PHASE OUT ARBORETUM

Dr. Macdonald said the Academic Committee on Landscape Development had recommended, and the Board has approved, the phasing out of the present 41/4 acre area (solid block on map) lying between the West Mall and the Lower Mall Residences, now known as the arboretum and rock garden, in conjunction with the development of the new areas.

Most of the trees in this area can be moved within two years to the that there is no preventable loss of

these valuable trees, Dr. Macdonald said. "Our planners believe that any future development of this area for other purposes can be made to incorporate most, if not all, of the trees that cannot be moved."

Patch logging and clearing started last summer for the 145.55 acres at the south end of the campus now allocated officially to field and research work, to research centres, and to University service. The allocations are being carved out of the last 280 acres of undeveloped campus lying south of the proposed extension of Sixteenth Avenue.

BANDS OF TREES

Areas will be screened by wide bands of trees, in some instances natural growth and others planted trees, Dr. Macdonald said, Some areas will be left in a natural state or only partially cleared, depending upon potential use,

"The nine acres allocated to the B.C. Research Council have been provided at the request of the provincial government that we find room to keep the Council on the campus," Dr. Macfrom its present small area in the northern academic core."

READY FOR 1967-68 ACADEMIC YEAR

Stadium, Metallurgy Tenders Called For

The Board of Governors has authorized calls for tenders for a six-storey metallurgy building and the grandstand of a replacement stadium at the University of B.C., President John B. Macdonald has announced.

FINANCING

Both structures are scheduled to go into service in the 1967-68 academic year. Both are to be financed as part of UBC's \$30 million, five-year capital development program provided by provincial government grants and pri-

Foresters Speak at Congress

Two members of the University of B.C.'s faculty of forestry presented papers at the sixth World Forestry Congress in Madrid, Spain, June 6-18.

Prof. Philip G. Haddock and Prof J. H. G. Smith both addressed meetings of the Congress which is organized by the Food and Agriculture Organization of the United Nations The first World Congress met in Rome in 1926, the most recent in Seattle in

More than 2,000 foresters representing nearly 150 countries attended the meetings. Twenty Canadian government researchers and university

teachers gave papers at the meeting. Prof. Smith attended a pre-Congress meeting of a working group of the International Union of Foresters in Zurich, Switzerland, May 31-June 3 where he delivered a paper entitled "Studies of crown development are improving Canadian forest manage-

At the World Congress he spoke again on "Factors influencing the accuracy of estimation of growth of Douglas fir trees."

Prof. Haddock has co-authored a paper with Dr. Oscar Sziklal. associate professor of forestry at UBC, entitled "Seed collection zones for Douglas fir in Canada."

Both UBC delegates also took part in pre and post-conference tours of reforestation, watershed management, and forest management projects involving both native and imported tree species in Spain.

vate giving through the 3-Universities Capital Fund.

Architects for the metallurgy building are McCarter Nairne & Partners. Tenders will be called on the basis of a six-floor structure with the interior of the top two floors left unfinished. (See picture below).

In its initial phase the metallurgy building will provide the department of metallurgy with equivalent floor space to that now used in some seven small, dispersed buildings.

SIX BUILDINGS

Sited on the Main Mall between the present B.C. Research Council building on the north and the forestryagriculture building under construction on the south, the metallurgy building is part of a six-building applied science (i.e. engineering) complex being developed in the area.

UBC BOTANIST SUPERVISES STUDY IN HAWAII

Dr. Vladimir Krajina, professor of botany at the University of B.C., has left for Hawaii to initiate a major study of the plant life there.

At the invitation of the University of Hawaii, Dr. Krajina will supervise the work of six graduate students who will systematically study the way in which plants have adapted to the characteristics of climate and soil composition in 14 biogeoclimatic zones in the islands

The project is an extension of work previously carried out by Dr. Krajina who mapped the 14 biogeoclimatic zones of the islands during visits in 1929-30 and 1961-62.

After getting the project underway in June and July, Dr. Krajina will fly to Tokyo where he will give a paper on the Hawaijan project at the Pacific Science Congress which meets in Tokyo for three weeks beginning August 22.

He will return to Vancouver in September.

UBC REPORTS

Volume 12, No. 3 — June-July, 1966. Authorized as second class mail by the Post Office Department, Ottawa, and for payment of postage in cash. Published by the University of British Columbia and distributed free of charge to friends and graduates of the University. Material appearing herein may be reproduced freely. Letters are welcome and should be addressed to The Information Office, UBC, Vancouver 8, B.C.

