# THE UNIVERSITY OF WESTERN ONTARIO 



Report of the President Academic Year 1961-1962

# REPORTOFTHE PRESIDENT <br> AND VICE-CHANCELLOR 

to

THE BOARDOF GOVERNORS

AND THE SENATE

$$
\begin{gathered}
\text { For the Academic Year } \\
1961-62
\end{gathered}
$$

## TABLEOF CONTENTS

University - General ..... i
The University Senate ..... 1
The Registrar's Department ..... 5
Office of the Comptroller ..... 7
Faculty of Graduate Studies ..... 15
Faculty of Medicine ..... 20
Faculty of Law ..... 24
Faculty of Engineering Science ..... 30
Faculty of Arts and Science ..... 39
University College ..... 43
Middlesex College ..... 48
School of Nursing ..... 51
School of Business Administration ..... 57
Affiliated Colleges: ..... 63
St. Peter ${ }^{8}$ s Seminary and College of Christ the King ..... 67
Ursuline College of Arts ..... 71
College of Music ..... 74
Summer School and Extension Department ..... 76
Trois-Pistoles Summer School ..... 78
The University Libraries ..... 80
Museum of Indian Archaeology and Pioneer Life ..... 86
Department of the Dean of Women ..... 89
Department of the Dean of Men ..... 92
President's Medals ..... 96
University Athletic Association ..... 97
Intercollegiate Athletics ..... 100
The Western Ontario Secondary Schools' Association. ..... 103
University Health Service ..... 105
Alumni Association ..... 111
Joint McIntosh Committee ..... 117
The Department of Buildings and Grounds ..... 118
University Naval Training Division ..... 123
University Canadian Officers ${ }^{\prime}$ Training Corps ..... 125
University Reserve Squadron (RCAF) ..... 129
Appendix A - Staff Changes ..... 133
Appendix B - Registration Summary ..... 147
Appendix C - Winners of Ontario Scholarships. ..... 148
Appendix D - Senior Awards ..... 150
Appendix E - The Dean ${ }^{\prime}$ 'Honors Lists ..... 155
Appendix F - Student Loans and Bursaries ..... 159
Appendix G - Publications ..... 163
Appendix H = Schedule of Research Funds ..... 205

# REPORT OF THE PRESIDENT AND VICE-CHANCELLOR 

To the Board of Governors and the Senate

For the Year July 1, 1961 - June 30, 1962

Ladies and Gentlemen:

How could I report in 1959-60, "We know that in a year or two we cannot accept all who wish to enter Western. Our determination to remain relatively small, and even 5,000 will be a relatively small student body in comparison with some which will be 20,000 or so, is based upon ideals and decisions of this University," and again in 1960-61, "The decision to limit the full-time intramural enrollment of the Constituent University to some 5,000 students necessitates, at the same time, decisions concerning the size of the Affiliated Colleges relative to the size of the Constituent Faculty of Arts and Science," and subsequently support the decision that Western should plan to provide places for some 9,000 students by 1970 ?

It is right that I should answer that question not only because of the decision itself, which was a vital one, but also because of the magnitude of the problems to be faced as a consequence of that decision.

Some ten years ago university presidents, principals, deans and professors spent days and weeks travelling this country and from every conceivable platform spoke of the crisis in higher education in Canada. We tried, and obviously succeeded, to impress the people of Canada that without money and understanding the universities of Canada could not do the job which was expected of them and which they were willing to undertake. We will never forget the crisis in higher education! The Federal Government Grants to the universities of Canada made it possible for the universities, not only to survive, but also to open their doors to additional thousands of students. And as we were, during the past ten years, struggling to provide the staff and the physical facilities relevant to that "crisis" yet another crisis was in the making. The problem is the provision of post-secondary education
for unprecedented numbers of students during the next eight years.
Within the Province of Ontario much serious thought has been given to this problem and to its solution. The presidents of the universities met with the Provincial Government's University Affairs Committee at which time startling and indeed disturbing data were presented to us. The university presidents appointed a sub-committee, under the chairmanship of Professor John Deutsch, to study the data and to make recommendations. Mr. Willis, Vice-President of Western, was a member of that committee.

So urgently needed was this sub-committee report that the members of the sub-committee were given not six months in which to study the problems involved, but just six weeks! Their report was ready within that time limit. The sub-committee then met with the Ontario university presidents; only one or two words and phrases of this report were altered, and the approved report immediately forwarded to the University Affairs Committee. The fate of thousands and thousands of young people, and indeed the future of higher education in Ontario, is at stake.

## What is this all about?

In 1961 Dr. Edward Sheffield, Research Officer of the Canadian Universities Foundation, presented an unusually fine report entitled "University Development: The Past Five Years and the Next Ten." He stated, in part, "The 1955 projection of enrollment was revised upward in 1957 and again in 1959. A new projection for the ten years 1960-61 to 1970-71 suggests the likelihood that enrollment will increase nearly two-and-threequarters times over that period - at a rate of roughly ten per cent per annum in the next five years, rising to eleven per cent in the following five years. Last year, 1960-61, there were 114,000 full-time students in our universities and colleges. In 1970-71 we may expect something like $312,000.1$ Then Dr. Sheffield added, "This figure [ 312,000 ] is 83,000 higher than the one shown for the same year, 1970-71, in the 1959 projection!"

On the basis of the 1959 national data it had been assumed that about 58,000 university places would have to be provided in Ontario by 1970. But Dr. Jackson, Consultant of the University Affairs Committee and Director of Research for the Ontario

Department of Education, dealing specifically and solely with Ontario's population, prepared a three-volume report upon which he made several projections of post-Grade XIII enrollment, which indicated that some 60,000 post-Grade XIII places would have to be provided, not by 1970, but by $1965!$ By 1970 some 112,000 such places would be required! This was the staggering sum and substance of Dr. Jackson's data which were given to Dr. Deutsch's sub-committee for examination.

Here is the picture as specifically related to the Universities. There will likely be 55, 000 full-time undergraduate students in Ontario universities in 1965 and 91, 000 in 1970. But we have been warned that 100,000 by 1970 is a distinct possibility. We cannot, with any sense of responsibility, use lower figures.

At the present time greatly increased numbers finishing Grade X will complete Grade XIII in 1965. This move will be followed immediately by a further major increase in 1966. There may well be as many freshmen in Ontario universities in 1966 as there are students today. The years from 1968 to 1972 will be, on the basis of present data, relatively stable, but from 1972 to 1980 'there will be very substantial increases every year." In the words of the sub-committee, "We face an unremitting expansion, of spasmodic intensity, with no contraction in sight in the foreseeable future, and with major crises just three or four years ahead. ${ }^{\text {n }}$

Expansion - rapid expansion - of university facilities in Ontario has become urgent. But what kind of facilities? The sub-committee examined the trends in post-secondary school enrollment in Ontario in an attempt to predict what kind of further education the majority of the students will require. It was pointed out that although the enrollment in Ontario universities increased by 67 per cent in the last seven years, the really great expansion has taken place in Arts and Science and in Graduate Studies. In Arts and Science the increase has been 123 per cent and in Graduate Studies, 100 per cent.

It would appear, too, that the greatest demand within our society, over the next decade at least, will be for Arts and Science graduates with particular emphasis on those graduating from honours courses. The increasing demand for those with
post-graduate training will, without question, see a major increase in the enrollment of students in Graduate Studies. I will refer to this later on.

The Committee, in examining the present facilities of universities within the Province, noted that the present and planned physical facilities in Engineering will be adequate for some time. The same is true relative to Law. There is need for greater capacity in Medicine, in Dentistry, and in Pharmacy. Another faculty of each of these three will be needed by the late '60's together with added facilities for training nurses, therapists, technicians and technologists. The fields of Social Work and Physical and Health Education, expanding rapidly as they are, will also need greater facilities within the next eight years. With the se exceptions, as mentioned, the professional schools in the existing Ontario universities will be able to take care of the likely undergraduate demands which will be made upon them, and at the same time graduate a sufficient supply of professionally qualified people provided, of course, that the universities have the financial resources with which to add staff and provide necessary equipment.

It is as important to know where new facilities for higher education should be located as it is to know what kind of facilities should be provided. No longer, as the sub-committee pointed out, is there any possibility, certainly in the foreseeable future, of new universities and colleges being established through purely private benefaction. The "state" must supply most of the capital funds for new buildings and equipment and a large portion of the annual operating budget. This being so it must be accepted that the government of the Province of Ontario, through its University Affairs Committee, should determine where any new university shall be established and the nature of that institution.

The areás in the Province where the greatest increases in university student population are likely to occur are known. Such areas are the population pressure areas within the Province and, of course, in planning new facilities are of considerable significance.

Already announcements have been made concerning the establishment of Trent University in Peterborough. There a local group of citizens, knowing that their city was a "population
pressure area" initiated the development. In like manner a group of interested citizens in the Niagara Peninsula have expressed their intention to establish a university in their "population pressure area."

Such realistic developments, initiated and supported by local citizens, encouraged by the University Affairs Committee and assisted subsequently by the Provincial Government, create the optimal conditions for the successful growth of a new institution of higher learning. The combination of mutual private and public support, even though the latter, from the financial point of view, is by far the greater, is of vital significance.

The development of our universities in specific, almost pre-determined areas in Ontario certainly does not preclude students from one area attending a university in another area. It is only natural that many students should wish to do so. It is a good thing, too, from several points of view, not the least of which is the desirability of having a relatively large group of students in residence on the campus.

At the present time the so-called mobility of university students in Ontario is very varied; the percentage of the present freshmen whose homes are in their university city and its suburban area varies from 11 per cent at Queen's to 90 per cent at York. The percentage at Western is just under 20 , the median in the Province is 50 per cent. The problem of supplying residential accommodation is not small!

The percentage of students from outside the Province varies from 33 at the University of Ottawa to 5 at Carleton and the Lakehead; students from the United States, with the exception of one or two universities, constitute a relatively small percentage. Since students from Ontario attend universities in other provinces and since many graduate students, as well as some undergraduates, attend universities and colleges in the United States, the subcommittee felt that no discriminatory fee structure should be contemplated. Perhaps the reciprocity which presently exists is to Ontario's advantage.

We must remember, too, that by 1970 there may be 5,000 to 6,000 students from the "less developed countries" attending
universities in Ontario alone. Not only is this a responsibility which we should assume, it is a responsibility which we wish to assume. Their presence on our campuses can only enhance the educational experience of our students. But this is a costly responsibility since the great majority of such "foreign" students will be in the professional and graduate schools; and we must remember that 99 per cent of them have no private financial resources.

Since the coming of the se students from emerging nations is in keeping with national policy, the financial burden should not be on the shoulders of the individual university or on the Provincial Government alone. Some type of special subsidy from the Federal Government to cover the cost of their education is a realistic one.

In each of the "population pressure areas", with the exception of the Peterborough area, there is presently one or more universities. With few exceptions, the major universities in Ontario have doubled or trebled their enrollment in the last seven years. This, as you know, was no minor undertaking. We had all anticipated a period of consolidation following such rapid expansion. However, this was not to be. The universities of the Province have now expressed general agreement, unanimous at least among the presidents, that in the public interest we would be willing to increase our enrollments further if the financial resources were available.

Looking at this frightening picture the university presidents pointed out to the University Affairs Committee; "In some cases ...the prospect of a sizable future expansion depends on the possibility of immediate action - to acquire land, for instance, and to undertake the necessary planning - and it was emphasized that this further large increase of enrollment would be contingent upon immediate', adequate and sustained financial support for both capital and operating purposes. It would be necessary for the universities to be given an immediate undertaking of longterm support."

Each university was asked to review its position relative to expansion, increased enrollment, etc. In presenting this problem to the Board of Governors of this University - which had decided (and as late as October 1961 reiterated its stand) to restrict
enrollment to 5,000 students, a figure which we had planned on reaching by 1964 - I said, "However, careful as our planning has been and justified as we may be as to our desire and hopes to make Western a fine University of relatively small size, it is imperative, in the light of new information, that we examine once again our policy of enrollment and size limitations.
"This we should do in view of the grave and almost impossible task facing the University Affairs Committee and the Government of the Province of Ontario to provide by 1965 some 60,000 post-Grade XIII education places and by 1970 some 112,000 such places. We should recognize, too, that although several new colleges and/or universities must be established, built and staffed to me et this great challenge, expansion of existing universities is also necessary and could more quickly and, in certain respects, more economically and adequately provide many thousands of additional places for more university students within the next few years."

I am certain that other university presidents expressed the same thoughts, more eloquently I am sure, to their Boards of Governors, to their Senates, and to their senior faculty members.

The new data compiled by Dr. Jackson received detailed study by our Academic Planning Committee. These data were analyzed along with the data provided by our own continuing Enrollment Committee. New projections were prepared which indicated that the total enrollment of Western, including graduate students, might reach some 9,000 students by 1967 and 12,000 to 16,000 by 19701

It must be remembered that (a) there should be an optimum size and a maximum size for any individual university and (b) the expansion of any university, originally conceived as a small university reaches a point in size beyond which it could well be less expensive to establish a new university. In this category of limitation are such items as ground area available, the size of specific buildings which cannot readily or justifiably be enlarged. et $c$.

It should be mentioned here, in passing, that only 44 per cent of Western's full-time students in 1960-61 came from the
area designated by Dr. Jackson as "Western's Region." The other 66 per cent came from other so-called "University Regions" and other parts of Canada, etc. And it should be remembered, too, that since 1945, not counting the enrollment of veterans between 1945 and 1951, Western had doubled in size by 1953, and had doubled again by 1961. Thus in each of the last two eight year periods, 1945-53 and 1954-62. the University has doubled its enrollment.

The Board of Governors, considering all of the available data and reports - both external and internal - decided, against its own preference but in the total interest of the people of this Province, to double once again during the period 1962-70, the student enrollment at Western. This figure deals only with fulltime intramural enrollment and does not include the additional several thousand students enrolled in Summer School, Extension courses, part-time students and students in the dozens of special courses.

Complete re-planning for staff additions and for new physical facilities had to be undertaken. The Affiliated Colleges were, naturally, involved in these new plans as they, too, assumed responsibilities for increases in student enrollment.

Since we had not completed the plans for physical facilities to provide for a student population of 5,000, plus 1, 000 Affiliated College students (our previous maximum) it was necessary to merge these requirements into the new total requirements for 9,000 students. This "doubling again" decision is, to put it in simple terms, the equivalent of building a new university for 4,500 students. The cost of buildings, equipment and new services - about 35 million dollars over a period of eight years! That is, if we are to meet our new challenge and our new responsibility.

A university cannot raise funds directly from taxes for the construction of new buildings nor for the operation of the institution. A university must rely on private and corporate gifts and on government grants for capital expenditures and on student fees, government maintenance grants and other income for its operating budget. Therefore major expansion of physical facilities depends, not alone on the university's willingness to expand but, as well, on the ability of the university to obtain from the various
sources the capital funds required.
At the same time as an expansion of facilities is planned, an awareness of the corresponding increase in the annual operating budget is essential. The two are inseparable committments.

Each university in Ontario has taken another good look at itself and studied its expansion possibilities. Each has established a new level of potential student enrollment. And still the picture is not too bright. With a total of 31,800 students in the Ontario universities ( 1961 figure) representing 9.4 per cent of the 18 to 21 year age group and 51.7 per cent of those completing Grade XIII, and with up to 100,000 students expected by 1970, what degree of expansion can the existing universities soundly and reasonably undertake?

They are prepared to accommodate 49,000 undergraduates and about 4,200 full-time graduate students by 1965 and 74,000 undergraduates and 8,200 graduate students by 1970. This, as our report to the University Affairs Committee says, "... is a maximum effort and ... it presupposes immediate, adequate, and sustained financial support."

Under those conditions an increase from about 32,000 to 82,000 can be accomplished in existing universities. But then the question arises, "What about the other 20,000 or so students who will be seeking places by 1970?"

The Committee answered the questions which I raised earlier, "What kind of institutions and where should they be located?"

New institutions will have to be established within the Province (and I am not at the present time going to deal with forms of post-Grade XIII educational needs other than universities). It was suggested that the new institutions"... should be located where the student population will be the greatest; that they should not be 'universities' in the 1970's; and that their main function to begin with should be the offering of general education in arts and science."

If four new such colleges or "universities" were established within the next year it would be hoped that with
everything going along almost perfectly, each of the four colleges would be able to enroll at least 1,000 students for the 1965-66 session and a considerably larger number by 1970.

Even these, adding perhaps 8,000 places by 1970, obviously do not solve the whole problem but, together with expansion of existing universities, will add a total of some 60,000 places within eight years.

The growing demand for higher education is as real as it is apparent. But what is the cost? Are the people of this Province prepared to pay the price? If they are not, then the demand cannot be satisfied - in this Province or in this Country. The exodus of good students to other countries, where most of them would subsequently remain, is a frightening prospect. The future of this Province could indeed be jeopardized.

The cost? Perhaps it is reasonably safe to use a figure of, say, $\$ 7,000$ per student place - and more if residential accommodation is considered as well - as the cost of capital construction. For 60,000 new places the cost would be in the neighbourhood of 400 million dollars, or about 50 million per year over the next eight years for capital expenditures alone. And that is only in Ontario.

Whether this kind of money is made available, or whether a realistic compromise has to be effected, the monies must be used wisely. There must be a new realization that money is extremely hard to come by. It must be realized, as it were, that a dollar can only be spent once. Expansion factors in buildings are essential. We may not be able to build in 1965 the whole of a building which might be required in 1970. But planning the expansion factor in the beginning permits additions to be made later at little extra cost and at a time when the actual need is present and the required funds available. In the interval funds which might otherwise have been spent on the additional future accommodation can be used for other urgent and pressing needs.

But all of this, the financial aspect, is only one facet of the total picture. It can be met but only with major assistance from Governments together with private funds which Western will
be seeking to the extent of 7.2 million dollars between 1963 and 1968. The other facet of the problem is more difficult of solution and will take a great deal of hard thinking and realistic planning. It will take a degree of flexibility which we perhaps have not exercised before.

The buildings can be built. The equipment can be purchased. But who are to teach these 60,000 additional university students? This is the crux of the problem. This is the sword of Damocles. This is the problem which will cause university presidents, deans, principals, heads of departments and business officers sleepless nights. This is the ghost which will haunt us all.

Our committee stated it this way, "Indeed, the decision to work towards an enrollment of 91,000 or any other figure cannot properly be taken unless it is reasonable to expect that adequate numbers of qualified staff will be available to provide instruction for the students."