The chemical engineering and electrical engineering buildings already are in use. In April the Board authorized preliminary drawings for a mechanical engineering building, a civil engineering building and an engineering common block in the area.

The Thunderbird Stadium grandstand is a unique design by Vancouver architect Vladimir Plavsic, a graduate of the UBC School of Architecture. It will seat 3,000 - the capacity of the stadium it will replace - but seating can eventually be extended to 15,000 persons. (See picture below).

SUSPENDED ROOF

To avoid the high cost of a conventional cantilever roof, or the alternative view interference of supporting posts, the roof will be suspended on 11/2 inch cables from a dozen 80 foot stressed-concrete bosts, each topped by a cast of the Thunderbird. Excavation for the stadium, drain-

age, a clay base for the Olympic-size track and other preliminary work has been completed. Seeding of the stadium playing field to provide a first class field will be finished this

summer. The grandstand will face west, nestled into the sloping ground so that spectators entering from a sweeping eastern plaza will find themselves at

the top level of seats. Thunderbird Stadium will replace the stadium built mainly by student contributions in the 1930's in what is now the highly developed academic core of the campus.

STUDENT BUILDING

The site of the old stadium has been earmarked for a \$4 million Student Union Building, to be erected mainly by a special \$15 a year addition to Alma Mater Society fees which the student body has voted to assess

UBC to Maintain Coast Boat Haven in Perpetuity

A small boat haven which the University has undertaken to maintain in perpetuity on Homfray Channel will provide an extremely promising area for research in fisheries and oceanography and as an ecological reserve.

"The Board of Governors was delighted to accept possession and responsibility for this academically useful natural beauty spot from the Reed and Sarah Hunt Fund," Dr. John B. Macdonald said. "It is the objective of Mr. Reed O. Hunt, Senior, and his family to preserve Prideaux Haven in perpetuity for pleasure boat users, who have long made it a favorite anchorage.

RETAIN BOAT HAVEN

"The University is entitled to use. improve or develop the property for academic purposes provided its natural beauty is not impaired and public enjoyment of the boat haven is not obstructed. In return, the University has undertaken to ensure that it is not marred or its assets destroyed, and it cannot be sold. It will be perpetually available, therefore, as a boat haven available for transient use by all who sail pleasure craft in the Homfray Channel."

The 40-acre property, located 14 miles north of Powell River, has a shoreline of about three-quarters of a mile. As university property, it is not taxable.

Dean of Graduate Studies Ian Mc-Taggart Cowan said: "The area has unique values even in a region which

is so amply supplied with magnificent wild land and foreshore. As a biological site, the waters adjacent are the warmest in British Columbia, and offer very interesting opportunities for studying the influence of temperature on reproduction, survival and population densities of a number of inter-tidal species of marine organ-

"Diving I have done in the area has produced evidence of invertebrate populations that are unlike those elsewhere in the province.

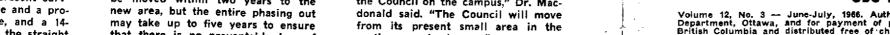
"Ashore, the flora is interesting. Prideaux Haven is in the northern extreme of the Gulf Islands biotic area, characterized by arbutus as an important tree species.

"Ecologists on the University faculty have long been discussing the desirability of having set aside, as ecological reserves, small areas representative of each major biotic region in the province.

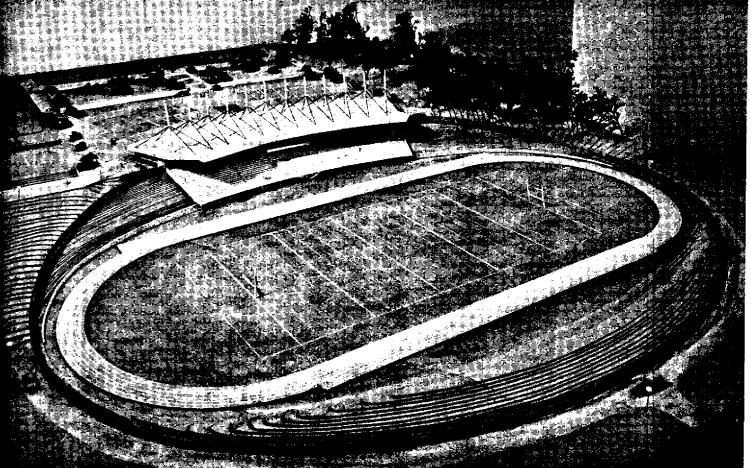
EXCELLENT EXAMPLE

"This is an excellent example of this particular biotic area. We can hope that its preservation by the University will give impetus to the establishment of ecological reserves in other major biotic areas - a matter becoming increasingly urgent due to the rapid development of the province."