The eleven universities in Ontario, with a full-time staff of 2,097 had a full-time undergraduate enrollment of 27,853 . This gave a ratio of 1.13 . But we must remember that there are a great number of part-time members of staff. If adequate allowance is made for the part-time staff the ratio of $1: 10$ would be more realistic.

Another fact which we have to keep in mind is that presently about 45 per cent of our full-time staff are senior people at the associate professor and full professor levels. Other facts of significance are:

1. 10 per cent of all students presently enrolled are graduate students. Obviously the number of graduate students one staff member can look after is much smaller than the number of undergraduates which he can handle.
2. About 65 per cent of all undergraduates are in professional and honours arts and science courses.
3. The "bulk" of the increased enrollment will most likely be in the general or so-called "liberal" arts and sciences.

This coming year, 1962-63, there will be about 2,153 full-time members of staff in the 11 universities in Ontario. We will have to have, if we maintain the same staff-student ratio, 4,880 in 1965 and 8,300 by 19701

The source of supply of teachers from the United Kingdom has virtually dried up. With five or six new universities being established there, with the rest of the Commonwealth traditionally relying on Great Britain for most of their scholars, with the old colonies emerging as nations depending even more on the U.K. for their teachers, and with government and industry competing as never before for graduates, we can expect only a few teachers from Britain.

The same is true of France. And from the United States we may expect, in general, to attract some former Canadians and some of those who go the re for their graduate work.

But it would be the greatest of follies if we did not realize that it is our task, our immediate obligation, to seek out, select, and train almost all of our future staff members ourselves. The development and expansion of honours undergraduate and graduate work must be done with vigour, with speed, and with foresight.

To obtain 5, 800 additional me mbers of staff - an increase of 250 per cent - no time can be lost.

Just as Canada's total economic structure can be safeguarded and her standard of living maintained only through increased productivity, so too can the universities achieve their enrollment goals only through an increase in their productivity. We must use our men, our money, and our material in the most effective and efficient manner possible.

We could start by overhauling our administrative structure. Where we have perhaps been guilty in the past of filling basically administrative posts by taking good men from academic departments, we should see if such positions really call for an academic background. Some would, of course; others definitely would not. The saving in academic manpower in this field would likely not be great, but it would be something. But would it be academically sound?

Follow this one step further to the academic department level. It is probable that many heads of large departments spend as much as 20 to 30 per cent of their time on administrative duties on behalf of their departments. Part, at least of such work could be done by a good administrative assistant at a nominal salary. If such relief could be given the head would have the equivalent time for teaching and research at the graduate and undergraduate level, thus adding, as it were, about one-third of a person to the academic staff. Do this 7 or 8 times in a major university and that could be the equivalent of 2 or 3 full-time senior staff men.

Another thing which we have to do is to take a close look at the part-time staff situation. Can we not make greater use of this potential supply of staff? It is done to a very major degree in medicine, in journalism, and in nursing; in law or in engineering to a lesser extent, and in a very limited way in Arts and Science. Chemists, physicists, geologists, eager to do some teaching, can be found in industry and I am confident that local companies would be willing to permit them to spend three to six hours per week, for the main academic year, in the university. Many such men are highly qualified with graduate degrees and research experience. In mathematics, too, part-time people can be found in insurance companies, in investment houses, in engineering firms and elsewhere.

Many retired university teachers and retired secondary school teachers, many married ex-teachers who are now housewives, could be recruited to teach one or two courses per week on a part-time basis. And even university administrative officers with previous academic experience, may have to be brought back to teaching on a part-time basis. Much as we may disagree with utilizing large numbers of part-time people, they may well be part of our salvation.

Perhaps we have not recruited enough tried teachers, many of them with good advanced degrees, from the secondary schools. No door can be left unopened.

There are many other angles to explore, many other cupboards which are not bare. But the greatest and surest source of supply of the future university teachers will have to come, as Dean Allen in his report of the Faculty of Graduate Studies stresses, from our own graduate schools. No one
is going to be concerned about the staffing problems at Western but ourselves.

So the development of our graduate studies, in as orderly a fashion as possible, is urgent and vital. An increase from our present number of some 440 to about 1,000 in eight years is a tremendous challenge.

Let us not forget that graduate students require far more space, per student, than do undergraduates and that the pre-Ph.D.'s require more space than pre-Master's degree students, and that with every increase in graduate enrollment the pressure on the libraries goes up, and with each new field of graduate studies started the library acquisitions in that field are frightfully costly - in back volumes, in new books, new journals, cataloguing, shelving, manpower and space.

We all know that the total cost of graduate studies is very high; yet it is a must. There is another point not to be forgotten in our planning. As the academic label of acceptance goes to higher and higher degrees, the numbers of graduate students stopping at the Master's level will decrease. Those proceeding to the Doctoral level will, proportionately, increase. Therefore the same student will be in graduate school longer and the turn-over correspondingly lessened.

We may not be able to wait that long so we may have to make greater use of those same graduate students. We can do this in several ways. One way is to shorten the overall time required to obtain a Master's or a Doctor's degree. At the present time most of the students entering graduate schoold do so in September, three to four months after graduation, unless they have been winners of one of the few special scholarships or fellowships. On graduation in May, they enter the competitive summer employment market to earn money. As much as three to three-and-ahalf months are, from the point of view of graduate studies, wasted. These young people will have to be assisted so that outside summer employment is no longer necessary. They will have to be encouraged to start their graduate work not in September or October, but in May or June. They will have to be subsidized in one way or another. With a good solid start on their reading, their research, etc., one full calendar year would see them with a Master's degree. And one could go on to expand this aspect of the problem.

Another way, and I am sure that it will have to be used, too, is to work out an acceptable ratio of people holding B. A!'s and M.A.'s within each department, assign them virtually to part-time teaching, with appropriate salaries, and permit them to continue their graduate studies at the same time - much as we do now with demonstrators and teaching fellows, but with heavier teaching loads and greater remuneration.

I mentioned earlier that 45 per cent of the full-time staff were professors or associate professors. This, of course, is good but it just cannot last. With new staff appointees holding good B.A.'s and Master's degrees, the lower academic ranks of instructor, lecturer and assistant professor will be filled by young and rather inexperienced teachers to a degree never experienced before. The older and more experienced teachers will have an added responsibility on their hands coaching, guiding, and teaching the young teachers. And of great importance will be determining at what level should these younger teachers teach. The students, after all, are the reason for the existence of a university. We cannot afford to fail them.

Just one last point. In our planning of staff requirements over the next few years it is one thing to determine that 12 new appointments will have to be made, say, in the History Department and that 15 new appointments will be made in English Language and Literature, and 15 in Chemistry, etc., but it is quite another thing to determine that of the 12 new appointments in History, 3 must be in the field of Canadian History, 2 in American History, 3 in Modern History, 2 in Renaissance, 1 in Ancient History and 1, let us say, in Latin-American History. We will not be looking for just 12 historians or just 15 chemists. If we were, our problems over the next decade would be somewhat simpler.

Let me close by saying two things: first, that our operating budgets of tombrrow will compare with those of a decade ago only in the fact that both figures will be in dollars; second, the universities, like Canadian industries, will meet their new problems only by increasing productivity, in its broadest sense.

The extent to which the members of the Faculty are engaged in the many fields of research is very impressive. There is no question that the level of scholarly attainment, high as it has been, is now higher than ever before, and more extensive. The very great increase within the Faculty of Arts and Science is a reflection of the abilities and reputations of the members of the staff. The list of publications (AppendixG) is as noteworthy as the list of research grants made to the University (Appendix H).

The number of members of the University who have been the recipients of honours and awards continues to increase. Many more have been admitted to Fellowships in major learned societies; many more have been elected to executive offices in those same or other learned bodies; many indeed are members of important government boards, committees, councils and commissions.

To all of those scholars and scientists who so enhance the reputation of the University, I offer my sincere congratulations and to them and to the many other great teachers my deep appreciation for their vital contributions to the life of the whole University.

And may I say at this time that it would be impossible to find a Faculty, a Senate and a Board of Governors who are more keenly aware of the problems which lie ahead of us as are those of this University. The concern, the interest and the care with which they have examined the problems and the new responsibilities which have to be met over the next decade have been exceeded only by the hard work and thoughtfulness which have been expended on the solutions. We are indeed fortunate that such a body of men and women are members of Western.

The sudden and tragic deaths of two of our Professors cast a gloom over the whole University. Professor David Ivor, on leave-of-absence while holding a Nuffield Overseas Fellowship, died on September 23 rd in London, England. Professor Ivan Smith, internationally respected cancer clinician, died on April 7th. Their loss will be felt for many years. The sympathy of their colleagues is extended to their families.

The retirements of beloved Faculty members and indeed of all members of the staff is a sad occasion. It does,however, make us pause to reflect on the great and varied contributions which each has made, usually over many, many years, to the thousands of students who have had the privilege of knowing them. Nor is this to be confined to the students. The influence which these outstanding people have had on members of the staff and on the University as a whole is equally as great.

And so it is that we say good-bye to such remarkable people as Professor Hartley Thomas, the inimitable Professor of Canadian History, after 30 years of service to Western; Professor "Chris" Sivertz, the stimulating Professor of Physical Chemistry, after 35 years of teaching and research here; Dr. Helen Allison - "Miss Registrar" - loved, admired and respected by the procession of students who have passed through her hands, as well as her records, for 37 years. Less well-known, except to the thousand residents of Spencer Hall, but equally respected is Mrs. Struckett who, for 11 years, has been the capable Warden of "Spencer". We pay special tribute, too, to Brigadier, The Honourable Milton Gregg, V.C., who added prestige to Medway Hall as its first Warden. To these and to several others who retired from the University on June 30th, both personally and on behalf of the Faculty, the students and the alumni, I extend our heartfelt thanks and our best wishes in the years ahead.

May I suggest at this time that you read carefully the excellent reports from the many Faculties, Schools, Colleges, Departments and the several organizations which follow this general introduction. They are significant and especially pertinent at this time. They contain the essential facts relevant to the whole University.

All of which is respectfully submitted.

Report of the Secretary - Helen M. B. Allison

Membership
There werc comparatively few membership changes during the year. Dean J. B. Collip, Dr. F. S. Maine, Professors R. L. Allen and R. E. K. Pemberton retired and were succeeded by Dean O. H. Warwick, Professor J. A. McIntyre, Professor R. W. Nicholls and Professor A. E. Raymond respectively. Principal A. B. Conron resigned and was succeeded by Principal D. G. G. Kerr. Mr. George Bowie's term of office as President of the General Alumni Association was completed and he was succeeded by the new President, Dr. J. S. Lott. Professor R. N. Shervill was added to the membership as a second representative from Middlesex College.

## The Election of the Chancellor

The first action of the Senate, for the year, was the election of Chancellor Verschoyle P. Cronyn, on September 21 st, 1961. The Electoral Board representatives elected by the Senate met with representatives of the Board of Governors for that purpose. At the next meeting of the Senate, following the election, a Committee of the Board of Governors and the Senate brought forward amendments to the existing procedures of the Electoral Board, which were substituted for some of the previous regulations, after they had been approved by both bodies.

## Meetings

Four meetings of the Senate were held, on October 26th, 1961, December 8th, 1961, February 9th, 1962 and May 23rd, 1962.

Recommended changes in the dates of statutory meetings for the future would bring next year's meetings on November lst, 1962, January 25th, 1963, March 22nd, 1963, and May 22nd, 1963. This means that the December meeting will be withdrawn in favour of a January meeting and the February meeting will be withdrawn in favour of a meeting in March.

## Reports of Committees

## The Convocations Committee

Four Convocations were held during 1961-62 (including the Installation of the Chancellor on October 27th) to confer 1,077 degrees and 183 diplomas - a total of 1,260 , of which 130 were degrees at the postgraduate level and 248 were Honors undergraduate degrees. All four Convocations were well attended and permitted students to bring a reasonable number of guests.

The Educational Policy Committee
This Committee brought forward to the Senate for its information the lists of new appointments to Arts and Science colleges, including the affiliates. It also recommended the following new courses: Botany 35 and 255, Chemistry 22 and 402, Economics 31, English 34 and 444, Music 30 Y and a revival of History 37 and Russian 37. This Committee recommended minor changes in several programs, including the language requirements in the Honors science programs.

The Executive Committee

The Executive Committee recommended to the Senate the following honorary degree recipients: Mr. Clare Bice, The Right Reverend J. Austin Roney, The Right Reverend A. H. O'Neil, Dr. Lloyd G. Stevenson - all four being graduates of this University; Dean Vincent W. Bladen, former Dean Edith M. McDowell. Recommendations were made for further degrees to be conferred in November 1962 and at suitable times in the future.

This Committee also recommended that the admission requirements for Adult Special Students be met before their admission, and the Senate approved.

The Policy Committee
A recommendation was brought in by this Committee with reference to the academic dress for the Ph.D. graduates of this University and approval of the Senate was obtained.

Gown: purple wool with sleeve tabs and facings of dark blue velvet of the shade and width traditionally used for Ph.D. gowns on this continent.

Hood: purple wool lined with white, with a dark blue cord trimming to match the velvet on the gown.

Cap: dark blue velvet, with gold tassel; flat and round in shape, with adjustable head size. The design is the same as for this University's honorary degree caps.

## The Committee on Secondary School and University Relationships

Several meetings were held this year to discuss the policy and functions of this Committee. The Committee finally recommended four full statutory meetings, three weeks ahead of each Senate meeting, for next year, with ad hoc sub-committees meeting in between the statutory meetings.

The Committee cooperated with the National Federation of Canadian University Students and the Purple Spur Society in two of their projects concerning high school visitations and a program for bringing secondary school students to visit the University.

It recommended the enlargement of the Committee to include five Faculty representatives of the Constituent and Affiliated Colleges, in addition to the President of the General Alumni Council.

A new Chairman is to be elected at the first meeting in 1962-63, in accordance with the Committee's recommendation for a rotating Chairmanship. The thanks of the Senate are welldeserved by Mr. D. M. Scott who has been the Chairman for two years.

Ad Hoc Committee on Admissions

An ad hoc Committee on Admissions presented its report for discussion by the Senate. Inasmuch as many of its recommendations depend on action by the Ontario Matriculation Board, the Faculty of Arts and Science, the Board of Governors, and the Committee on Secondary School and University Relationships, it received the Senate's approval in principle, for further study by the groups mentioned. No changes were made in the admissions policy for 1962.

Recommendations from Faculties, Colleges, and Schools of the University approved by the Senate

1. A revised numbering system and minor revisions in the Faculty of Engineering Science curriculum.
2. Minor changes in the curriculum of the Faculty of Law.
3. School of Nursing revisions of the curriculum involving Sociology 20 and Sociology 40, as well as the addition of Philosophy 30 to strengthen the Public Health Nursing Program.
4. Faculty of Graduate Studies recommendations for:
(i) The M.A. program in Mathematics and Computing,
(ii) The M.E.Sc. program in Engineering Science, never before offered in this University.

A full report on the philosophy and practices of the Summer School and Extension Department was presented by the Director, Professor McIntyre.

The Senate received and discussed statistical reports on the failure rate in each Faculty and School and College of the University, with a special study, made by the Secretary of the Senate, of the failure rate in the Freshman class in the constituent University.

The Senate spent a good deal of time discussing a revised Grade XIII program for the secondary schools, recommended by a Special.Committee of the Ontario Matriculation Board. ViceChancellor Hall is the Chairman of the Matriculation Board's Special Committee working on this project.

In October and in May the Senate heard estimates of the numbers of students expected at the Universities of Canada within the next ten years, and the preparations which must be made for them.

# THE REGISTRAR'S DEPARTMENT 

Report of the Registrar - Helen M. B. Allison

Once again the student en rolment showed an increase over the previous year. The total full-time student registration was 4,715 of whom 3,252 were men and 1,463 were women. But we must not think that only 4,715 students were duly registered. The part-time student, whether he be registered in Summer School, in the intramural programme, or in the extension-correspondence programme, has to receive instruction from our own teaching staff. The Registrar's Department works in close collaboration with the Department of Summer School and Extension relative to their students.

As far as this office is specifically concerned, and the whole University generally, the part-time student is still a student and the teaching and administrtive responsibilities are increased thereby. So in total there were 7,327 (net) students enrolled in the University in 1961-62.

The proportion of men ( 67.3 per cent) to women ( 32.7 per cent) is practically unchanged from last year ( 68 per cent men). The overall net increase in student enrolment was 10.4 per cent over the previous year. (See Registration Summary - Appendix B).

The enrolment of graduate students is the subject of a special report by the Dean of the Faculty of Graduate Studies. An increase of 13.7 per cent was experienced in that Faculty.

Of the 7,327 students enrolled in the whole University 3,746 were full-time students in the Constituent University, 969 were full-time students of the Affiliated Colleges and 2,612 were part-time students. Of the total of 4,715 full-time students 2,366 or 50 per cent, attended schools in the 14 counties of Western Ontario, about 22 per cent came from schools in London and Middlesex County. A further 1,809 attended other schools in Ontario while 281 had attended schools in the other provinces of Canada. 73 students had gone to schools in other parts of the Commonwealth and 185 in other countries.

With the rather rapid urbanization which has been taking place in Ontario, it has been rather surprising that over the past 15 years or so the number of students who have come from rural sections has remained fairly constant ( $14-15$ per cent). Again this past year, of the total of 7,327 students, 14.4 per cent list the occupation of their parents as "agriculture". Again there was little change in the occupations of the students parents over those of the past several years.

There were 39 religious denominations represented by the students of this University. With the increased number of students, particularly at the graduate level, coming from Asian and African countries, this is to be expected.

During the year the 186 th and the 187 th Convocations were held. A total of $1^{\prime}, 077$ degrees and 183 diplomas were awarded. The degrees granted included 9 honorary degrees and 130 graduate degrees at the Master's and Doctoral level. The first undergraduate degrees in Law, since the re-establishment of the Faculty of Law, were presented to 17 students. How fortunate they were to have been students under that great teacher and jurist, Dean Ivan Rand!

Altogether there was an increase of 17 per cent in degrees granted and an increase of 14 per cent in diplomas, for a total increase of 16.7 per cent. Of significance, too, is the fact that there was an increase of 9 per cent in Honours degrees granted at the October and May Convocations.

The failure rate of students continues to be of concern to the whole University, as it continues to be the concern of every university. The percentage of failures during the past few years has been as follows:

| $1955-16.5 \%$ | $1959-13.8 \%$ |
| :--- | :--- |
| $1956-13.9 \%$ | $1960-16.6 \%$ |
| $1957-10.6 \%$ | $1961-15.6 \%$ |
| $1958-12.6 \%$ |  |

This problem of "failures" is constantly under study and every step, short of lowering academic standards, is being taken to assist new students through the period of adjustment into university academic procedures and practices.