Mr. Reed O. Hunt, is chairman of Crown Zellerbach Ltd., San Francisco. A son, Mr. Reed O. Hunt, Jr., lives in West Vancouver.







PART OF \$50 MILLION ESTATE

Bequests to UBC May Total \$13.5 Million

The University of B.C. Board of Governors has accepted two bequests expected to total \$9.5 million from the residue of the estate of the late Dorothy J. Killam.

The Board previously accepted a specific \$4 million bequest, bringing to \$13.5 million the expected UBC total from the \$50 million estate.

All funds are in fixed endowments, with the annual earnings only available to UBC for specified

THREE FUNDS ESTABLISHED

The three funds provide for university teachers' salaries, for scholarships in advanced studies and for general endowment purposes.

The widow of the late financier Izaak Walton Killam was a Halifax resident who died in France last August at the age of 62.

Mr. Killam's cousin, Lawrence, is a Vancouver resident and two of Izaak Killam's great-nephews graduated in engineering from UBC: David in 1959 and Frank in 1964.

Mrs. Killam's will provided for UBC:

A \$4 million Killam Memorial Salary Fund with "income to be used exclusively at the discretion of the Board of Governors . . . with the approval of my trustees to pay salaries of its teaching staff (other than staff concerned with "the arts' as presently defined in the Canada Council Act) . . . Under no circumstances is any part . . . to be used directly or indirectly for purchasing equipment or erecting buildings."

● A fund expected to total \$5 million "to be retained in trust . . . as part of . . . general endowment funds with income only therefrom to be used from time to time . . . for such purposes as may be determined" by the Board of Governors.

An expected total of \$4.5 million as the Izaak Walton Killam Memorial Fund for Advanced Studies, the earnings to provide Killam Scholarships "for advanced study or research at universities, hospitals, research or scientific institutes or other equivalent or similar institutions both in Canada and in other countries in any field of study or research other than 'the arts' as presently defined by the Canada Council Act and not limited to the humanities and

social sciences referred to in such act."

Mrs. Killam's will also said: "My purpose in establishing the Killam Trusts is to help in the building of Canada's future by encouraging advanced study. Thereby I hope in some measure to increase the scientific and scholarly attainments of Canadians, to develop and expand the work of Canadian universities, and to promote sympathetic understanding between Canadians and the people of other countries...

CONTRIBUTE TO LEARNING

"It is my desire that those selected to receive scholarships shall be likely to contribute to the advancement of learning or to win wide distinction in a profession and it is my hope that insofar as possible scholarships will be granted for work leading to a doctorate or for work of similar standing.

"However, a Killam scholar should not be a onesided person and each scholar's special distinction should be founded upon sound character and good manners.

"No person shall be qualified or disqualified as a Killam scholar on account of his or her race."

Award For UBC Scientist

Dr. Gordon H. Dixon, associate professor of biochemistry at UBC is the first recipient of the Ayerst Award of the Canadian Biochemical Society.

The newly-established award is given annually in recognition of "meritorious biochemical research in Canada" to an individual under 38 years of age who has accomplished "outstanding research and demonstrated independence of thought at an early stage in his career."

The award carries with it a prize of \$1,000 and an inscribed tray. Formal presentation was made at the annual meeting of the Canadian Biochemical Society at UBC in June.

DOUBLE HONOUR

Dr. Marvin Darrach, head of UBC's biochemistry department, said the award to Dr. Dixon is a double honour since the recipient is chosen both for his past performance and future potential.