OFFICE OF THE COMPTROLLER

Report of the Comptroller - R. R. Glover

This brief report outlines the financial operations of the University of Western Ontario for the year ended 30th June, 1962 and is based upon the Statements prepared by the University's Auditors Clarkson, Gordon \& Company.

## Summary of the Year's Operating Results

During the year under review, the net excess of revenue over expense was $\$ 2,972.44$. For comparative purposes, the net results of the previous five years are listed below:-

Years Ending 30th June
1961
1960
1959
1958
1957
$\underline{\text { Net Operating Results }}$
\$ 4,432.50 Surplus 2,797.15 " 13,545.25 " 9,937.00 " 9,745.59 "

Comparative Distribution of Revenue and Expense

The following Schedule shows, in summary form, the distribution of revenue and expense for the year, with comparative percentages for the previous year:- (Cents omitted) The figures are presented in the standard format recommended by The Canadian Association of University Business Officers.

Revenue

Student Academic Fees
Gifts for General and Specific
Operating Purposes
Receipts for Services to
Outside Organizations, etc.
Miscellaneous
Endowment Income
Government Grants for
Operating Purposes
Federal
\$ 1, 083, 013
Provincial $1,475,000$
Municipal 75,000
Sponsored or Ássisted
Research Funds
Government -
Federal 794,046
Provincial 31,782
Municipal
Corporations 32,776
Foundations,
Associations, etc. 410,167
Individuals \& Bequests 44,113
Endowment 35,583
Joint Funds incl. Campaigns
Other Sources

Amount $\%$ of Total $\%$ of Total
\$2,225,128 32.44
34.29

61,861 . 90
1.35

| 288,810 | 4.21 | 4.06 |
| ---: | :---: | ---: |
| 52,543 | .77 | .27 |
| 73,645 | 1.07 | 1.36 |

288,810
.77
1.36

Expense
Instruction
Assisted Research

Administration
Plant Maintenance
Scholarships, Bursaries
\& Prizes
Miscellaneous
Net Deficit on Ancillary
Enterprises including Athletics

Extraordinary Operating
Expenses
Ancillary Enterprises
including Athletics
Expenses $\quad 1,145,221$
Less Net Deficit
11,645
$1,133,576$
Total Expense
Surplus at end of Year
7,990,722

$$
\begin{array}{r}
6,564,461 \\
292,685
\end{array}
$$

3.00
3.21

647,017
9.86
10.68

17,001
.26
.31
144,514
2.20
4.04
$\underline{11,645}$

$$
\begin{array}{lll}
6,564,461 & 100.00 & 100.00
\end{array}
$$

Total
Amount
\$ 4, 022, 115 61.27 61.59

1,525,119
5,547,234
84.50

An indication of the rapid growth of the University may be seen in the fact that the total of current expenditures, including research and ancillary enterprises, reached almost eight million dollars, an increase of approximately 13 per cent over the previous year.

In Graphic form, the figures appear as follows:

SOURCES OF CURRENT REVENUE


CURRENT OPERATING EXPENSE


## Research

The foregoing figures, schedules and charts include, as has been the practice in previous years, the amounts applied from research grants-in-aid and contracts, and as well, the actual expenditures on research during the year. This phase of the University's activities has increased substantially over the past few years, as may be seen in the following table:-

| Years ended <br> 30 th June | Expenditures <br> for Research |
| :---: | ---: |
| 1962 | $\$ 1,525,119.05$ |
| 1961 | $1,142,912.39$ |
| 1960 | $987,716.25$ |
| 1959 | $853,554.28$ |
| 1958 | $634,737.34$ |
| 1957 | $623,053.26$ |

The distribution of research expenditures within the Faculties and Schools, was as follows:-

Faculty or School, etc. Research Expenditures \% of Total
Faculty of Medicine \$ 833, 319.83 54.6

Faculty of Arts and Science 553, 854.00 36.3

School of Business
Administration
53,323.58
3.5

School of Nursing
$23,625.78$ 1.6

Faculty of Engineering
Science
$13,930.91$
. 9

Museums
5,119.62 . 3

Miscellaneous

$$
41,945.33
$$2.8

$$
\$ 1, \overline{525,119.05} \quad 100.00
$$

## Ancillary Enterprises

The University's policy of providing good housing and dining facilities for students as closely as possible to the actual cost resulted in a very small excess of revenue over expense for the year. In Summary form, the results appear as follows:-

Food Services (four units) \$3,208.63 Surplus
Residences (two units)
Total
307.72 Loss
\$ 2,900.01 Surplus

In addition, the two Bookstores operated at a net surplus of $\$ 12,982.90$ which, by an agreement made several years ago, is held for Student purposes.

## Capital Financing

Construction of additional facilities required an expenditure from Capital Funds during the year of $\$ 1,621,778.00$ for a variety of buildings and other projects of which the principal ones are listed in another section of this report. To complete the construction in progress at 30th June, 1962 a further expenditure of $\$ 2,285,000.00$ will be required. Capital Funds on hand, and promised, are more than sufficient for the se projects, but the ambitious expansion plans for the coming years will require many millions of dollars and steps are already being taken to raise these funds.

## Physical Plant

As has been stated, expenditures on new physical facilities during the year amounted to $\$ 1,621,778.00$. This compares with the 1960-61 expenditure of $\$ 2,502,471$ (on a cash basis).

The Cancer Research Laboratory was completed and occupied early in the year, giving impetus to the University's Research program. The Library of the Richard Ivey School of Business Administration was also finished and has added immeasurably to the facilities of the School.

The addition to the Lawson Memorial Library which was begun in June 1961 became available for partial occupancy by June, 1962 and will be ready for use by the Students and Staff this fall. The additional reading room space and the additional work areas for the Library staff will be most welcome.

A modest addition to the University College was started in February, 1962 and will be completed before 30th September, 1962. It will provide urgently needed offices for the Faculty.

An addition to the Greenhouse was also completed during the year and has proved most beneficial to the Department of Botany. Also completed during the year were additional recreational facilities in the form of an Artificial Ice Rink, and three additional Tennis Courts.

The Dr. H. A. and W. J. Stevenson Medical Library adjacent to the Faculty of Medicine was begun in September, 1961, and construction was still in progress at 30 th June, 1962. The funds for its construction were provided by the late Dr. W. J. Stevenson, specifically for this purpose.

By far the largest project undertaken was the construction of a Second Men's Residence Unit which will provide residence accommodation for more than 300 students. Construction began in March, 1962 and most satisfactory progress was made. It is expected that it will be available for use by the Summer of 1963, the reby helping to fulfil one of the greatest needs of the University, that of accommodation for the students of whom the greatest proportion are from outside the City of London.

Although the amount of construction was not by any means the largest in any one year during the period of expansion, the diversity of the projects indicates the breadth of the front on which the University is forging ahead.

## Gifts and Grants

A $\$ 300,000.00$ increase in the Province of Ontario Maintenance Grant is reflected in the 1961-62 Statements. A further increase of $\$ 175,000.00$ has been made for the Provincial fiscal year commencing lst April, 1962 to a total of $\$ 1,650,000.00$, but this will not be reflected in the University's statements until the 1962-63 year.

The Federal Government University Grant for maintenance purposes in the amount of $\$ 1,083,013.02$ was received. Although the number of students increased over the previous year, the amount of the grant was less, due to the more rapid increase in student numbers than the increase in general population, on which the grant is based. An increase in the grant to $\$ 2.00$ per capita in 1962-63 will in all likelihood increase the amount to be received in the coming year. The City of London continued its annual operating grant at $\$ 75,000.00$ and eight of the County Councils of Western Ontario contributed in varying amounts for capital purposes, and/or for bursaries or scholarships.

The Province of Ontario increased its grant for capital purposes to $\$ 1,200,000.00$ an all-time high in this field. A further increase to $\$ 2,000,000.00$ has been made for the 1962-63 fiscal year, thereby tangibly expressing its strong support of University expansion in Ontario.

A grant of $\$ 60,000.00$ was received from the National Cancer Institute for special apparatus for the Cancer Research Laboratory, thus adding to the grant from the Ontario Division of the Canadian Cancer Society which provided the building itself.

A special gift of $\$ 10,000.00$ was received from Dr. Richard Ivey, a long-time and most generous benefactor of the University, to provide funds for special landscaping and plantings to beautify the grounds. Another greatly appreciated gift of $\$ 60,000.00$ was received from an anonymous donor for Capital purposes.

Many other gifts from friends and Alumni of the University added to the bursary and Scholarship funds and to the student loan funds. Gifts for unrestricted purposes were also gratefully received. It will be evident to readers of this report that a University cannot expand, or indeed continue to exist without such benefactions.

## Conculsion

Looking ahead, one is most conscious of the fact that the continuing increase in student enrolment will tax to the utmost all the University's facilities, human, financial and physical. To survive this period, the most rigid economies must be practised and to this end, we shall devote all our energies.

# FACULTYOF GRADUATESTUDIES 

Report of the Dean - R. A. Allen

For the ninth successive year the registration in the Faculty of Graduate Studies reached a new high, 444, which was an increase of 51 or 13 per cent. It is perhaps equally important that all divisions of the Faculty shared in the growth, as will be evident from the statistics on the following pages.

The growth of the Faculty is shown however not only in the student registration but in the list of faculty members, their number and qualifications, and also in the introduction of important new courses and programmes of study. The 1962-1963 Announcement will show 230 members of the Faculty, as appointed in 1961-1962, representing 36 departments.

To illustrate the expanding educational offerings the following may be mentioned. In May 1961 the first M:Sc.N. degree in Nursing Administration was conferred. In May 1962 there were three and by November 1962 three more will have completed their work. In September 1961 the first two candidates were registered for the Ph.D. degree in Business Administration. These students already hold the M.B.A. degree and their work. for the Ph.D. will require a minimum of two calendar years.

On December 8, 1961 the Senate approved the new Master of Engineering Science (M.E.Sc.) course. The first candidates will register in September 1962. At least fifty per cent of their work must be in Engineering Science but "on the advice of the Engineering Science Committee on Graduate Studies and with the concurrence of the Department Head concerned, candidates may elect or be required to take graduate courses or senior honours courses offered by departments in the Faculty of Arts and Science." This is in keeping with the policy of providing a broad training in Engineering Science and related disciplines.

On the same date the Senate approved a new Master of Arts course in Mathematics and Computing. The candidate must be a graduate in Honour Mathematics and his programme will include both advanced work in Mathematics and specialized courses in Computing. This is a relatively new and rapidly expanding field
of great importance to both Business and Scientific research.

In previous reports I have repeatedly emphasized the importance of the Faculty of Graduate Studies as a training school for future university instructors, as well as for research workers and executives in business and industry. At the risk of being repetitious I must stress the same point again. The need for an increased supply of university instructors becomes more critical from year to year as the influx of undergraduate students exceeds even the predicted percentages.

In normal times the growth of the faculty as shown in the statistics presented in this report might be considered satisfactory. To meet the demands of the next five to ten years extraordinary measures will have to be adopted to increase the number of graduate students even more rapidly and hence the number of university teachers in training. There are now approximately 9,000 full-time members on the teaching staffs of Canadian universities. It is estimated that by 1965-1966, 14,000 will be required and by 1970-1971, 25,000.

It seems clear that we must begin spotting potential university teachers early in their undergraduate courses, encourage them to select and continue in honour courses, and then provide them with sufficient financial assistance in their postgraduate years to counterbalance the attractions of a quick job and quick money in some other field. This University has consistently given special attention to the weaker students, those in academic difficulty. Without neglecting such students in need of help it has become imperative that we pay more attention to the very brightest, direct their early studies more carefully and encourage them to go as far academically as their ability warrants.

The increased financial encouragement should obviously include more graduate scholarships and fellowships. But I suggest that it should also include what might be termed summer subsidies so that students might begin their graduate work in June or July after graduation instead of in September as many of them have been doing. Most of our students have to spend the summer earning the money, frequently in unproductive work, to pay their tuition fees and living expenses the next year. If they were relieved of this necessity, although admittedly there are some values in some kinds of summer work experience, it would accelerate the
graduate training courses and make the graduates available sooner for university and other positions.

In the unusual conditions the universities are facing we shall have to appoint a larger number of instructors who have begun but not completed their graduate work. It follows that the University will have to help these men more than in the past, to continue their professional training.

The whole teaching manpower problem of the universities is and will be serious. I have mentioned the young instructors. One of the most serious aspects of the problem will be that of finding mature and well qualified professors to teach the hundreds of graduate students and to guide the young instructors.

The increased demands on library and laboratory resources occasioned by the growth of graduate study are to an extent obvious. What is not always appreciated is that the resources necessary for graduate studies are far out of proportion numerically and financially to what is required for undergraduate teaching.

|  | $\frac{1957-58}{}$ | $\frac{1958-59}{}$ | $\frac{1959-60}{}$ | $\frac{1960-61}{}$ | $\frac{1961-62}{}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Arts and Science | 101 | 124 | 140 | 184 | 196 |
| Business <br> Administration <br> Medical Sciences | 145 | 170 | 161 | 178 | 209 |
| Nursing | 23 | 20 | 18 | 23 | 27 |
|  | - | - | 2 | 8 | 12 |
|  | 269 | 314 | 321 | 393 | 444 |

Humanities and Social Sciences
Economics and
Political Science 8
English
Geography 14
History
21
Mathematics 7
Philosophy 11
Psychology 18
Romance Languages 12

111

Natural Sciences

Botany 14
Chemistry
31
Geology 4
Geophysics 3
Physics 17
Zoology 16

- Nursing

First Year
Second Year
Medical Sciences

## Men

Arts and Science 196

Degrees Conferred October 1961 and May 1962 (cont'd)

| M.A. | 19 | - | 3 Economics <br> 3 English <br> 2 Geography <br> 2 History <br> 1 Mathematics <br> 1 Mathematics and Computing <br> 4 Philosophy <br> 3 Psychology |
| :---: | :---: | :---: | :---: |
| M.B.A. | 81 | - | 81 Business Administration |
| M.Sc. | 17 | - | 1 Biophysics <br> 2 Chemistry <br> 1 Geography <br> 2 Geology <br> 2 Geophysics <br> 6 Physics <br> 3 Zoology |
| M.Sc.N. | 3 | - | 3 Nursing Administration |

130

## FACULTY OF MEDICINE

Report of the Dean - O. H. Warwick

The year under review has been one of interest and some accomplishment. We welcome to our Faculty Dr. A. C. Wallace who, as Professor of Medical Research, will direct the activities of the Cancer Research Laboratory. He is to be congratulated for attracting to his group several excellent young men of proven ability - Dr. J. H. Cutts, Dr. K. Hoshino, Dr. D. G. Montemurro, Dr. G. Sainte-Marie, and Dr. I. G. Walker. Certainly, the trust placed in us by the Canadian Cancer Society and the National Cancer Institute of Canada will be upheld in the years ahead.

No senior members of staff have this year reached the age of retirement but the page of death has been heavy. Gone from the scene are friends who will long be remembered in this medical community. Tragically early was the death of Ivan H. Smith, our distinguished Professor of Therapeutic Radiology whose contributions to the teaching and practice of medicine this Faculty can ill afford to lose. With like regret we note also the passing of others whose combined contribution to our school of Medicine over a period of many years has been most significant - S. M. Fisher, J. H. Geddes, Madge T. Macklin, and J. A. McIntyre.

The Royal Commission on Health Services appointed this year by the Federal Government can be expected to influence the future of Canadian medicine. Much time and effort have been expended by members of this and other Faculties of Medicine across Canada in preparing a brief on medical education. It points out that in Canada we are not graduating the number of physicians necessary to provide adequate medical service for our citizens, that there is no current provision for increasing the volume of graduates as our population expands, that young Canadians of good academic promise have been reluctant in recent years to apply for admission to medicine, that Canadian medical schools have inadequate facilities to educate more doctors, that salaries of teachers are considered to be low and that our schools are under-staffed.

For the correction of these shortcomings it has been recommended that present facilities be expanded, that new schools be established, and that better stipends be offered by our universities in order to attract gifted young graduate students to careers in teaching and research, and in order to increase the number of full-time teachers in both the basic and clinical sciences. It has been further recommended that more liberal scholarships and bursaries be established and that fees for instruction be reduced or abolished.

The production of good doctors is the fountain-head of good medical care. Without good doctors it is not possible to achieve and maintain high standards of medical services whatever the economic basis of supplying these services. It is our sincere hope that the Federal Government will recognize the priority of education within the total medical picture, and will accept our recommendations for its development and support.

Pertinent to the above and of particular interest locally are the plans to move facilities for the basic medical sciences to the University campus. The Board of Governors on December 18th, 1959, reaffirmed its previous decision with regard to this move and at the same time granted authority for preliminary planning. We thank Professor E. G. D. Murray and his committee for the report on our requirements. Without this it would not have been possible to proceed so quickly to the point we have now reached.

Contracts for the construction of the Stevenson Library were awarded in September 1961, and work is well under way.

By the establishment of a full-time secretariat for The Association of Canadian Medical Colleges a further step has been taken to coordinate medical education in Canada. We welcome the appointment of Dr. J. Wendell Macleod to this new position. The Kellogg Foundation has made a five year grant of $\$ 170,000$ to help initiate this venture in which the Association of Canadian Medical Colleges will act as an associate committee of The Canadian Universities Foundation.

The honours and awards received by members of our Faculty are a measure of the esteem in which this Faculty is held
by our colleagues in the rest of Canada and in other countries. Among our staff this year we find presidents of five national or international organizations: Professor E. G. D. Murray 8th International Congress for Microbiology, Professor A. C. Burton - Canadian Physiological Society, Professor J. C. Rathbun - Canadian Paediatric Society, Professor R. J. Rossiter - Canadian Biochemical Society, Professor A. H. Neufeld - Canadian Society for Clinical Chemistry. Professor C. F. Robinow is president-elect of The Canadian Society of Microbiologists.

Professor M. L. Barr received the annual awards and gold medals of both The American College of Physicians and The American Society for the Study of Sterility. Dr. D. H. Carr, in the same Department, received the Annual Award of The Canadian Society for the Study of Infertility. Professor A. C. Burton received the Gairdner International Award for his many contributions to our understanding of the physiology of the heart and blood vessels. Professor A. D. McLachlin visited the British Isles for two months as Travelling Professor of Surgery under the sponsorship of the James IV Association of Surgeons. Dr. J. A. McCredie received the Jacksonian Prize of The Royal College of Surgeons of London. Professor R.A.H. Kinch was Visiting Professor at the University of Texas and Wayne State University. Professor E. G. D. Murray gave the 12 th Annual Wadsworth Lecture to the New York State Department of Health, and received honorary membership in both the British and American Societies of Microbiology. Professor R. G. E. Murray was holder of The Royal Society of Canada Award for 1961, and was Guest Professor at the Statens Seruminstitut in Copenhagen.

Dr. D. E. Zarfas and his staff at the Children's Psychiatric Research Institute received the Bronze Award of The American Psychiatric Association for their contribution to the improvement of patient care. This Award is especially noteworthy as the Institute has been functioning for less than two years.

Through bursaries and loans our students have this year received financial assistance amounting to almost $\$ 40,000$. To this group must be added those who through academic achievement, assisted themselves by winning scholarships. We wish to express again our gratitude for those gifts which have augmented our scholarship and bursary funds.

As in previous years it has been our privilege to be host to distinguished visitors. Sir George Pickering, Regius Professor of Medicine at Oxford, was with us for two weeks as the Edward Gallie Professor of The Royal College of Physicians and Surgeons. Others included Sir Russell Brock and Professors P. M. F. Bishop, A. St. G. Huggett, and Bernard Lennox from England, Professor U. S. von Euler from Stockholm, and Professors Otto Saphir, Clyde Randall, and Harold Wolff from the United States. It was also our privilege to be hosts to The Canadian Gynaecological Travel Society.

FACULTYOF LAW<br>Report of the Dean - I. C. Rand

The Academic Year 1961-62 has seen the first full cycle of courses in the school leading to graduation. The students of the class registering in 1959 have now passed into the outer chambers of their profession from which they will soon enter its active ranks. They will spend a year in a law office to experience in subordinate practice the application of ideas ingested in the school which furnish for the daily round of work meaning and significance. At the end of that year they will proceed to a further six months of lectures at Osgoode Hall from practitioners addressed to matters arising in the bulk of professional activity, the successful accomplishment in which qualifies them for admission to the professional body.

For one passing to the University from Grade XIII of the provincial school system, a period of not less than six and one-half years of study and preparatory experience is thus required, a training which the advancing complexity of social and economic relations has made necessary. This is strikingly exemplified by the subjects of instruction now included in the curriculum to meet the expanding law: such subjects as income, succession and other modes of taxation, the functioning of administrative bodies, the legal involvements of community planning and land use, estate planning, and the various features of industrial and labor relations, were, to law schools in North America of fifty years ago, either unknown or touched upon incidentally and in limited aspects only. The steady extension of governmental action in the affairs of the individual and community, as, for example, in national and international business, the new social impacts and relations in a proliferating population, and the higher standards of living in increasingly complicated material conveniences with their technological features, have led to these new fields of regulation. How best to prepare the new generations of lawyers for meeting this elaborate and many-sided expansion, every day becoming more refined and precise in detail and application, presents academic problems of difficulty.

The new school building was formally opened at the Fall Convocation on October 28th of 1961. On that occasion we were
honoured by the presence of John J. Robinette, Q.C., D.C.L., then Treasurer of the Law Society of Upper Canada and an outstanding counsel, whose address crowned the ceremony. Following the opening, the student body had the privilege, in the Moot Court Room, of listening to Erwin N. Griswold, S.J.D., Dean of the Harvard Law School. To his young auditors Dean Griswold spoke from, a long and rich experience in law school activities, and his counsels, the fruit of scholarly achievement and practical administration, conveyed in imaginative expression, were a fitting conclusion to the proceedings. At Convocation the University conferred on Dean Griswold the degree of Doctor of Laws, Honoris Causa.

The first year in the new building, the third in the school's life, has been marked by the generation of a corporate spirit. With the excellent material resources and appointments now available, the interests and relations of the students have been brought into focus and given a local habitation from which will come stimulating ideas and activities toward the fullest utilization of these advantages.

One such feature has already materialized: a schedule of Moot Court competition was carried out to a gratifying conclusion. The interest aroused was so keen and the work involved so effectively performed, that the participation of all students during the coming year was the enthusiastic forecast. On the final argument, the Honourable Mr. Justice Laidlaw and the Honourable Mr. Justice Mackay, both of the Ontario Court of Appeal, and the undersigned, sat as judges and the proceedings achieved a remarkable atmosphere of realism. At a dinner in honor of the occasion the winning team was presented with the trophy given to the school by the Honourable Mr. Justice C. D. Stewart, of the High Court of Ontario.

Later, in February, the school entertained the inter-school Moot Court competition between the law schools of the province, in which representatives from all of them took part. The presiding tribunal was composed of His Honor Judge MacRae and His Honor Judge McCallum of the County Court of Miłdle sex and the Honourable H. M. LeBel formerly an associate justice of the Ontario Court of Appeal, all of London, and the arguments occupied a full day. The same spirit of serious purpose was exemplified and undoubltedly the session was a revelation to the younger members of the student body. At the dinner given the visiting teams
the cup, donated by the Law Society of Upper Canada, was awarded to the representatives from the University of Ottawa. Mr. LeBel brought the proceedings to a close with a careful analysis of the problem posed to the teams and the conclusion of the judges.

The value of the moot work was evidenced also by the interest taken in both proceedings by the visitors who sat as judges. We are greatly indebted to themfor the time given, the consideration addressed to the contentions advanced, and the equally serious decisions rendered. They undoubtedly enjoyed the experience and it was a further step toward bringing the law school into closer relation with the courts and bar of the province.

The se competitons have aroused an appreciation of the art of advocacy in its creative and effective aspects, exhibiting the realistic and empirical process by which through eight centuries the development of our law has brought us to its present body. Altogether we can set these activities down as a successful introduction to advocacy, the appreciation of which will grow as an important adjunct to the academic training.

We are now able to view some aspects of the student body over the past three years. The registration of the in-coming class in each year was as follows: 1959-60, 36; 1960-61, 51; 1961-62, 40 . The number writing examinations in each year was: 1959-60, 33; 1960-61, 1st year class, 45; 2nd year class, 23; 1961-62, 1st year class 38; 2nd year class 35; 3rd year class 21. Those entering the school with degrees were in 1959-60, 31; in 1960-61, 42 ; in 1961-62, 26. The numbers of entering students married were in 1959-60, 11; 1960-61, 7; 1961-62, 7. Ages on entrance were: 25 years or under, 1959-60, 25; 1960-61, 44; 1961-62, 31; over 25 years, $1959-60$, $11 ; 1960-61,7 ; 1961-62,9$. The universities at which the entrants received qualifying education were: in 1959-60, Western, 26; Toronto 5; Queen's 3; others 5; of these, 7 attended two or more universities; 1960-61, Western 39, Toronto 5; others 14; of these, 7 attended two or more universities; 1961-62, Western 30; Toronto 5; Queen's 1; others 10; of these, 6 attended two or more universities. The geographical distribution of the entrants was: 1959-60, Western Ontario 28; Eastern Ontario, Quebec and Eastern Provinces 6; Western Canada 2; 1960-61, Western Ontario 37, Eastern Ontario, Quebec and Eastern Provinces 13, Western

Canada 1; 1961-62, Western Ontario 30, Eastern Ontario and East, 9; Western Canada 1. In the Spring Convocation 1962 the degree of LL.B. was conferred upon seventeen members of the graduating class.

For the year 1962-63 two new members of the teaching staff have been appointed, Assistant Professors John M, F lackett and Ralph E. Scane. The former was educated at Birmingham University, received the degree of L.L.B. (Hons.) in 1956, and at St. John's College at Cambridge, L.L.B. (Hons. Post Graduate). At Birmingham he took the Aitchison Memorial Prize, was awarded an International Legal Studies Fellowship, and, with a Fullbright Scholarship, spent a year, 1959, in advanced work at the University of Pennsylvania: from 1959-61, he was lecturer at the Law Faculty of the University of British Columbia and Assistant Professor in 1961-62. He is a member of Gray's Inn, London.

Professor Scane is a native of Ontario. In 1953 he graduated in Arts at Victoria College (University of Toront) with honours in Political Science and Economics winning, in 1951, the Alexander Mackenzie and the Alumni Scholarships, and in 1953 a J. Reginald Adams Gold Medal in the same subjects. In 1957 he graduated from Osgoode Hall taking the Bronze Medal and the Christopher Robinson Memorial Scholarship. For the past five years he has been in professional practise in the city of Toronto. Prof. Scane fills the vacancy caused by the resignation of Mr. Gary Keyes who is entering post graduate study at the Law School of the New York City University.

With a faculty of eight full-time and three part-time members the school is equipped to meet the present demands in teaching. Although the effective mode of learning law calls particularly for the student's individual struggle with legal ideas, yet as in other disciplines, assistance and guidance from the broader conceptions of matured thought and experience deepen the grasp of them and they seem best communicated by the free discussion of concrete problems arising in the courts. In the development of law, incrustations on rules and formulations of principles inevitably accumulate, and one of the functions of law school instruction is, by critical examination, to free the language of law from these impediments to clear thinking, to endeavour to dissipate opacities and uncertainties in authoritative pronouncements. This is conditioned by the intellectual levels of the student
body offering: what is dictated in some cases is to be modified in others; and like other accommodations, teaching must have regard to all elements including functions and requirements which the school may find itself peculiarly placed to serve.

During the year the second volume of Current Law \& Social Problems was published. Its articles elucidate questions of Criminal Responsibility, Moral and Positive Law, International Business, Investment, Aerial Liability, and recent legislative development in Canada in the field of Drug Addiction. The treatment generally of these subjects exhibits concise statement and comprehensive elaboration of appropriate standards.

Published also was an elaborate and penetrating monograph on Government Guarantees to Foreign Investors by Assistant Professor Fatouros. This work grew out of a doctoral the sis of Columbia University and it has been described as a "major contribution to the science of International Law". Assistant Professor Johnston was the recipient of the degree of J.S.D. from Yale University; His thesis, "The International Law of Fisheries", is expected to be published during the coming year: the importance of its subject-matter is obvious and its publication will be awaited with much interest.

The quality of the work done in the third year of the school's life was, on the average, quite as high as in the previous years; that of the third year class was particularly welcome. While the results as a whole, in the light of the standards set, are not disappointing, they are not as satisfactory as we would like. They call for keener perception of effectiveness in the teaching and of appreciation in its reception. The closer integration of school interest is now in progress, and it should be expected that future results will evidence a deeper student mastery through the stimulus from this and other factors.

As in the previous years, a number of lectures and addresses were given by members of the faculty to groups within and without the University. This practice seems desirable not only in accommodating these groups but also in extending that communication of ideas which is so essential to intelligent government and to the stability of a democratic society.

The library is steadily widening its coverage of law reports; with the acquisition of those of New Zealand and Australia, both
state and Commonwealth, we shall have completed the records of Common Law judicial decisions of every land where that law is basic with the exception of those of state courts of the United States prior to the 1870's; as these are now being re-published in the National Reporter series, the school is in a position, in this respect, to meet the reasonable requirements of legal research in any Common Law field.

The service given by Dr. Talman and the Library Administration has been excellent and I desire to mention the prompt consideration given by Dr. Banks and her staff to any suggestions made for the accomodation of student work. The one feature which has caused and apparently, to some degree, will continue to cause annoyance is the unauthorized removal of books from the library and delay or failure in returning them, both a violation of the library regulations. This is specially serious in a law library where the greater number of volumes are units of sets, the purchase of a single volume of which is, generally, most difficult and in many cases impossible. It may be necessary to adopt the practice to which other schools have been forced, of a turnstile exit at which all portfolios or other bags must be opened for examination. Other means will first be adopted but the situation seems to resist correction through general appeal.

All of which is respectfully submitted.

FACULTY OF ENGINEERINGSCIENCE<br>Report of the Dean - R. M. Dillon

We can perhaps derive some satisfaction from the progress made by the Faculty of Engineering Science during its second year where significant advances have been made in a number of areas as outlined in the following report. At the same time we must not lose sight of the fact that we are in the midst of a critical stage in our development during which only the very best efforts of all can spell ultimate success.

## The Faculty

It is gratifying to see that the number of technical conferences attended by Faculty members is growing and particularly enouraging to note a marked increase in active participation at these meetings.

The 76th Annual General Meeting of the Engineering Institute of Canada, Montreal, P.Q., 12th - 15 th June 1962 was attended by Professors Foreman and Davenport. At this meeting Dr. Davenport presented a paper dealing with some aspects of the wind loading of structures.

Professor Lauchland attended a Conference for Department Heads or equivalent in Mechanical and Electrical Engineering sponsored by the Canadian General Electric Company Limited at Peterborough on the 4th - 6th June 1962.

Professors Foreman and Poucher attended the 70th Annual Convention of the American Society for Engineering Education held at the U.S. Air Force Academy, Colorado Springs on the 17th - 22nd June 1962.

Several members of the Faculty attended the Fourth Southern Ontario Regional Conference of the Engineering Institute of Canada held in London, Ontario on the 28th of April. Professor Lauchland served on the general committee and acted as moderator at one of the technical sessions and Professor Soderman read a paper entitled "Practical Applications of Recent Advances in Soil Mechanics'.

Professor Poucher was invited to attend the Annual Meeting of the Canadian Institute of Steel Construction held at Montebello, Quebec on the 11th - 12th May 1962.

The Faculty was represented by the Dean and Professor Poucher at the Annual Meeting of the Association of Professional Engineers of the Province of Ontario held on the 27 th January 1962 in Toronto.

The Canadian Nuclear Association Annual Meeting held in Ottawa from the 28th to the 30 th of May 1962 was attended by Professor Emmerson.

Professor Poucher attended the first annual meeting of the Canadian Sheet Steel Building Institute at Hamilton on the lst of May 1962.

Professor Lauchland was appointed to the Accreditation Committee of the Association of Professional Engineers of the Province of Ontario and at the same time he continued to serve as an Association Examiner for Mathematics I.

Professor G. S. Emmerson was employed by the Reactor Division of Atomic Energy of Canada Limited at Chalk River during the summer of 1961 when he was engaged in design studies on fog cooling systems for reactors.

Members of the faculty continued to take an active part in High School career days throughout the area. The absence in the High Schools of sufficient numbers of guidance officers with a true understanding of engineering and our continuing need to attract gifted students makes it especially important that we pursue this activity with increasing vigour.

The Dean served as a Project Officer with the Royal Commission on Government Organization. The assignment, from July until December 1961, was with the Scientific Research and Development group. In May and June of 1962 he visited a number of engineering schools and colleges in the United Kingdom and Ireland.

Professor Chess has been awarded a National Science Foundation Grant to attend a series of Summer Institutes for Electrical Engineering Teachers at Worchester Polytechnic

Institute where he will begin post-graduate studies leading to a doctoral degree.

Professor Lauchland served on the University Committee on Copyrights and Patents.

Professor Soderman and the Dean collaborated in the preparation of a specification for the Sub-Structures SubCommittee of the Committee on Highway Bridges of the Canadian Standards Association.

Through the generosity of Mr. F. E. Johnson of Ottawa, and the tireless efforts of Professor Soderman the Johnson Lecture Series in Soil Mechanics was initiated in April of 1962. The first guest lecturer, Dr. P. W. Rowe, Reader in Soil Mechanics of the University of Manchester spoke to about forty engineers from other universities, government and consulting engineering organizations in Ontario, Quebec and the United States explaining to them his theories on earth pressure concepts and shear strength theory.

On the 4 th April 1962, the Deans of the ten engineering schools in the Province of Ontario met at Western for the purpose of discussing problems of common interest to Provincial engineering faculties. Perhaps the primary purpose was to study the Robarts Plan for Secondary Education, but a number of other topics received consideration and it was agreed that further conferences would be held at the discretion of Dean H. G. Conn of Queen's University who was elected Chairman.

Rules of Procedure for the Faculty Council drafted by Professor Chess have been formally adopted by Council.

Professor G. S. Emmerson was awarded a Ford Foundation Grant to attend a special Summer Programme on "Modern Developments in Heat Transfer" at M.I.T.

## Visitors

On the 8th November 1961 Dr. B. G. Ballard, one of Canada's most distinguished engineers, visited the Faculty in his capacity as President of the Engineering Institute of Canada. In the afternoon he addressed the student body and staff prior to speaking at dinner to the London Branch of the Institute.

We were visited on the 24th of November 1961 by an Accreditation Team of the Association of Professional Engineers of the Province of Ontario. The Committee was under the chairmanship of Professor H. S. Pollock, Department of Electrical Engineering, Queen's University, and included Professor E. L. Dauphin, Department of Civil Engineering, Queen's University, Professor W. A. Wallace, Department of Mechanical Engineering, University of Toronto, and Professor W. G. MacElhinney, Department of Chemical Engineering, University of Toronto. Subsequently, we were informed by the Council of the Association that in future our graduates will be qualified for registration as professional engineers on a similar basis to graduates from other accredited schools in the Province.

The Reverend Denton Massey, O.B.E., S.B., Rector of Saint Paul's Anglican Church, Point Edward, who is an Engineering graduate of the Massachusetts Institute of Technology, addressed the graduation class at the Graduation Banquet.

In April Professor A. H. Naylor, Professor of Civil Engineering, Queen's University, Belfast and Dr. Lillian Gilbreth, internationally known industrial engineer, visited the campus.

Mr. G. E. Humphries, Consulting Engineer of London and Vice-President of the Engineering Institute of Canada and President-elect of the Canadian Association of Consulting Engineers, addressed the students and guests at the annual E.I.C.-U.E.S. Dinner held in Somerville House.

Dr. D. M. Myers, Dean of the Faculty of Engine ering, University of British Columbia was our guest during the 9th and 10 th of May 1962.

In addition to the above distinguished visitors the following appeared as guest lecturers for the fourth year course in Engineering Practice.
J. B. Cronyn, P. Eng., President, Labatt Industries Ltd. Mr. L. Sifton, Director, District 6, United Steel Workers of America
Mr. T. H. Bremner, News Editor, CFPL Radio, London
Mr. G. R. MacMillan, Assistant Manager of Manufacturing, Imperial Oil Limited
J. Guthrie, P. Eng., Chief Construction Engineer, Manufacturing Department, Imperial Oil Limited

Ivan C. Rand, Q.C., Dean, Faculty of Law, University of Western Ontario

## Research and Graduate Studies

There has been a marked increase in the amount of funds available for research in the current year. From the Alexander Charles Spencer Endowment Fund and the Edna E. Jeffery Engineering Research Fund and from other special accounts will come over $\$ 20,500$. Grants in aid of research amount to $\$ 12,650$ making the total available from all sources just over $\$ 39,000$. This corresponds to a figure of about $\$ 13,000$ for last year.