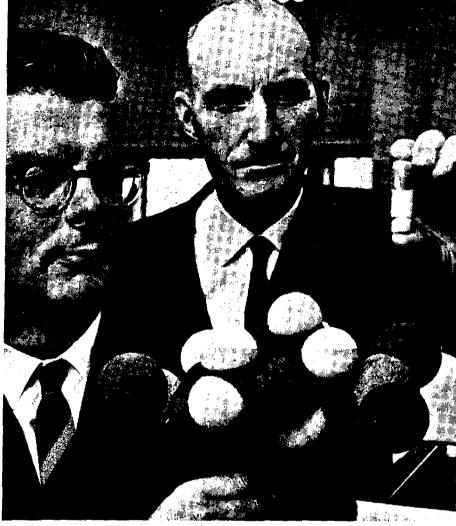
"Dr. Dixon," he said, "has exhibited a unique talent for the imaginative selection of problems and for the brilliant design and execution of experiments in the field of protein chemistry, one of the most complex, yet exciting and important areas of biological and medical research.

"In this difficult field of protein blochemistry, Dr. Dixon's work has brought much light and understanding," Dr. Darrach said. "The Canadian Biochemical Society has recognized in Dr. Dixon and his field of research great hope for future advances in these most fundamental aspects of medicine and biology."

Dr. Dixon, who joined the UBC faculty in 1963, currently holds grants totalling \$84,000 from the Medical Research Council of Canada to study the structure of proteins and their relationship to biological functions in the human body.



DR. GORDON H. DIXON



TWO UBC SCIENTISTS who have received \$13,000 in grants to test nitrate ester compounds which may one day be used to treat heart disease are Dr. Douglas Hayward, of the chemistry dept., left, and Dr. J. E. Halliday, of the faculty of pharmacy. Dr. Hayward holds a model of a single molecule of a newly-synthesized ester developed in his laboratory. Dr. Halliday holds a small vial of the nitrate ester which he will use for scientific testing. The number of molecules in the vial is estimated by Dr. Hayward as three multiplied by ten to the 21st power, or three followed by 21 zeros.

NITRATE ESTERS

Two Scientists Get Grants for Drug Tests

Grants totalling \$13,000 have been made to two University of B.C. scientists for the production and testing of new drugs which may some day be used in treating heart disease.

The Warner-Lambert Pharmaceutical Company has made the grants to Dr. L. D. Hayward, of the UBC chemistry department, and Dr. J. E. Halliday, of the faculty of pharmacy, for work on a complex group of compounds known as nitrate esters.

Of 418 known nitrate esters, nitroglycerine and pentaerythritol nitrate are major drugs used to treat a heart condition called angina pectoris, which is characterized by intense pain in the heart area.

The nitrate esters, which patients take in pill form, relieve the pain by dilating the blood vessels and by other complex physiological means.

Dr. Hayward, one of the few chemists anywhere in the world who has made a lifetime study of nitrate esters, began work on these compounds 20 years ago.

His chief aim has been to study their

fundamental chemical properties, particularly the reaction involved in their explosive decomposition and biological action.

Six years ago he synthesized an entirely new nitrate ester, and because its molecular structure was related to other such compounds, was able to predict that it would have a potent biological effect.

Extensive tests carried out by Dr. Halliday in the faculty of pharmacy confirmed Dr. Hayward's predictions.

Pharmaceutical companies are intensely interested in new nitrate esters, Dr. Hayward said, as possible drugs for treatment of heart disease patients.

Since 1960, Dr. Hayward and his students have synthesized about two dozen nitrate esters, two of which are currently being tested by Dr. Halliday.

Both scientists emphasized that the new nitrate esters prepared by Dr. Hayward would have to undergo years of rigorous and exhaustive tests before they could be used by humans.

Pollution Control Sought

A UBC professor is one of 30 persons selected to read a research paper at a 26-day conference on water resources at New Mexico State University June 13 to July 8.

Professor T. Lionel Coulthard, head of the department of agricultural engineering and mechanics in UBC's faculties of applied science and agriculture, will speak on "Biological investigations into the pollution of water supplies."

OKANAGAN RESEARCH

The paper will be based on research he has carried out in the Okanagan valley since 1957 on the pollution of water supplies by algae, the simplest form of plant life.

Prof. Couthard's work in the Okanagan valley began in 1957 when he was asked to investigate an algaechoked reservoir at Westbank, opposite Kelowna.

He found the reservoir coated with a four to six inch layer of algae which had polluted the water and was responsible for a continuous "rotten eggs" odour as a result of decay.