Currently some 12 projects are underway, the work being under the direction of 9 members of staff. Dr. A. G. Davenport is conducting a number of investigations dealing with the measurement of scales, spectra and cross-spectra of strong wind turbulence in the first thousand feet of the atmosphere over open country and over urban areas. As well, he is investigating the action of these gusty winds on several types of structures. Certain aspects of this work involve wind tunnel testing which he intends to carry out during the summer of 1962 in the laboratories of The National Aeronautical Establishment in Ottawa. Professors Foreman and Bulani are continuing their investigation in combustion spectroscopy and Dr. E. S. Nowak is engaged in analytical studies arising from his research in the thermodynamic properties of water vapour at critical temperature and pressure.

Professor L. G. Soderman is carrying out a compositional analysis of Ontario clays, his work being supported by the National Research Council. The initial laboratory work will be carried out in cooperation with Professor William T. Lamb at the Massachusetts Institute of Technology.

Professor G. S. Emmerson plans to institute investigations in boiling heat transfer and Dr. K. A. Upton who recently joined the staff will continue his investigations in the structural behaviour of bolted joints, an interest he developed while at the University of Bristol.

Perhaps the most significant step forward this year has been the institution of a program of post graduate study. On the 19th of September 1961, members of the faculty met with Dr. R. A. Allen, Dean of Graduate Studies, to discuss the possibility of introducing a graduate program in Engineering Science commencing in the fall of 1962. Subsequently, the Engineering Science Committee on Graduate Studies was set up, the original membership comprising as follows: Professors Kearns, Lauchland, Foreman, Davenport, Poucher, Bulani, and the Dean. Professor Poucher was appointed secretary and it was largely due to his efforts that the Committee, after a series of meetings held within a relatively shor t period, produced a proposal for a program leading to the degree of Master of Engineering Science. The proposal was considered by the Faculty of Graduate Studies on the 17 th November, received Council approval on November 27th, and finally Senate approval early in December of 1961. The program will consist of a thesis and a minimum of two courses, at least 50 per cent of the work being in Engineering Science. On the advice of the Engineering Science Committee on Graduate Studies and with the concurrence of the Department concerned, candidates may elect to take courses in basic or social sciences offered by Departments in the Faculty of Arts and Science, thus adding considerably to the flexibility and scope of the program. Some twelve graduate courses in Engineering Science were planned although it was not envisaged that all of these would be given in one year.

The response to our bulletins and posters was encouraging and by mid-March almost 100 enquiries had been received. These came from students attending universities across Canada and from several foreign countries as well as a considerable number of young engineers working in industry. Interest was also shown by undergraduates expecting their baccalaureate degree in 1963 or later. A number of very promising applications have been considered and the forecast enrolment in graduate studies for 1962-63 is from 4 to 6 students.

## The Curriculum

A number of relatively minor changes to the curriculum for 1962-63 were approved by Faculty Council with the aim of further unifying the program and where possible reducing the weight of the course especially in the third and fourth years.

Electric Machines and Electronics, a third year course, will be rearranged and sub-divided into two parts, the first Principles of Electro-Mechanical Encrgy Conversion will be offered by Professor Lauchland, and the second, Principles of Electronic Devices by Professor Chess. Laboratory work at the third year level will be further unified through the introduction of a new course to include experiments in thermodynamics, fluid mechanics and mechanics of materials. Again in the third year, the surveying course taken by civil engineering students will be reduced to a half course. Structural Analysis and Design offered to the fourth year was separated into two courses, one dealing with structural theory and the other with design, this change being made possible with increased numbers of staff. A new course in the Geology of Unconsolidated Deposits will be offered to the civil engineering option through the Department of Geology. Discussions have been held regarding the desirability of re-introducing a full course at the first or second year level for all students. This plan was enthusiastically supported by members of the Department of Geology. Senate approval was obtained for a new course numbering system by which the level and general subject matter of a course may be readily identified.

Disturbingly high failure rates in the third and fourth years continue as one of the most perplexing problems facing the Ad Hoc Committee on Curriculum Policy which continued its long term study under the Chairmanship of Professor Foreman. One of the aims is to devise a more flexible program which will better suit the requirements of students with a wider range of academic ability and interest and which, it is hoped, will reduce the current attrition. To this end, the committee has conferred with members of the Advisory Committee on Engineering Science, with members of the Faculty of Arts and Science and with Engineering educators in several other universities and colleges and has discussed with them a wide range of topics such as pre-engineering programs, multi-stream curricula, student course loading, industrial cooperation and graduate programs. A considerable amount of data was gathered during a visit to Case Institute of Technology in Cleveland, Ohio, where a most interesting reorganization of the School of Engineering has recently been put into effect. Professor Foreman plans to convene a meeting of the Committee for a week-long conference
during the summer of 1962 with the object of presenting a preliminary report for the consideration of the Faculty Council in September.

## Enrolment

During the academic year 1961-62 there were a total of approximately 4,200 undergraduates enrolled in engineering courses in Ontario and of these 228 were attending Western. One hundred were in the freshman year, 68 in the second, 37 in the third and 23 in the final year, which represents an increase of 20 per cent over last year's enrolment. Of the 82 freshmen entering from Ontario Grade XIII, 31 had attained a minimum of 70 per cent on 9 papers, which showed a considerable improvement in standards over the past two years. Plans for the coming year have been completed assuming a total enrolment of about 280 of whom about 110 are expected to be freshmen. At the present time future planning is proceeding on the basis of a maximum undergraduate enrolment of about 400 although this figure may have to be revised to keep pace with overall requirements in the Province.

## Advisory Committee on Engineering Science

The fourth meeting of the Advisory Committee on Engineering Science was held on Thursday l2th October under the Chairmanship of Dr. E. V. Buchanan. Perhaps the most important topic discussed dealt with the support of research and graduate work. There was unanimous agreement that this activity should receive the highest priority and that the Committee should continue to support the program by supplying apparatus, equipment and other facilities wherever possible. It is a pleasure to report that in several instances this decision has been put into effect and committee members have been most generous with both material assistance and sound advice whenever they have been called on. This spontaneous support is deeply appreciated by all members of the faculty.

The Committee regretfully accepted the resignation of Dr. C. J. Mackenzie, President of Atomic Energy Control Board, and subsequently, the Board of Governors approved the appointment of Brig. J. P. Carriere, Executive Vice-President, Franki of Canada Limited from Montreal.

## Future Space Requirements

The growing research program and the imminent onset of graduate work has already pointed to the urgent need in the very near future for additional facilities. To assist in future planning, Professor Chess has conducted an Accommodation Study, the purpose of which was to ascertain the amount of space which would be required to conduct the present academic program when enrolment reaches its projected maximum by the academic year 1967-68, to deter mine how much of this requirement might be met by the existing facilities and finally to determine when the availability of additional space will become critical.

Professor Chess survey indicated that the most imminent need would be for extra shop facilities which will almost certainly be inadequate by 1964-65. If our graduate enrolment is to increase as envisaged, there will be an acute shortage of laboratory space during this same academic year. Allowing for increased numbers of undergraduate students we can, with present facilities, accommodate a maximum of 17 graduate students and we can go this far only by modifying our present building and accepting undesirable congestion in the laboratories.

To accommodate an undergraduate enrolment of 1967-68 of 410 and a graduate enrolment of 35 , the total requirement is estimated to be 30,000 square feet of additional space, comprised roughly of 3,000 square feet for offices and lecture rooms, 3,600 square feet for shop facilities and 23,400 square feet for laboratories, all of which would double our present accommodation. The salient fact as reflected by these studies is that although the total amount of space referred to above may not be required for five years, a serious shortage is foreseen in just two years time.

## Student Activities

Professor Emmerson, Advisor to the Undergraduate Engineering Society and Professor Foreman, Advisor to the Student Chapter of the Engineering Institute of Canada report that student activities continue to be efficiently organized and enthusiastically supported by a high percentage of the student body. Membership in the U.E.S. stood at 175 and in the E.I.C. at 140 .

# FACULTY OF ARTS AND SCIENCE 

Report of the Dean - F. Stiling

History was made in the Faculty of Arts and Science during the year under review by the separation of the duties of the Dean of the Faculty from those of the Principal of University College. Immediately after this action, the Dean was able to devote his full attention to maintaining the academic policies of the Faculty, considering changes in policy, and implementing the details inherent in them.

A valuable contribution to these purposes was made by having weekly meetings of the three Principals of the colleges of the University. These meetings enabled the Principals and the Dean to anticipate possible difficulties among personnel and in academic practice and to maintain a harmonious relationship which contributed greatly to an amicable and efficient operation of the three colleges. One obvious result was that each College felt it was part of a larger whole, which feeling benefited not only the Faculty of Arts and Science, but the University. One other result of these regular meetings was that the realization came to both the College of Music and to the other colleges that it was an integral part of the Faculty of Arts and Science, and hence of the University.

Satisfactory relations between the University colleges and the Affiliated Colleges were continued and enhanced by continuing to hold regular monthly meetings of the Arts Educational Policy Committee of the Senate: The value of these meetings was demonstrated time and time again by, among other things, ensuring common, but not uniform, educational practices and policies.

Although each Principal of the colleges will be submitting an individual report, I should not let this opportunity pass without noting the addition to University College to provide additional office space for members of the Faculty. An addition to Middlesex College is projected in order to provide similarly additional academic office space and more class rooms.

Reference will be made later to the report of the Admissions Committee in the appendix to which it is stated that a new natural science building is to be erected which will probably be started in 1963 and that to take care of prospective increased enrolment it will be necessary to have a new Arts College, comparable to Middlesex College, at some time in the near future.

Two important departments, which are concerned with part time studies, remain in the jurisdiction of the Dean. They are the Department of Extension and Summer School Studies, and the Department which deals with the TroisPistoles Summer School. The former of these, in addition to continuing with its credit work, established a much needed non-credit programme of adult education. This programme which was systematically organized and was taught by members of the Faculty of the University, involved a wide variety of subject matter. These courses were offered in London and attracted wide interest.

The attendance at the Trois-Pistoles Summer School increased in 1961. In addition to the traditional courses in oral French and in painting there were offered two new courses. Both of the se were well supported and attracted considerable attention; they mark an innovation in this University as they involve pedagogy. The first of these was a course in method of teaching oral French, and in the second, twenty-eight FrenchCanadian school teachers were given a course in the method of teaching oral English.

During the year a special committee appointed by the President, studied the admissions policy of the University of Western Ontario, some parts of which are intimately concerned with the Faculty of Arts and Science. "It must be recalled, too, particularly with regard to the physical facilities and staff requirements, that all of the natural science courses, mathematics, the humanities subjects, and the social science subjects taken by the students in Engineering, Nursing, and Business Administration are provided, not within their own faculties, but by the Faculty of Arts and Science. All courses for 'premedical' students are likewise provided by University College.
${ }^{n n}$ The same general situation exists with respect to the Affiliated Colleges whereby all courses in the sciences, mathematics, psychology, geography, etc. are taken in University College. Therefore, any increase in enrolment in the 'professional faculties and/or in the Affiliated Colleges materially affects the constituent Faculty of Arts, viz, classrooms, laboratories, demonstrators, staff, secretaries, offices, supplies, etc." This Committee, under the chairmanship of Vice-President Allen, was concerned with the proportion of students in the Faculty of Arts and Science to the number of students in the whole University and the proportion between the Affiliated Colleges and the University Colleges. The following statement was made on the assumption that the University would not be allowed to grow any larger than 5,000 students: "This would allow for 3,100 students to be registered in the constituent Faculty of Arts and Science. The Affiliated Colleges' total enrolment should not, it is felt, exceed one-third of the total enrolment of Arts and Science".

During the month of March, 1962, the Universities Advisory Committee of the Provincial Government encountered, for the first time, the prospective enrolment in universities based on Ontario, rather than on national figures. The effect was astounding expecially upon the authorities at this institution because it became evident that we would have to accommodate a greater number than the 5,000 students. A special committee of the Faculty of Arts and Science under the chairmanship of Dr. M. K. Inman devoted its attention to the projections in enrolment and to some extent with the physical accommodations in the Faculty of Arts and Science. These greatly increased figures also hastened the establishment of another special committee concerned with academic standards. In the letter containing the terms of reference which was sent to each of the members, namely Professors C. J. Hickman, F. W. Taylor, M. K. Inman, A. H. Johnson, P. Forsyth, J. Graham and A. V. Tucker, the following statement occurs: "As we shall presumably be turning applicants away, it is important that we should not be harbouring students inferior to those we shall be rejecting. This, then is a good time to re-assess our standards in some of our courses ... This Committee ... will be primarily concerned with academic standards. It will review curricula in the Faculty of Arts and Science considering the purposes in the General and the Honours Programmes.
"This new Committee will review the manner in which we are trying to achieve the se purposes and presumably this review will result in recommendations. The Committee will examine the practices of the two sub-committees of the Acadernic Standing Committee which deal with petitions and failures and near failures. This Committee may consider it wise to examine the method of instruction used in various disciplines but it may decide that these are departmental affairs and should not be considered by the Committee."

The Committee began meeting on March 15, and met eight times before the closing of the academic year. It will be resuming its activities early in the autumn of 1962 and should present many recommendations which will interest the Faculty Council, and, it is hoped, the members of the Senate.

Before concluding this report, I must express my gratitude to the Principals of the University colleges and their counterparts in the Affiliated Colleges, and express my pleasure in the appointment of an Associate Dean; Professor M. K. Inman was appointed to this office by the Board of Governors on June 15 .

# UNIVERSITY COLLEGE 

Report of the Principal - Robert J. Uffen

The academic year 1961-62 was one of continued expansion, in enrolment, in faculty and staff, in academic development and in physical facilities. This trend is likely to continue for at least a decade. The increase in undergraduate enrolment is being taken up largely in Middlesex College of Arts so that the enrolment in University College is stabilized near 1700. However, during the past five years the enrolment in the Faculty of Graduate Studies, Arts and Science division, has doubled from 101 to 196, and this is having a profound effect on the activities of the faculty of University College. Over forty per cent of these graduate students are in the Natural Sciences which has put an enormous load on the laboratory facilities. The increasing need for future university faculty members will require even greater increases in the number of graduate students and the attendant research facilities.

To meet this expansion nineteen new faculty appointments were made effective July 1, 1962. There were twenty-three promotions, one leave-of-absence, ten resignations and two retirements (See AppendixA). Notable among these were the retirements of Professor Christian Sivertz, who came to Western in 1926 and is leaving for England where he will continue his chemical research, and Professor Hartley Thomas, who has spell-bound students of history since 1931. Professor Thomas, will continue to lecture in Huron College. After a few years' absence, Professor L. Ignatieff is returning to U.W.O. as Professor of Russian Studies. Dr. J.D. Ralph has resigned as W. Sherwood Fox Professor and Head of the Department of Classics, and is succeeded by Dr. A. E. Raymond. Dr. Ralph will continue as Professor of Classics. Dr. Peter Forsyth took up his duties as Professor and Head of the Department of Physics in September 1961. He came to us from the University of Saskatchewan where he was Professor in the Institute of Upper Atmospheric Physics.

It is with great regret that we record the death of Mr . A. E. Thompson, Senior Technician in the Physics Department who, despite chronic ill health had been a cheerful, willing, and resourceful assistant for many years.

Effective July 1, 1962, distribution of the faculty and staff of University College will be as shown in the following table. There will be 154 full-time faculty members; 165 part-time, technical and stenographic staff; and another 20 or 30 Research Associates who stay for a year or two, making a grand total of about 350 people.

A chronic state of overcrowding is being temporarily alleviated by addition of an office wing onto the Arts Building which will be ready for occupancy September 1962.

The scholarly activities of our faculty and graduate students are evidenced in several ways: by their original publications; by the financial assistance they are able to command from granting agencies outside the University; and by the very large number of advisory positions and memberships in Learned and Professional Societies which they occupy; and by senior awards and scholarships. A total of 152 books, articles, scientific papers and reviews were published during 1961-62 (See appendix G). Members of University College, because of their individual reputations, brought to U.W.O. a total of over $\$ 500,000.00$ in research grants and contracts (See Appendix H). The activity of the following is particularly noteworthy: Professors D. C. Bradley, E. Brannen, A.W.A. Brown, P. de Mayo, P.A. Forsyth, D. Hay, A.H. Johnson, W. W. Judd, R. W. Nicholls, F. L. M. Pattison and E. G. Pleva.

Our faculty and students continue to win a significant number of senior awards and scholarships to pursue graduate studies at U.W.O. and abroad. For example, graduates in the two Departments of Chemistry and Physics alone, received 23 awards averaging \$2,000.00 each. For the first time in many years a Western student, Mr. James Farley, Honours Economics, won a Rhodes Scholarship.

Members of our faculty are quite active in Learned and Professional Societies, a function which, although often overlooked by the general public is indeed of great academic significance. Frequently they are called upon by Federal, Provincial and Municipal Governments as well as Industry, in advisory capacities, usually without remuneration. The detailed list is impressive. For example, Professors F.L.M. Pattison and J. H. Blackwell were appointed to National Research
UNIVERSITY COLLEGE of ARTS and SCIENCE

| Departinent | Prof. | Assoc. Prof. | Assist. Prof. | Lect. | Instr. | Demonstrators | Teaching Fellows | Teclınicians | Secictaries | Other | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Principal's } \\ & \text { Office } \end{aligned}$ |  |  |  |  |  |  |  | 1 | 3 |  | a |
| Bctany | 2 | 3 | 1 | 2 | 1 | 0 |  | 6 | 23 |  | 23 $\frac{1}{2}$ |
| Cl-eaistry | 3 | 1 | 11 | 2 |  | 14 |  | 5 | 4 | 2 | 4.2 |
| Classics | 2 |  | 1 | 2 |  |  |  |  |  |  | 5 |
| Cceputing Center |  | 1 | 1 | 1 |  |  |  |  | $\frac{1}{2}$ | 4 | 72 |
| Econouic \& Pol. Sci. | 2 | 2 | 3 | 3 |  |  | 3 |  | 1 |  | $1 L_{\text {c }}$ |
| English | 2 | 4 | 2 | 5 | 2 |  | 3 |  | 1 |  | 19 |
| Geman | 2 | 1 |  | 2 |  |  | 1 |  |  |  | $\bigcirc$ |
| Geography | 1 |  | 1 | 6 |  |  |  |  | 1 | 1 | 10 |
| Geology | 1 | 3 | 2 | 1 |  | 7 |  | 2 | 1 | 1 | 13 |
| Geophysics | 1 | 1 |  | 3 |  | 1 |  | 3 | 1 |  | 10 |
| History | 1 | 2 | 1 | 6 |  |  | 2 |  | $\frac{1}{2}$ |  | 1212 |
| Jcurnalisa | 2 |  |  | 3 |  |  |  |  | $\frac{2}{2}$ |  | 10\% |
| Hathematics | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 1 |  | 23 |
| Philosophy | 1 | 2 | 2 | 2 |  |  | 2 |  | 1 |  | 10 |
| P.II. ER.E. | 1 | 3 | 1 | 6 |  |  |  |  | 1 | 5 | 17 |
| Physics | 3 | 3 | 7 | 3 |  | 5 |  | 10 | 3 | 1 | 35 |
| Psychology | 1 | 2 | 1 | 4 |  |  | 2 |  | 1 |  | 11 |
| Secretarial Science | 1 |  | 2 | 1 |  |  |  |  |  |  | 4 |
| Romance Languages | 2 | 1 | 2 | 3 | 2 |  | 1 |  | 1 |  | 12 |
| Fussian | 1 |  |  | 3 |  |  |  |  |  |  | 4 |
| zoology | 2 | 3 | 3 |  |  | 9 |  | 4 | $1 \frac{3}{2}$ | 1 | $23 \frac{1}{2}$ |
| TOTAL | 35 | 35 | 45 | 66 | 7 | 4.4 | 10 | 32 | 25-1 | 15 | $321 \frac{1}{2}$ |

Council and Ontario Research Foundation grant selection committees; Professors J. A. McIntyre and J. L. Wild were appointed Project Officers for the Glasco Commission; Dr. J. Kramer was appointed to the Editorial Board of the U.S. National Science Foundation; Professor C. J. Hickman was appointed to the Board of Directors of the Royal Botanical Gardens, Hamilton; Professors M. H. M. MacKinnon and E.J. Beattie conducted numerous radio and television programs; Professor A. B. Conron was a member of the Board of Directors, United Community Services, London; Professors D. C. Bradley, J. B. Stothers, S. G. Peitchinis, G. Reuber, M. Inman, E. Brannen, D. Hay, and G. Winder acted as consultants to various private companies; Professor E. G. Pleva was appoited to the Social Science Research Council Executive, was Chairman of the City of London Planning Board, was a member of the Conservation Council of Ontario, and was consultant to the Ontario Cabinet Advisory Committee on Conservation; Professor A. H. Johnson was elected a Fellow of the Royal Society of Canada, was President of the Canadian Philosophical Association, and was editorial consultant to Dover Publications and the Humanities Research Council of Canada.

An exceedingly important responsibility is that of participating in the Province of Ontario Grade XIII examination program because of its importance in determining the type of student able to meet our entrance requirements. Professor A. B. Conron was a member of the Supervising Board for 1961-62, while Professors R. W. Torrens, N. A. Bennetton, R.H. Stinson, W. E. Atkinson, and Mrs. R. Waller were Examiners-in-Chief.

It is a peculiarity of educational institutions that much of the internal administration and planning must be done by the faculty in addition to their more obvious functions as scholars and teachers. A great deal of this must be fitted in between the winter and summer academic sessions and between regular classes. A heavy load falls on those experienced faculty members who are called upon over and over again to sit on committees for scholarships, admissions, parking, library, and the like, of which there seems to be an endless number. Notable among these people are the following: Professors M. K. Inman, G. H. Reavely, R. W. Torrens, H. I. Battle, A. H. Johnson, M. H. M. MacKinnon, J. H. Blackwell, and G. H. Turner.

Few people realize how early in the planning for new buildings the academic decisions must be made. For a building costing about $\$ 2.5$ million, the re is required about 18 months for construction, about 2 months for the contractors to prepare bids; about 6 months for the preparation of detailed plans and about 3 months for preliminary architectural and site planning. Consequently, if a building is needed for occupancy say in the autumn of 1965 , the recommendations as to who and what will occupy it must be made and forwarded to the Board of Governors by the Spring of 1963. It is obvious that if the forecasts of future enrolment for Ontario Universities can be relied on, then we have a very short time indeed in which to prepare.

I would like to take this opportunity to thank the faculty and staff for their cooperation and support during a period of such rapid change in the University. The members of University College may be proud of the younger faculties, schools, and colleges to which she has given birth. In particular I would like to thank Mr. John Schram, Prefect and Miss Pauline Beattie, Sub-Prefect, with whom I had the pleasure of participating so pleasantly in student affairs, and Professor Harold Reavely who with quiet efficiency, was Acting Principal whenever needed.

## MIDDLESEX COLLEGE

Report of the Principal - D. G. G. Kerr

In its second year, and with two classes in attendance, Middlesex College had in 1961-1962 a total of 774 students as compared with the 344 freshmen of the previous year. Student activities under the leadership of an able council were well-established. The physical plant was functioning smoothly. It was already becoming comfortably filled, however, even without the third class enrolled: all faculty offices were occupied, class room utilization was at least as high as on any part of the campus, the theatre and examination room were in great demand, the Barbara Ross Spencer Library was in full use, and the Terrace Room, always occupied, was crowded for several hours at noon each day.

The year was marked by the tragic loss of Dr. David Ivor, Head of the Department of Economics and Political Science. Dr. Ivor died in England, where, on a year's leave of absence as a Nuffield Fellow, he was engaged in research on the problem of transferring under-employed resources from industries of declining productivity. His sound teaching, scholarly writing, and genial companionship had made him a most effective member of the College's original faculty. He will be missed.

It is perhaps too early to comment usefully on the success of the decision to divide the Arts and Science Faculty into colleges, or to forecast what sort of identity, if any, Middlesex College may acquire. It already differs in one important aspect from University College. The latter is a large diverse organization spreading over a number of buildings and all departments, including the costly sciences, and it outweighs Middlesex College in seniority, size, budget, and administrative complexity. Middlesex College is compact and homogeneous. It enjoys the advantages that correspond to these characteristics - in particular its faculty have an excellent opportunity in the office wing and faculty lounge for stimulating association with one another. This may well account in part for the stubstantial amount of scholarly activity in which they are engaged. Some of this activity is reflected in the appendix
to this report where publications are listed; other phases of it require special mention here.

Most obvious to the outsider and among the most important is the work of the two departments with laboratories, Romance Languages and Psychology. The Psychology Laboratory, specializing in studies in learning and perception, has been adding to its equipment and is of increasing importance for its undergraduate and graduate teaching and for its research. The Romance Languages Department added a recording studio to the facilities of its Audio-Visual Center, and made some other modifications to improve the latter's efficiency. The Center was used not only in regular teaching by all language departments and the School of Music, but for non-credit "Corrective English" courses for New Canadian and foreign students and also for special courses in language laboratory techniques for high school administrators and teachers. It is particularly gratifying that this University is taking a lead in providing instruction in how best to operate the expanding language laboratory facilities of Ontario high schools.

In the Humanities and Social Sciences, however, it is not in the laboratory as a rule but in the office or the study at home or in a library or archives here or elsewhere that scholarly accomplishment takes place. Current publications give only a slight indication of such accomplishment because many projects do not lend themselves to the sort of periodic "progress report" common in scientific journals. Among the members of the Middlesex College faculty, for example, are: the editors of the Literary History of Canada, the Century of Canada Series, and Alphabet, one of Canada's "little magazines"; a winner of a Nuffield Fellowship for a year's study in England; three holders of Canada Council grants to finance summer research; an executive member of the group that was successful during the year in setting up and securing endowment for the Canadian Council on Urban and Regional Research (C.C.U.R.R.); a summer research assistant on the staff of the Canadian Royal Commission on Health Services; a Grade 13 examiner-in-chief; a frequent commentator on international politics on CBC; and programme participants at meetings of Learned Societies on at least twelve occasions during the past year. All of this and the eighty-one publication items listed in the appendix are evidence of the ability of the
thirty-nine full time members of the Middlesex College faculty and the spirit of active enthusiasm they share as a group. Perhaps one of the major advantages of the college system, which Middlesex College is beginning to exemplify and which may have been some what underestimated until now, is this opportunity it gives for the formation of inter-disciplinary communities of scholars within what is ceasing to be, because of rapid growth, a community of the whole University.

SCHOOLOF NURSING

Report of the Dean - R. Catherine Aikin

The following number of degrees and diplomas were conferred during the 1961-62 academic year:

October 1961 Convocation:-

| Bachelor of Science in Nursing - Programme A | - |
| :--- | :--- |
| Bachelor of Science in Nursing - Programme B | - |
|  |  |
|  |  |
| Diploma in Nursing Education | - |
| Diploma in Nursing Service Administration | - |
| Diploma in Public Health Nursing | - |

May 1962 Convocation:-

Master of Science in Nursing - 3
Bachelor of Science in Nursing - Programme A - 5
Bachelor of Science in Nursing - Programme B - 27

Diploma in Nursing Education - 52
Diploma in Nur sing Service Administration - 35
Diploma in Public Health Nursing - 61
The same number of degrees and one-seventh more diplomas were granted than during the previous academic year.

There was a ten-percent failure rate in all programmes during the past academic year.

## Enrolment

Again the enrolment of the School has increased. Of particular note is the increase in the number of graduate registered nurses returning to the University to complete the requirements for a Bachelor of Science in Nursing. Many of these nurses are completing courses through the Summer School and Extension Department and have expressed gratitude for the opportunity to do so.

By 1965, we expect to require full University admission, even for our diploma students. We are now encouraging high school students and young graduates of hospital schools to complete Grade XIII. Perhaps our enrolment will drop in three years, but with encouragement, we hope applicants will soon reach our raised standards.

## W. K. Kellogg Foundation Grant

Twelve students were enrolled in the programme leading to a Master of Science in Nursing (Administration) degree. One half of these were enrolled in each of the two years. Three students were nurses from India and three students were nurses from the Philippines. During the coming year we intend to increase our recruitment programme so that more nurses from Southwestern Ontario will become graduate students.

Professor Edith McDowell continued to direct the projects during the third year of the W.K. Kellogg Foundation Grant. Under her direction, Mr. Hugh Rooney, Mr. Jon Skafel, Mr. Douglas Martin and Mr. Robert Wyckham assisted in casewriting. The first volume of cases is now published and ready for distribution. This task has demanded a great deal of understanding of case-finding, case-writing and the casemethod of teaching. Professor McDowell and her assistants are to be congratulated upon the excellence of the results of their endeavors. It is anticipated that other university schools of nursing will wish to use these cases as teaching materials of this nature are rather rare. This is the first book of nursing administration cases to be published in Canada.

## Advisory Committee

One meeting of the Advisory Committee was held this year. The major concerns discussed were the need for nurses with university preparation, the advisability of submitting, with other university schools of nursing, a brief to the Royal Commission on Health Services, the possibility of offering credit and non-credit courses in cooperation with the Summer School and Extension Department, financial assistance to nurses attending university and the advisability of administering intelligence tests to students.

## Faculty Changes

Miss Edith McDowell has continued as Professor of Nursing Administration for a second and final year. The University recognized her contribution to nursing and nur sing education in Canada and here at the University of Western Ontario by conferring on her an honorary degree of Doctor of Laws. The School of Nursing will miss her wise counsel and leadership.

With the increase in enrolment in the School of Nur sing it has been necessary to increase the number of faculty members. Miss Ethel Horn, Miss Eileen Healey and Miss June Shaw joined the Faculty this year, the latter on a part-time basis. Miss Joyce Nevitt resigned as of June 30, 1962.

## Conferences

In January, 1962, the Faculty was pleased to cooperate with and participate in two Conferences held in the School of Nursing for teachers and head nurses of hospitals in Southwestern Ontario. The first Confe rence was sponsored by the Registered Nurses'Association of Ontario. Its purpose was to interpret the educational policies of the Association and to provide an opportunity for those concerned with nursing education to share ideas and report on progress towards better preparation of nurses.

The second conference was sponsored by the Canadian Nurses Association as part of their School Improvement Programme. This programme is one of the results of the Pilot Project on the Evaluation of Schools of Nursing in Canada completed in 1960. Eighteen regional conferences, of which this was one, were held throughout the Country to assist members of schools of nursing in evaluating their educational programmes through the use of a Self-Evaluation Guide prepared by the Canadian Nurses Association.

The Faculty were happy to act as hosts to these Conferences and assist in giving leadership in the discussions.

## Programmes

For many years, all students in the School of Nursing have studied Sociology - a special course which was offered to them from the Sociology Department. This year, with the approval of the Senate, students have studied the full Arts and Science Faculty courses - Sociology 20 or Sociology 40 for students who have already completed the introductory course.

The Senate also approved that Philosophy 30 be a required course for students in the Public Health Nursing programme. The members of the Advisory Committee, Faculty of the School of Nursing and the Department of Philosophy have believed, for several years, that this change was academically sound. We are happy that the necessary arrangements now have been made.

Some minor adjustments have been made in other courses, in order to avoid unnecessary repetition and to include current and pertinent areas of study. Perhaps the greatest single step in improving the programmes has been the building up of a library of books, pamphlets, reports and journals. An excellent beginning has been made during this past year to provide resources for Faculty and students alike. Dr. J. J. Talman and his staff could not have been more cooperative with our Faculty and we are grateful to them for their efforts on our behalf.

## Submission to the Royal Commission

on Health Services

At the suggestion of President Hall and members of the Advisory Committee, consideration was given to preparing a brief for submission to the Royal Commission on Health Services. Other University Schools of Nursing were contacted and it was agreed that a joint brief should be submitted from the Canadian Conference of University Schools of Nursing. The brief which was finally submitted in May contained recommendations with which our Faculty agreed. There were further recommendations which our Faculty alone would have made that other university Schools of Nursing did not see the need to make at this time. The se latter recommendations did
not concern university education of nurses, but rather were concerned with the practice of nursing. The Canadian Conference of University Schools of Nursing did not wish to make recommendations beyond their own immediate responsibilities. By the time the joint brief was prepared, it was too late to submit our own brief.

## Other Faculty Activities

Dr. McDowell assisted in a one-week work conference which was part of the programme in "Unit Administration" of the Canadian Hospital Association and the Canadian Nur sest Association.

One or more Faculty members attended meetings of the Canadian Nurses' Association, International Tuberculosis Association, World Psychiatric Congress, Canadian Conference of University Schools of Nursing, American Nurses' Association, Registered Nurses' Association of Ontario, Canadian Public Health Association and Canadian Civil Defence College, Arnprior。

Mrs. J. Peitchinis was elected President of the Middlesex County Chapter of the Registered Nurses ${ }^{8}$ Association of Ontario. All Faculty members continue to serve on professional and community committees.

## Student Activities

In 1962, the students of the School of Nur sing won the Lang Trophy for the first time. A high percentage of the students participated in the various sports activities and, with all the recent emphasis upon physical fitness, it seems appropriate for nur ses to be so active.

Once more this year, the students assisted in the canvassing for the Heart Fund. Their efforts were well rewarded.

A special word of appreciation should be expressed to the many agencies who have offered well-planned experiences to our students. Their contribution is an important part of our
programmes. We appreciate their suggestions for improvement, the guidance which they give the students and the careful evaluations of the students' progress.

I, personally, would like to thank the President, other members of the Administration, the Faculty of Arts and Science and the Faculty of Medicine for their assistance and cooperation during the past academic year.

# SCHOOLOF BUSINESS ADMINISTRATION 

Report of the Dean - F. W. P. Jones

While complete registration figures may be found elsewhere a few comments may be interesting. At the graduate level, for the first time, we had over two hundred students proceeding to advanced degrees. This group was enrolled from more than double that number of applications. In handling graduate students at this School one of the most interesting things that stands out is the diversity of the class respresenting all parts of Canada, several foreign countries and proceeding from a broad variety of undergraduate backgrounds. About a third of the class have had business experience. Among the graduate students at the School this year we welcomed our first doctoral candidates. Much was learned from this experience which is serving the faculty well in planning future years. At the undergraduate level the size of class was about the same as in other years. There would appear to be a trend for students to secure an undergraduate degree in another field and then to do work in administration at the graduate level.

The fifteenth session of our Management Training Course brought a demand that again enabled us to hold the course in two sections. While the heaviest registration came from Ontario and Quebec it is rather interesting to note that we had a group from the United States and one student from offshore. The course has now been recognized to the point where some corporations are, from year to year, sending a member of their top management group. In several cases all of the top managers of a particular company have come to our campus. The course was under the direction of Professor W. A. Thompson who was assisted by Professors McDougall, Thain and Wettlaufer. Again, we owe a debt of gratitude to the Harvard School of Business Administration for contributions from three of their faculty.

Enrollment in the three-week Marketing Management Course was at an all-time peak of ninety executives. All teaching was carried out by Western Faculty. Much of the teaching material was from Canadian cases gathered by our Faculty. The class carried on its tradition of expressing its appreciation to Western by making a substantial contribution to assist in furnishing a student lounge in our building.

Short courses and seminars played an increasingly important part in the activities of the School. The Young Presidents' Organization came to the campus for the fourth time to discuss "Management Control." Sessions were based on book reviews prepared by students in the class of Dr. D. H. Thain. The group used this material as a background for discussions on a wide range of problems encountered by the participants in operating their own firms. The Canadian Industrial Management Association which last year launched a London, Ontario chapter, again held successful classes in our building during the fall and winter. Otherfaculty members participated in short courses for the Canadian National Railways, Canadian Association of Advertising Agencies, the Foreman's Club, the Junior Chamber of Commerce, the Canadian Plumbing and Heating Association, National Productivity Council and others. While an objective of the School has been to channel requests for executive education into our two main courses it has become apparent that as sociations and companies wish special offerings adapted to their particular problems. While the School has been able to co pe with this to date, demands are becoming such that very shortly the School will have to examine its position on these. This is vitally necessary if we are not to sherk our main task of teaching, research and writing.

Closely allied to our student body and Canadian industry, we held our 1962 Placement Program. One hundred and twenty-five corporation visits were arranged and executives from these companies held more than fourteen hundred personal interviews in the School placement facilities. Mr. Armstrong who directed the program reports that companies are doing a much more effective job of interviewing than heretofore. It is his opinion, however, that there are still serious differences of opinion held by students and employers on how this process should be conducted. The task of the School is to improve the total atmosphere in which this process takes place so that understanding is raised to a higher level each year. Again, there was no shortage of job offers at higher salaries. Quite another problem, however, is for students to sort out their own objectives so that a first job can be mutually beneficial to both employer and candidate.