SUPPLY IMPROVED

The water supply for drinking purposes has been considerably improved since then as a result of chlorination and copper sulphate is added separately for irrigation purposes.

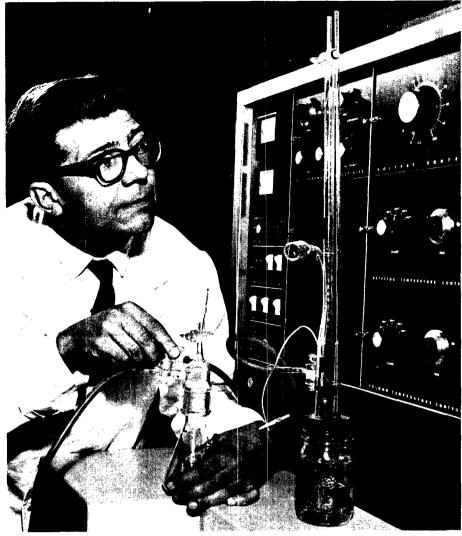
In the meantime, however, Prof. Coulthard and his graduate student assistants have continued to search for a more effective algae-killer.

Recently he has been testing a German-manufactured chemical called Dimanin, which he discovered while in Ghana in 1962 as an agricultural adviser to the government and a lecturer in agricultural engineering and dean of the faculty of agriculture at the University of Ghana.



PROF. T. LIONEL COULTHARD

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DR. LEROY WULLSTEIN, of UBC's faculty of agriculture, has discovered a neverbefore documented chemical reaction which explains why millions of dollars worth of nitrogen is lost annually to farmers. Dr. Wullstein is shown adjusting an electrolytic respirometer used for study of soil and bacteria. The large machine is a gas chromatography unit which analyses the contents of the respirometer.

NEW CHEMICAL REACTION

UBC Agriculturalist Explains Nitrogen Loss

A UBC scientist has discovered a basic chemical reaction which will aid in understanding why thousands of tons of nitrogen representing millions of dollars are lost annually to farmers.

For the past six years, Dr. Leroy Wullstein of UBC's faculty of agriculture has been working on the problem, which is related to the nitrogen cycle, the basic process by which nitrogen in organic fertilizers is changed and utilised to promote plant growth.

NITROGEN LOSS

Scientists have known since the 1920s that somewhere in this cycle there is a considerable loss of nitrogen from soils.

Not only has Dr. Wullstein pinpointed the place in the cycle where the reaction takes place, but he has found that free nitrogen is created as the result of a complex chemical reaction never before documented.

When bacteria attack organic material in soils they first create ammonia, then nitrites and finally, nitrates. Ammonia and nitrates are the material used by plants for growth.

Scientists have always thought that free nitrogen is created by the bacterial reactions involved in this cycle.

History Teacher Awarded Grant

Dr. Philip J. Greven, an assistant professor of history at the University of B. C., has been awarded a \$700 research grant by the American Association for State and Local History of Nashville, Tennessee.

The grant will enable Dr. Greven to continue research on the early history of Andover, Massachusetts, a New England town near Boston.

The research material will be used in writing a book about 17th and 18th century family life in Andover. The same subject was the basis of Dr. Greven's doctoral thesis at Harvard University.

The grant was one of 16 totalling \$7,050 to applicants in Canada and the U. S. engaged in the research, writing and publication of local history.

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Dr. Wullstein's research has shown that this idea is false.

REACT WITH METALS

His results clearly show that when the cycle reaches the point where nitrites are created these actually react with certain metals present in the soil to create large quantities of nitrogen gas which may be volatilized from the soil solution.

Dr. Wullstein's discovery will have basic and broad implications in a number of fields, including chemistry, biochemistry and agriculture.

For the chemist it means investigation of a hitherto unknown chemical reaction and since the mechanism of the reaction is now partially known agricultural researchers can concentrate on developing methods of preventing the nitrogen escape.

Dr. Wullstein is currently working on a method of chemical control which will minimize the nitrogen loss. He hopes that by reducing the activity of the metals naturally found in the soil the reaction which creates the free nitrogen will be dampened.

He cautions, however, that a delicate balance has to be reached in slowing down the reaction. Steps which would completely stop the metal-nitrite activity would almost certainly affect soil fertility.

The National Research Council of Canada has granted Dr. Wullstein \$10,000 this year for further research studies. Nature, the prestigious English publication, has already accepted a report of Dr. Wullstein's research for publication in the near future.