To give graduates, members of the Canadian business economy and our faculty, an opportunity to mix in a campus setting, the Sixth Annual Business Conference was held under the chairmanship
of Mr. Fred C. Berlet of the class of 1953. The theme of the conference proved very provocative as it was built around the subject, "Can Capitalism Survive?". Keynote addresses were delivered by Mr. George E. Gathercole; Dr. John J. Deutsch; Mr. John Hamilton, a former faculty member; Mr. Paul J. Lovewell and Mr. Robert B. Young. At the annual banquet, Professor Franklin E. Folts of Harvard gave a stimulating address on Industrial Practices in Japan. During the conference, Professor Thompson, an Associate Dean of the School, reviewed the Long Range Planning of the School of Business Administration. While the attendance at the conference was not up to expectations, the content was considered excellent. A committee was immediately appointed to lay plans for 1963. The School of Business Administration was fortunate in having Colonel Fraser Rowland represent it on the various Conference Boards.

The Business Quarterly during the past year generated both progress and problems. On the one front we are extremely happy that the Business Quarterly, under the editorship of Professor W. J. McDougall, continued as the only Canadian Management Journal which generated penetrating articles directed at the middle and top levels of Canadian businessmen. Of possible interest is the fact that readership polls taken in the year indicate that more than one-half of our subscribers pass the magazine to other readers, also a substantial number in this group preserve the magazine as a reference source.

In a very short period of time the Quarterly has reached the level of 6,000 paid subscribers. The problems of the Quarterly appear to be associated with healthy growth. We have found that to adequately serve our audience as well as to grow, we must add staff, increase advertising rates and attend to circulation. Thus, financing the Quarterly calls for a great deal of planning.

The joint effort of the Stanford Research Institute and Western concluded its first operating year. As a result, a project was uncovered in which the School of Business Administration and the Department of Economics co-operated in a substantial research study financed by a group of Canadian companies. It was very gratifying to the School to be able to research a problem with Professors of Economics and to have advice and guidance from the Stanford Research Institute as well. As the year drew to
a close this task was reaching its final stage. We might also mention that additional projects are contemplated to the point where some organizational changes may have to be made in our relationships with the Institute. The assessment to date is that this provides an interesting research opportunity for us to work with other parts of the University and the Canadian economy. Professor Taylor directed our contribution and Mr. Gordon Pearce, a former faculty member, stationed here by the Stanford Research Institute, bridged the gap between ourselves and SRI.

While there are some problems to be overcome on our program of Case gathering and research, the year saw considerable progress. Professors Ready, Taylor and Thain, working with junior members of faculty or doctoral students supervised important additions to our library of Canadian Case histories in the field of Finance, Human Relations and Marketing. As a result of work done in previous years, two texts not only are used at this School but in Business Schools across Canada. The year saw a revision of our introductory book, "Business Administration in Canada." This work in revised form was compiled by Professors Thain, Wettlaufer and Mr. Samuel Martin. Dr. R. K. Ready in the field of Human Relations did much further work toward the project mentioned in last year's report. It is expected that this work will go to the publisher for review and criticism by the late autumn of the current academic year. In the same field, Dr. Ready has additional work which is currently known merely as "The Arco Study." It is built around social control and leadership in a management group and at present consists of cases which it is hoped will later be advanced into analytical and theoretical forms.

Course development and problems facing the School were given much attention by the faculty. At the final faculty meeting of the past academic year, Professor Thompson's Long Range Planning group presented a statement of our up-to-date objectives. This was fully debated by our faculty and as a result of progress made at that meeting the work was turned over to a permanent planning group who will be reporting in the months ahead. Also, following the work which we completed on the undergraduate program two years ago, an MBA Study Committee was created for the purpose of assessing our graduate program. Several members of faculty worked with Dr. J. F. Hart of the Computer Centre and conferred with faculty members on leave who are studying mathematical
and statistical techniques as part of their doctoral work in other universities. Our immediate goal is leading us to the creation of at least two advanced courses in the application of mathematics and statistics to decision making. Mr. John Graham requested that Mr . Craig Lundberg be assigned the responsibility of doing bibliography work to add books to our Library. It is hoped, that using Mr. Lundberg's work as a pilot project, to do the same with additional members of faculty who might bring to us suggestions on book lists from other recognized Schools of Business Administration.

The Board of Governors saw fit to approve the appointments of Mr. George Day and Mr. Nicholas Yarmoshuk as instructors with a major part of their time committed to research. At the same time, leaves of absence were sought and granted to Mr. John Preston to attend Harvard University and to Mr. Wesley Weber to proceed to Carnegie Institute of Technology for enrollment on doctoral programs. Both of these men were supported by Ford Foundation Fellowships. Returning from leave was Mr. A. R. Wood who was granted his D.B.A. from Harvard University. While there, Mr. Wood specialized in statistical techniques and will bring an important contribution to us in this area. Mr. C. Kennedy May also was granted a doctoral degree by Columbia University in the field of Marketing. Dr. D. S. R.Leighton was on a leave of absence as a visiting professor to the IMEDE Management Development Institute in Lousanne, Switzerland. As the year closes we are considering the advancement of further names to the Board of Governors involving men who will bring special knowledge that will assist us on our doctoral program.

The Advisory Committee to the School of Business Administration were particularly helpful to us in a very important area. At their November meeting, realizing that we were shortly to come to the end of our current research fund, the Committee adopted an Associates Plan as used by Harvard University and Stanford University. This will mean that large corporations will give continuing grants to the School and in turn become much closer to our work. The Associates Plan is just one more substantial contribution which the committee has made. As a result of their efforts to date they have secured from Canadian companies and benefactors sufficient funds for our classroom building, library, research program, visual aids and some faculty salaries. Mr. Harold Rea continued as the very capable chairman of the group.

It is all too easy for us to take for granted the fine cooperation which we receive from the other parts of the University. So that this may not happen, we wish formally to express our heartfelt thanks. In turn, we do hope that we will become increasingly effective in assisting Schools and Faculties on the campus.

## HURON COLLEGE

Report of the Principal - J. Grant Morden

On January 25th, 1962, the Reverend John Grant Morden was appointed Principal of Huron College. Dr. Morden was inducted as Incumbent of the Huron College Chapel by the Bishop of Huron and installed as Principal by Mr. G. F. Kingsmill, M.B.E., the Chairman of the Corporation, on March 29th, 1962. After being made Principal Dr. Morden assumed the office of Dean of Theology, following the traditional pattern of the administration for the College. Dr. John Gordon Rowe continues as Dean of Arts, a newly created position to which he was appointed on June lst, 1961.

On December 2nd, 1961, Huron College as a Christian Liberal Arts College signed a new affiliation agreement with The University of Western Ontario. The bonds of common heritage tie us together; the terms of the agreement are to the interest of both parties setting up equal standards of admission, and conditions under which Huron College will be able to proceed to excellence of teaching in the humanities and social sciences. Huron College will limit its enrolment to a maximum of 500 students in the Arts Faculty.

Huron College has now established a tenure policy for her teaching staff, as well as a sabbatical leave plan. She became a full member of the National Conference of Canadian Universities and Colleges this spring, and is proud to take her place on the roster of Canadian institutions of higher learning represented in the Council.

## Registration of Students

Faculty of Arts Faculty of Theology

|  | $\frac{1961-62}{}$ | $\frac{1960-61}{}$ |  | $\frac{1961-62}{11}$ | $\frac{1960-61}{10}$ |  |
| :--- | ---: | ---: | :--- | ---: | ---: | ---: |
|  |  |  | First Year | 11 | 12 |  |
| First Year | 202 |  | 226 | SecondYear | 13 | 12 |
| SecondYear | 158 |  | 122 | ThirdYear | 11 | 10 |
| ThirdYear | 105 |  | 71 | Occasional | $\frac{3}{38}$ | $\frac{2}{34}$ |
| FourthYear | 9 | 2 |  |  |  |  |
| Occasional | 8 | 0 |  |  |  |  |

## Faculty Changes in the Academic Year 1961-62

## Resignations

Miss Anneliese Eva Bode, M.A.(Sask.), Lecturer in Mathematics
John Herbert Gillespie Crispo, B.Comm. (Toronto), Ph.D. (M.I.T.), Assistant Professor of Economics and Political Science

Miss Diane Elizabeth Lane, B.A. (U.W.O.), M.A. (London), Lecturer in English

## Appointments

Miss Myrtle Brock, B.A.(U.W.O.), Lecturer in English
Mrs. Christa Livia Burghardt, M.A. (Toronto), Instructor in French

Mrs. Eileen Margaret Glennie, B.Sc. (London), Lecturer in Mathematics

Mr. Robert J. Jackson, B.A.(U.W.O.), Lecturer in Political Science

Mr. Edward Dana McVey, B.A., M.A. (Queen's), Lecturer in English

Mr. Robert Edward K. Pemberton, M.A. (Oxon), Lecturer in Classics

Lewis Shipper, M.A. (Wayne), Ph.D., (U. of Michigan), Lecturer in Economics

## The Silcox Memorial Library

The Huron College collection now stands at 31,125 volumes, an increase of 5,125 volumes above last year.

## Building Program

Huron College has appointed the firm of Watt and Tillmann as Architects for the new proposed Student Recreation Building and the Women's Residence.

The Recreation Building is to be completed by October lst, 1962. The Women's Residence is to be opened by July, 1963. The Residence will house some eighty girls.

The Centennial Year - 1963
1963 has been named the Centennial Year of Huron College. The College was founded by the Rt. Rev. Benjamin Cronyn on December 2nd, 1863. Among the many events planned to mark this year of celebration and thanksgiving are the following:

1. The year will be launched with a Centennial Year Dinner.
2. There will be, by the permission of Synod, a special appeal made to all parishes and Anglican families of the Diocese for a Thanksgiving Offering for the work of the Theological Program of Huron Colleqe. This Appeal will be made in May 1963.
3. There will be a general financial campaign to Corporations, Special Names, Friends, and Graduates of the College to underwrite our building program. This campaign will be addressed to the whole community, as Hur on College serves all denominations through its Faculty of Arts. This campaign is to take place in the fall of 1963 and the spring of 1964.
4. Huron College will play host to the Renaissance Society in May, 1963.
5. Huron College will play host to the Synod of the Diocese of Huron in May, 1963.
6. Huron College will play host to the Missionary Strategy Committee of Lambeth and to Heads of Anglican Colleges in August, 1963. A special Convocation will be held on August 7th to honour the senior Archbishops of the Anglican Communion and Representative Missionary Personnel.
7. A Centennial Year Lecture Series will be given in the spring of 1963 and published as The Huron College Centennial Year Lectures. Dr. Northrop Frye, Principal of Victoria University, Toronto, will be the lecturer.
8. Founders' Day Convocation will be held on December 2nd, 1963.

A portrait of former Principal, Bishop A. H. O'Neil, L.Th., M.A., B.D., D.D., LL.D., by Clare Bice, will be unveiled.

A short history of the College by Dr. James J. Talman will be released for sale at a popular price. Huron College owes a debt of gratitude to Dr. Talman who has agreed to write this history without charge to the College. His generosity is a great contribution to our Centennial Year and a good omen for its success.

In conclusion the authorities of Huron College wish again to express their appreciation to the President and the Officers of the University for all the help and counsel that they have given to Huron College during the past year. It is our firm conviction that we are indeed fortunate to be able to grow under the wings of the University. We pray God that by our growing in stature and quality in the academic world we may reflect glory on the University with which we are affiliated.

AND<br>COLLEGEOF CHRIST THE KING<br>Report of the Rector Monsignor Andrew P. Mahoney

## St. Peter's Seminary College of Arts

Eleven students registered in St. Peter's Seminary College of Arts appear on the Deans' Honour Lists for 1962.

Rev. M. A. Gervais, B.A., S.T.L., received the certificate of Eleve Titulaire in August, 1961, from the Ecole Biblique of Jerusalem and the degree of SS. L. from the Roman Biblical Commission in November. He is now teaching full time in the Seminary.

Rev. Michael T. Ryan, B.A., Ph.L., completed his doctoral thesis in the Department of Philosophy at Notre Dame University. His subject was The Notion and Uses of Dialectic. Date of publication is June 1962 .

The return of Rev. Dr. Michael T. Ryan from Notre Dame made it possible for Rev. Patrick E. Cavanagh, M.A., Ph.L., to resume his studies there. It is expected that he will have completed his requirements for the doctorate by autumn.

The Librarian reports the acquisition of a remarkable relief map of Palestine, eight feet by four feet in size, the work of Professor R. Melanson. It is executed in metal, and is extraordinarily detailed. The Scripture Department was also enriched by a set of ordnance maps of the Holy Land, begun under the British Mandate and completed by the State of Israel.

Another fortunate acquisition was the complete works of Louis of Granada, in a French translation.

By the bequest of the late Rev. L. Marchand, the library has also acquired an extraordinary set of glass-mounted slides,
with a special projector. These slides, approximately 3 by 4 inches in size, number over two thousand. The subjects dealt with are the archaeology of the Near East and Palestine, with reference to Sacred Scripture, the Crusades, Rome and the early Christian Era, aspects of the liturgy, lives of the saints, and so on.

In February, Very Rev. Dr. L. J. Flynn, Vice-Rector, was named pastor of St. Michael's Parish, London, this post being left vacant by the sudden death of Rev. P. E. McKeon, pastor since 1950.

Rev. Dr. A. J. Durand was promoted to Vice-Rector. On June 29th, the Vice-Rector, Rev. Dr. Durand, and the Bursar, Rev. F. J. Laverty, were named Domestic-Prelate and Papal Chamberlain respectively.

## The College of Christ the King

At the end of the academic year, 1961-62, twelve residents in the College obtained first class standing. Seven of these students were registered at the College of Christ the King and five were registered at University College. Gradually, the College Residence is becoming a studium. The over-all picture was not good: of the 226 students whotried examinations in April and May, only 110 passed all their subjects, i.e. 48.67 per cent.

Reverend P. E. Crunican, M.A., resumed teaching History after a year's absence for study towards the Ph.D. Mr. F.M.G. Wieden, M.A., and Mr. J. R. Mulder, M.A., resumed teaching English after completing courses for the Ph.D. in Germanic Languages at the University of Toronto and in English Literature at the University of Michigan, respectively. Mr. Thomas J. Collins, M.A., was encouraged to register at the University of Indiana for a Ph.D. in English Literature. Mr. Sean F. Gallagher obtained his M.A. in English from the University of Western Ontario on October 27 th and was raised to the status of lecturer on the Feast of Christ the King, October 29th. Mr.James Q. Cahill, M.A., joined the staff as an instructor in History and Mr. Sean J. Ward, M.A., did the same as an instructor in English.

Mr. B. M. Greene, Director of Art Lectures, arranged another series of lectures on "Masterworks and their Makers." They were delivered as follows:

January 4, 1962. "School of Athens" by Raphel. Dr. William S. A. Dale, Associate Director, The National Gallery of Canada.

January ll, 1962. "The True Cross" by Piero Della Francesca. Dr. Marvin J. Eisenberg, Associate Professor, Department of the History of Art, the University of Michigan.

January 18, 1962. "Sacred and Profane Love" by Titian. Dr. John R. Martin, Professor, Department of Art and Archeology, Princeton University.

January 25, 1962. "Summer" by Pieter Breughel, the Elder. Dr. Wolfgang Stechow, Professor, Department of Fine Arts, Oberlin College.

February 1, 1962. "The Ghent Altarpiece" by van Eyck. Dr. Peter Brieger, Head of the Department of Art and Archeology, University of Toronto.

February 8, 1962. "The Stained Glass of Chartres Cathedral". Dr. James R. Johnson, Associate Curator of Education, The Cleveland Museum of Art.

February 15, 1962. "La Verre d'Absinthe" by Picasso. Miss Helen Johnson, Associate Professor, Department of Fine Arts, Oberlin College.

February 22, 1962. "View of Toledo" by El Greco. Mr. Edward B. Henning, Assistant to the Director, The Cleveland Museum of Art.

The College continued to assist students from outside Canada by giving free tuition and free residence to two students from Kenya and to one student from Hong Kong.

On June 29th, His Excellency the Most Reverend J. C. Cody, Bishop of London, announced that the Dean of the College, Very Reverend L. A. Wemple, had been named a Domestic-Prelate by His Holiness, Pope John XXIII.

# URSULINE COLLEGE OF ARTS 

Report of the Dean - Mother Marie

The year 1961-1962 was marked by the largest proportionate increase in enrolment in the history of the College: 36 per cent for full-time University students proper (that is, exclusive of the Prel iminary Year, for which fewer students were accepted). As the College is once more raising its requirements for admission to First Year Arts and to the Preliminary Year, no substantial increase is expected for 1962-1963, and there may even be a slight decrease. This state of things is not wholly to be deplored, as last year the College's residential facilities were definitely overtaxed.

Seven full-time students and one part-time student figured on the Dean's honour list. The College has adopted the policy of giving a reduction of $\$ 100$ on the tuition fees of any full-time student obtaining an A average at the final examinations.

At the final examinations the re were proportionately fewer students who would have to repeat their year, but it was noted that First Year Arts students obtained, on the whole, lower averages than in previous years. The policy is being maintained of not readmitting "repeaters" save in very exceptional cases.

Two students from Ghana, Africa, were admitted to the College with full scholarships. One was in the Preliminary Year, the other in First Year Arts. The College appreciates the fact that the African Foundation continued to sponsor these students to the extent of paying some of their incidental fees and defraying some of their personal expenses.

Twenty-two students were enrolled in the 1962 Summer Course in Religious Knowledge $32 x$ and twenty-seven in Psychology 36x. A faif proportion of these students were taking both courses.

Mr. W. H. Adamson, M.A., was the only new instructor appointed this past year (Mathematics 10 and 12 ). Members of the Faculty of the College of Christ the King did some part-time teaching at Ursuline: Rev. P. Crunican, M.A., (History 31), Dr. J. K. Farrell (History 35) and Mr. J. J. Snyder (Philosophy 20x). A greater measure of co-operation with the College of Christ the King was achieved and bids fair to develop still more as the two Colleges exchange professors and students for certain senior and honours courses. Joint Faculty meetings have already been held and an executive formed, on which St. Peter's and St. Thomas Scholasticate are also represented. By these measures the College of Christ the King and Ursuline College hope to avoid unnecessary duplication of courses and, by pooling their best resources in Staff and senior students, to provide for these students a greater variety of professors and more stimulating classroom contacts.