The bulk of Dr. Wullstein's research was carried out at UBC. Some of the soil analyses were performed at Oregon State University with the cooperation of Dr. C. M. Gilmour who has co-authored research papers on the subject with Dr. Wullstein.

UTAH NATIVE

Dr. Wullstein is a native of Utah and a graduate of the University of Utah, where he received his bachelor of science degree in 1958, and Oragon State University, where he was awarded his master of science degree in 1961, and his Ph.D. in 1964.

He has been a member of the UBC faculty of agriculture since 1964 and last year was awarded a grant to participate in an international symposium on pesticides sponsored by the North Atlantic Treaty Organization in England.

Three U's Cooperate in Cyclotron Design Study

Scientists representing the three public universities have been granted \$100,000 for a design study on a new cyclotron.

The grant, from the federal government's Atomic Energy Control Board, will be used in the next year by a team representing the University of B.C., the University of Victoria and Simon Fraser University.

SEEK FUNDS

Following the design studies, the team will seek funds from the federal government to proceed with construction of a nuclear accelerator called TRIUMF, short for Tri-University Meson Facility. The project would cost an estimated \$13 million and could be completed by 1972.

The TRIUMF project would be located at UBC and would make British Columbia a major centre for nuclear research.

Dr. Erich Vogt, professor of physics at UBC and chairmen of the design study group, said TRIUMF would represent a major step forward in development of nuclear accelerators and would pioneer new fields of nuclear research.

He said TRIUMF would be unique in that it would produce a thousand times more mesons than any present machine and its proton beam would have an intensity 1000 times greater

FROM PAGE ONE

Expand Graduate Studies

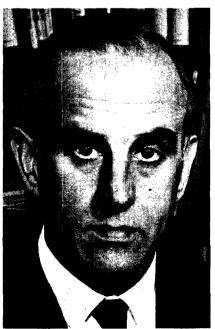
tioned in the continuous debate on the control and direction of Canadian business is that there is only one Canadian university offering studies in business administration beyond the master's level. The great majority of doctoral candidates are obliged to study abroad.

MAKE CONTRIBUTION

"It is not narrowly nationalistic to provide these people with an effective choice between a Canadian university and one elsewhere. It is merely the kind of choice which should be characteristic of our society. As one of the largest faculties of commerce and business administration in Canada, we have a clear responsibility to make a contribution."

Born in Belper, Derbyshire, England, Dean White took his bachelor of science (estate management) in 1949, and his master of science (estate management) in 1951 at the College of Estate Management, University of London. He became head of the Valuation Department there in 1952.

His awards include that of Recognized Teacher of the University of London in Valuation and Taxation of Land and Buildings in 1955, and the Gold Medal from the Royal College of Chartered Surveyors, England, in 1961. Dean White is a Fellow of the Royal Institution of Chartered Surveyors and a Fellow of the Chartered Auctioneers' and Estate Agents' Institute.



DEAN PHILIP H. WHITE

than anything presently available at this energy.

UBC BUILDING

As a result, scientists working with the machine would be able to carry out many different kinds of nuclear experiments.

Included in the estimated \$13 million total cost is a \$3 million building which UBC will be asked to provide. The UBC Board of Governors has already allocated a five-acre site for the TRIUMF building in a new research area being developed at the south end of the campus. (See page 4).

Dr. Vogt emphasized that TRIUMF would be a cooperative project organized as a regional laboratory to serve equally the interests of scientists at the three west coast universities participating in the project.

TRIUMF would consist of a spiral ridge cyclotron, a large accelerator for the production of short-lived nuclear particles called mesons. The mesons produced by the machine will enable scientists to undertake fundamental research in the field of nuclear structure.

NUCLEAR BEHAVIOUR

In addition to experiments in the field of nuclear physics and nuclear chemistry, TRIUMF would enable scientists to study the nature of mesons themselves and the forces between other elementary particles such as protons and neutrons. The meson beams could also be useful in medicine and biology.

cine and biology.

Here is how TRIUMF would produce the elementary particles called mesons:

The first step is the production of negative hydrogen ions outside the cyclotron. This is done by an electrical discharge in hydrogen gas which generates negative ions.

These negative ions are then drawn off and brought into the middle of the cyclotron where they go into circular orbits. Here they are accelerated in a fraction of a second in a radio frequency field to an energy of 500 million electron volts (MeV).

During the acceleration process the electric charge of the ion is reversed by stripping off two electrons and at this point the ion stream becomes a proton beam.

MESON BEAM

The protons are then curved out of the machine and a beam guiding system directs them at a target material, e.g., copper or carbon, to produce a meson beam. The mesons are produced when the proton beam bombards the nucleus of the carbon or copper.

The mesons, produced as a secondary beam, are then used to bombard a secondary target. The target either an element or a compound, will vary according to the kind of experiment being carried out.

Astronomy Institute Planned

Plans for construction of a National Institute of Astronomy on the UBC campus have been announced in Ottawa by the minister of mines, Hon. Jean-Luc Pepin.

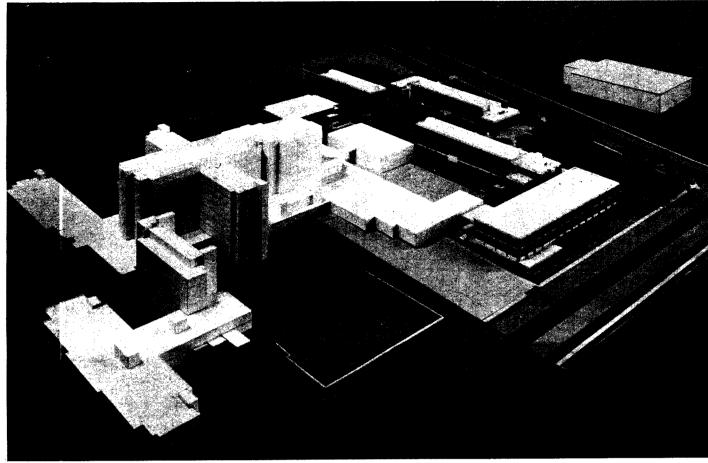
The new Institute, which will include a \$1 million optical shop, will be constructed on a five-acre site in the new 146-acre south campus research area. (See stories on pages one and four).

Construction of the optical shop, which will grind the 154-inch mirror for a telescope at the new Queen Elizabeth Observatory near Osoyoos, will begin in September or October.

The building for the National Institute of Astronomy will be constructed within two years. The Institute will analyze the findings of astronomers working at the telescope site.

The new Institute will also enhance graduate studies at UBC. Senate approval will be sought for an expansion of studies in astronomy.

The form which the program will take is now under consideration in the faculty of science and graduate studies.



CONSTRUCTION STARTED this week at UBC on the first phase of the Health Sciences Centre, shown in the architect's model above. The first phase of the Centre - accommodation for psychiatric treatment — is the wing at lower left in the model. The total Health Sciences Centre will be made up

of the solid white buildings, and will include a teaching. research and referral hospital for treating exceptional medical cases. The darker buildings at top right are either constructed or are under construction. The white building shown in outline across University Boulevard is the War Memorial Gymnasium.

CONTINUED FROM PAGE ONE

Hospital Includes Latest Aids

are to meet the growing demands, for medical care. We cannot educate enough physicians for many years to come. In many instances, disciplines trained in shorter time at lower cost than doctors will be able to take over work now done by doctors, allowing doctors to concentrate their energies and time on the most essential medical problems.

HIGHLY SPECIALIZED

"Because of the highly specialized nature the cost of the centre cannot be compared with the cost of providing a community treatment hospital.

"The most important feature of the building is the inclusion of adequate and strategically-located teaching and research space within the patient service areas. This will eliminate the many difficulties and inefficiencies of under-spaced teaching hospitals of the past, and of teaching in what are

primarily community service hospitals. - the necessity, for instance, of trying to conduct individual patient lec-

Architects Cited

Two UBC architects and a graduate of the school of architecture have been honoured with citations of morit from the Architectural Institute of B.C.

The citations were given for projects completed during the past year.

Arthur Erickson, associate professor of architecture, received his citation for a house and Professor Wolfgang Gerson was cited for the design of the new Unitarian Church complex at 49th and Oak in Vancouver.

William R. Iredale, a 1955 graduate of the school of architecture, was honoured for the design of a new food plant in Vancouver. He is a m-mber of the firm of Rhone and

tures, seminars and so on in busy corridors, nursing stations and even broom closets."

Dean McCreary said that the centre will incorporate such modern advances as a computerized hospital information system to improve the recording and analysis of the conditions of patients, the use of video tape and TV in teaching, and many other concepts now under study and development.

RESIDENCE ACCOMMODATION

It is also anticipated that the Centre will have under treatment many times the 410 bed patients. Though not included in present financing estimates. there is a general plan to provide low-cost temporary residence accommodation near the centre for many hundreds of patients able to visit it on a day basis for treatment.

DEAN COWAN JOINS U.S. COMMITTEE

Dean of Graduate Studies Ian McTaggart Cowan has been appointed as the only Canadian member of a top wildlife advisory committee to United States Secretary of the Interior Stawart L. Udall.

The Washington announcement called Dean Cowan "one the world's foremost ecologists." Dean Cowan is a professor and former head in the department of zoology at UBC.

He attended his first meeting in Washington in June as a member of the Interior Department's Advisory Board on Wildlife and Game Management.

The meeting was called to map plans on how the National Wildlife Refuge System should be completed. Secretary Udall has asked the committee speci-fically "what the National Wildlife Refuge System should be, if it could be rounded out, filled in or otherwise altered and completed to include all that our national wildlife lands and waters should include or conversely, need not or should not include."

Grads Honoured Again

The UBC Alumni Association has been chosen for the second straight year for an American Alumni Council administration award for top honours among Canadian universities. The Award recognizes alumni programs which "mobilize behind education the full strength of organized alumni sup-

BANQUET HONORS

President John B. Macdonald told the Alumni Association's annual dinner May 11 at Hotel Vancouver, "UBC is the one Canadian university to receive the award this year, along with 13 American universities."

Honored at the dinner were Dean Walter Gage, Leon Ladner, QC, and Michael W. Hunter.

Dean Gage, professor of mathematics and dean of inter-faculty and student affairs, received the Alumni Merit Award given annually to a graduate who has distinguished himself and made a significant contribution in any field of endeavour since graduation. Dean Gage, of the UBC class of 1925, is the third winner of the merit award.

Leon Ladner, QC, a member of the UBC Board of Governors, was made a life member of the Alumni Association in recognition of his outstanding contribution to higher education and his association with UBC for more than half a century.

LETT SCHOLARSHIP

Michael W. Hunter, law 11, of Burnaby, became the first recipient of the \$1500 Sherwood Lett Memorial Scholarship established in March. The scholarship is given to a student displaying the all-round qualities of the late Chief Justice and former Chancellor of UBC — "high scholastic and literary attainments, physical vigour, moral force of character and ability to serve, work with and lead others."

Terrence Mullen, who has been teaching at Prince George, was awarded the Alumni Scholarship of \$3,000. He plans to study for a master's degree in education next year.

Management consultant Kenneth R. Martin, B.Com. '46, was elected president of the Association for 1966-67. During the past year he served as third vice-president and chairman of the "B.C. '76" conference held in March.

Also elected were Mrs. J. M. Lecky, first vice-president; Stanley Evans, second vice-president; Dr. Walter G. Hardwick, third vice-president; and David Helliwell, treasurer.



KENNETH MARTIN

BOARD OF GOVERNORS

Mr. Justice Nemetz Re-elected Chairman

The University of B.C. Board of Governors has re-elected the Hon. Mr. Justice Nathan T. Nemetz as chairman for the year ending June 30, 1967.

Mr. Justice Nemetz was elected acting chairman in the spring of 1965 to complete the term of the late George T. Cunningham, and re-elected for a one-vear term as chairman starting July 1, 1965.



MR. JUSTICE NATHAN T. NEMETZ

Though members of the Board are elected or appointed for three-year terms, they elect their chairman annually.

Mr. Justice Nemetz is one of the three members elected to the 11-member Board by the UBC Senate. He has been a Board member since 1957, and a member of Senate, appointed by the Alumni Association board of management, since 1957. He is a former president of the Alumni Association.

The Board also includes six members appointed by the Lieutenant-Governor in Council, and the Chancellor and President as ex-officio members.

A McGowan Cup debator and an editor of The Ubyssey, Mr. Justice Nemetz graduated from UBC with first class honors in history in 1934. He graduated from Vancouver School of Law in 1937.

Reports

JUNE-JULY, 1966 VOLUME 12, No. 3 RETURN POSTAGE GUARANTEED JUDITH SHARK LIBRARY