Three members of the Brescia Faculty obtained higher degrees this summer: Mother M. Corona, a Ph.D. (English) from the University of Notre Dame, Notre Dame, Indiana; Mother M. Perpetua, an M.A. (Psychology) from the University. of Detroit; Mother M. St. Paul, an M.A. (History) from Notre Dame. Mother St. Paul was recently appointed to the Brescia Staff as Instructor in History and Assistant Registrar.

A new affiliation agreement which will come into effect July lst, 1963, was negotiated between the Constituent University and the College. This step was long overdue, since there had been no official revision of the agreement of 1919 when Ursuline College was first affiliated with the University. The College wishes to express its appreciation to the President of the University, to the Board of Governors and to other officials for the cordiality and understanding shown during the preliminary discussions and at the time the agreement was finalized.

Because of the confusion prevalent in past years between Ursuline as a College and Brescia Hall as its residence and because the general public tends to refer to both simply as Brescia, the College will take steps within the next few months to change its name officially to BRESCIA COLLEGE.

Owing to a change of plans, construction on the proposed addition to the College did not begin until August, 1962. Instead of building three units (Library, Classrooms and Assembly Hall) in stages, it was decided to erect at once one large building comprising all three units.

The Brescia Lecture League again sponsored a number of excellent talks on a wide variety of subjects:
"What I Saw in Russia" - Rev. J. Record, C.S.B. (Assumption University of Windsor)
"Germany - Summer, 196l" - Dr. Herbert Kalbfleisch
"The Role of the Opposition" - Right Honourable John Wintermeyer
"Religious Symbolism in the
Art of Philip Aziz" - Rev. Anthony Durand
"The Existentialist Psychologists" -
Dr. Jaroslav Havelka
"Thomas Mann" Mrs. W. K. Ferguson
"The Obligation to Excellense"-
His Excellency, Bishop G. Emmett Carter

The Christ the King - Brescia Drama Society presented three one act plays in December, 1961: "The Valiant", "The Sandbox" and "A Phoenix too Frequent". The second of these was chosen as the entry of the two Colleges at the Intercollegiate Drama Festival in Montreal, where it received honourable mention.

Brescia girls again played on the various sports teams of the University. One of them won the interfaculty badminton singles and doubles.

## COLLEGE OF MUSIC

Report of the Principal - Clifford von Kuster

Enrolment increased by roughly one third this year, bringing the number of full-time students to a total of 41. Of this number, about 60 per cent are enrolled in the Honours Music Education program. Two of our students were included in the Dean's Honour List.

As an added service to the General Arts students, the College of Music has designed a senior course in music appreciation. This course (Music 30Y) is a development and continuation of Music 20 Y . It has been ratified by the Senate and will be offered in the 1962-63 season for the first time.

Long range planning in regard to the future scope and size of the College, the necessity for additional space and adequate library facilities are problems that continue to receive constant Faculty consideration.

The following outline of activities illustrates the everincreasing part played by College of Music Faculty and students in the musical and cultural life of the community:

Miss Kathleen Parlow, Head of the String Department, gave her third series of Tuesday morning violin lecture recitals at the College. She also appeared as guest soloist with the London Civic Symphony and gave a second Sonata recital with Clifford von Kuster for the London Chamber Music Society. Both performances were given standing ovations.

Mr. John Cook, Head of the Organ and Theory Departments, conducted a performance of Bach's "St. Matthew's Passion" at St. Paul's Cathedral in April. Four vocal students of the College appeared as soloists in this production which was reviewed in "The National Magazine for the Performing Arts". Mr. Cook also composed a "Concerto for Trumpet, Trombone and Strings" especially for this year's Concerto Concert, which was sponsored by the Sunday Nine O'Clocks, and featured student soloists. He
was again commissioned to write incidental music for two of the plays produced at the Stratford Festival this season. We deeply regret that this will be Mr. Cook's last season here. His contribution to music in this area has been a major one and we wish him and his family success and happiness in their new home in Boston.

Mr. Alfred Rosé, Head of the Voice and Music History Departments, presented a paper entitled "Verdi and Shakespeare" at the Nineteenth Century and After Society in November. In March he was guest lecturer at Assumption University where he spoke on "What is Music Therapy?". Mr. Rosé continues to direct the University Choir and conducted the orchestra in this season's Concerto Concert.

Mr. Howard Munn, Principal of the Western Ontario Conservatory of Music and a member of the College piano faculty was guest speaker at the Ontario Registered Music Teachers' Association banquet in Windsor. Later this season he acted as adjudicator of piano classes at the Orillia Music Festival.

Mr. Don McKellar, Head of Instrumental Music Education, was again Musical Director of the London Little Theatre whose activities this season included a most successful production of "Guys and Dolls". Mrs. McKellar was this year's Director of the campus Gilbert and Sullivan Society presentation of "The Mikado".

Mr. Earle Terry, Head of Choral Music Education and Director of the Conservatory Choir conducted a performance of Haydn's "The Creation".

Mr. Clifford von Kuster was guest soloist with the London Civic Symphony at their Gershwin program.

Four students won scholarships ranging from $\$ 50.00$ to $\$ 100.00$ at district music festivals and several others were featured as soloists by such organizations as the London Chamber Music Society and the Young People's Concert Series.

# SUMMERSCHOOL 

## A ND

EXTENSION DEPARTMENT<br>Report of the Director - J. Archibald McIntyre

As has been true in the past, the major function of this Department during the past year has continued to be the provision of opportunities for students in the Faculty of Arts and Science on a part-time basis to pursue university study toward a degree. Summer School courses and those offered in various extension centres have been the major means of dealing with this situation although tutorial classes and the courses offered through correspondence have provided alternate opportunities. As will be noted by reference to the report of the Registrar, the number of such students continues to increase.

The increasing number of Universities in Ontario, (particularly in South-western Ontario), coupled with the rapidly enlarging student body in this University suggests that the day is not far distant when we will find it most useful to concentrate our attention on Summer School and winter courses in London and Extension centres within a radius of approximately 50 miles of London. This would of course encourage cooperation with, rather than undue competition between, other institutions fairly close at hand. At the same time, the educational opportunities for students who pursue their academic studies on a part-time basis should be materially broadened as other universities increase the number and variety of their available courses. An additional question of some interest is the possible utilization of television in university education. A committee is actively investigating the application of this medium to courses given through the auspices of this Department.

A start was made during the year on systematically organized non-credit courses taught by staff of the University and involving a wide variety of subject matter. These courses were offered in the evenings in London and attracted a wide interest. An even more varied selection of courses is planned for the fall and winter of 1962-63.

The Department has continued to cooperate with a number of organizations outside the University in the operation of their educational efforts, such as, among others, the Recreation Directors' course sponsored by the Community Programmes Branch, Department of Education, and the Accounting course sponsored by the Society of Industrial and Cost Accountants. The Investment Dealers Association course, "How to Invest Your Money", was withdrawn at the end of the year to be distributed by the Association following a revision.

The University, through this Department, has cooperated with the Department of Indian Affairs and the Community Programes Branch in holding a Leadership Training Institute for representatives of Bands in Central and Southern Ontario. Also the Institute of International Affairs and the Overseas Institute jointly sponsored at this University, a conference on Canadian Overseas Aid in the past decade. This Department was represented on the planning committee and handled the administrative details.

During the year, the Director served on the Royal Commission on Government Organization, Manpower Section.

# TROIS-PISTOLES SUMMER SCHOOL 

 Report of the Director - T. J. CasaubonThe enrolment at the Trois-Pistoles Summer School for 1961 showed an increase. There were seventy-two students registered for the French course, fifty-seven for the English course and fourteen for Painting. Also, thirty-six students attended an art appreciation course presented by Mr. Louis Belzile.

Two new courses offered in the afternoon met with a great deal of success. There were twenty-three teachers attending the course in methodology for the teaching of oral French and twenty-eight French-Canadian school teachers were given a course in methodology for the teaching of oral English.

The studentṣ wère instructed to keep an academic record of all the work covered during the course. This book was examined at regular intervals by the instructors and a mark was given. The mark given counted as part of the term work and was averaged in the final evaluation standing for each student.

Each day, during the singing period, two students were called upon to give to the whole assembly a three-minute speech in the second language. For a large number of students, this provided the opportunity for at least two speeches in the course of the summer.

Conversation groups and group discussions were organized by Mr. C. Paradis and Mr. James Coulton. A few visiting gue sts and town elders were invited to speak to the students in order to provide more opportunities to hear different voices.

The recreational programme was arranged by $\mathrm{Mr} . \mathrm{C}$. Theodore, Mr. A. Ferland, Mr. L. McLarty and Mr. M. Lafratta. The students enjoyed tennis, swimming and softball. Mr. R. Legault organized a very active bowling schedule which ran through the whole summer.

Mr. A. Ferland once again directed the students' choir. Rehearsals took place three evenings a week and the choir climaxed its activities with a half hour recital at the radio station CJFP, Rivière-du-Loup. The townspeople were able to hear the choir at the closing ceremonies.

The painting and landscape course seems to be gaining in popularity. In fact, there were fourteen students attending this course. So, the Trois-Pistoles School Board has permitted the use of a rural school situated on the edge of town for the painting classes. This offers the students easier access to landscaping sights and provides for them the freedom and quietness that such work requires. The course in art appreciation has been extended to permit town people to attend. It is given in the evening and is open to students, summer resident tourists and local citizens.

We were happy to welcome to our school in the course of the summer, Dr. G. E. Hall, President and Vice-Chancellor of the University of Western Ontario, Mr. David Steinhauer of the Department of Education, Toronto, Dr. Robert Gauthier, Department of Education, Toronto, Mr. Provencher, Department of Public Instruction, Quebec, Mr. D. M. Graham, Director of Education, Toronto.

The following have been added to the Junior consulting committee: Mr. J.-Louis Deschênes, Mr. N. Larivée, Mr. Placide Pelletier.

## THE UNIVERSITY LIBRARIES

> Report of the Chief Librarian - J. J. Talman

The year was at once both extremely difficult and most satisfying. The already congested work space was abbreviated still further by construction. But the moving into the additional space as the year ended, more than compensated for the previous trying twelve months.

The new addition to the Lawson Memorial Library Building, with its great expansion of work space, additional stacks, and extra reading rooms, long over due, along with the air conditioning of the old building will improve the usefulness of the Library and the conditions of work for some time.

The setting up of two open access reading rooms in the place of the long-established reserve reading room should make the volumes most in demand in the humanities and social sciences more readily available to undergraduates. The old museum was converted into a most attractive reading room. Altogether, students will be able to find about 15,000 volumes at hand.

The year saw the completion of the new library for the School of Business Administration. The reading room and stack space were badly needed owing to the growing expansion in graduate work in that School. The use of the reading room provides clear evidence of the need.

## Accessions

Accessions in all faculties totalled 21,154 , a spectacular increase over the total of 14,490 reported last year. Of this total the Faculty of Medicine added 1,997 volumes, an increase of 516. The Faculty of Law added 7,821.

This addition to the collections is not surprising in view of the greatly increased appropriations by the Board of Governors. Unfortunately, the increase in the cost of books, aggravated by the devaluation of the Canadian dollar, has resulted in our acquiring fewer volumes than we had hoped.

|  | Circulation |  |
| :---: | :---: | :---: |
|  | 1959-60 1960-61 | 1961-62 |
| General Library | 114,667 98,233 | 96,931* |
| Physics and Chemistry | - - | 2,225 |
| Biology and Geology | - - | 2,960 |
| Middlesex College | - - | 9,628 |
| Business | - - | 8,485 |
| Engineering | - - | 1,740 |
| Law | - - | 3,228 |
| Nursing | - | unsupervised |
| Medicine | $11,491 \quad 12,558$ | 13,556 |
| * Including only circulation in the Lawson Memorial Library |  |  |
| Building. In the past th Law and special reading new listing provides a m | entry included Busin rooms, now shown sep re meaningful picture | , Engineerin ately. The |

The rise in circulation is gratifying. The provision of the two open access reading rooms in the Lawson Memorial Library Building will probably result in an apparent drop in circulation, as more volumes will be consulted without a circulation slip being filled out.

Interlibrary Loans
General Library

Outgoing
1959-60
361
Incoming

1960-61
396
728

1961-62
681
793
1040

## Medical Library

|  | Outgoing | Incoming |
| :---: | :---: | :---: |
| $1959-60$ | 906 | 384 |
| $1960-61$ | 723 | 331 |
| $1961-62$ | 812 | 270 |

The large increase in incoming interlibrary loans reflects the great expansion of graduate work in the University. It is worth noting that the University of Western Ontario, as a whole, lends more than it borrows. This desirable situation, however, is due to the fine Medical collection. In other fields the imbalance, arising from the expansion of graduate work, suggests the need for further building of resources.

The library, following the trend in Canada, is cutting down on the lending of journals and other serials. Here the Xerox 914, referred to below, is proving to be particularly useful. If a short article of fewer than ten pages is required, it is more economical to supply a photocopy gratis to borrowing libraries, than to go through the paper work necessary to lend and bring back a volume. When the article copied is more than ten pages it is necessary to make a charge.

> Regional History Collection

The year saw no notable additions to this collection. Miss Anne Sexton, however, was able to spend a fair share of her time in putting the collection in order. Consequently inquiries can be dealt with much more readily. Several graduate students in history made use of the collection.

## Additional Activities

During the year it beçame clear that some copying device was absolutely essential and after careful investigation it was decided to rent a Xerox 914. The machine has proved to be invaluable as a time-saver, in providing copies of scare material needed in instruction and in speeding up the work of interlibrary loans. On occasion it has even been possible to make copies of significant and completely unobtainable books. After this library
put in the machine, the University of Toronto and University of British Columbia rented similar equipment.

The increasing size of the collections in Engineering, Biology and Geology, Physics and Chemistry and Nursing necessitated the setting up of author, title and subject catalogues in these four reading rooms. This involved the preparation of some 20,000 additional cards for books already in the reading rooms.

## Staff Activities

Dr. Talman attended the Anglo-American Conference of Historians, at the University of London, July 7-8, 1961, and the annual meeting of the Canadian Library Association, of which he is Chairman of the Microfilm Committee. In December it was announced that he had been appointed a member of the Historic Sites and Monuments Board of Canada, and he attended the meeting of the Board in Ottawa, in May. He also served on the Programme Committee of the Conference of New York historians, and attended the meetings held in Buffalo, in April. Having served for three years on the Board of the Champlain Society, his appointment ended with the annual meeting of 1962.

Dr. J. P. McLaughlin attended the annual meeting of the Society for French Historical Studies, March 15-17, 1962, in East Lansing, Michigan. He also attended the meeting of the Canadian Historical Association, Hamilton, Ontario, June 7-8, 1962.

Dr. Bishop attended meetings of the Committee on Medical Science Libraries of the Canadian Library Association held in Ottawa in February and June. As a result of these meetings, one of which was held with members of the Executives of the Association of Canadian Medical Colleges and the Medical Research Council, a survey of Medical School Libraries is being undertaken for the Medical Education Project of the Royal Commission on Health Care.

Miss Bishop also attended the Institute of Professional Librarians Conference; The Canadian Library Association Conference and the Ontario Library Association Conference held in Ottawa in June. Congratulations are due to Dr. Bishop who secured her Doctorate in Library Science at the University of

Michigan during the year.

Dr. Margaret Banks was the representative of the University Libraries on the London committee for Library Week during the spring of 1962.

Miss Ruth Sanderson attended the meeting of the Canadian Library Association in St. Andrews, New Brunswick, 1961, and the meeting of the Ontario Library Association in Hamilton, Ontario, 1961. In June, 1962 she attended the Ontario Library Association meeting and Canadian Library Association meeting in Ottawa.

> Gifts

Books and journals were received from Mr. W. L. Duffield, Mrs. E. H. Nugent, Mrs. Frances MacKay, the United Steel Workers of America, and through the will of Mrs. Charles Martin of Simcoe. Mr. J. Judd Buchanan gave a donation of $\$ 100$ for the purchase of books dealing with Business History. Dr.A.B. Misener presented a valuable file of the Proceedings of the Physical Society.

The Medical Library received 3,489 separate items. This total represents a large number of single issues of journals useful in completing the Library files and also for exchange. The College of Physicians and Surgeons gave the library $\$ 200$ and the London Academy of Medicine $\$ 150$.

The outstanding gift of the year came from the Canada Council which gave $\$ 5,000$ for the purchase of books in Medieval Studies.

## Staff Changes

As usual the year saw many changes in staff. Miss Gail Duncan left to marry, and her place has been taken by Miss Elsie Lapp. Dr. Valeria Brizio left at the end of the year to take a full-time position in the Romance Languages Department in Middlesex College. Having joined the library staff for the second time, in February 1959, Mrs. Helen Staples gave up her position in charge of periodicals to be married. Mary Baker left in October to be married, and her duties in the School of

Business Administration were taken over by Mr. John Macpherson. Mrs. Deanna Gazzola left in June to have a family and was replaced by Miss Judith White. Five new posts were filled by the addition of Miss C. A. Moggridge, Miss Lesley Hill, Mrs. Elsie Brown, Mrs. K. Poznan and Miss Helen Opavsky. Miss Moggridge and Miss Hill came from South Africa to take their positions here. It was a pleasure to welcome Mrs. Evelyn Crouch as a part-time cataloguer in the Library of the Faculty of Medicine. Her experience is proving invaluable. Miss Sally McCrae was appointed to fill the vacancy caused by the resignation of Mrs. Korzak which was reported previously.

In conclusion, tribute must be paid to the entire staff which carried on under great difficulties created by congestion, noise and dust, and in spite of the difficulties processed more volumes than had ever been added in the history of the library.

# MUSEUM OF INDIAN ARCHAEOLOGY 

## AND PIONEER LIFE

Report of the Honorary Curator - Wilfrid Jury

The new museum displays built in Middlesex College continued to attract students and visitors during the winter months. The cases displaying the Indian artifacts were changed at frequent intervals to maintain interest. The displays in the Entrance Hall of the first floor were also varied periodically. At present they exhibit a number of guns manufactured in London by the Soper family who enjoyed wide renown as gunsmiths in the last century.

During the winter months a comprehensive report was commenced on the field work that has been carried on by this museum in Southwestern Ontario over a period of some twenty years. This will make available the results of our study of the Neutral Indians and their antecedants.

We continued to build and expand Fanshawe Pioneer Village in co-operation with the Upper Thames Valley Conservation Authority. Pioneer articles are now displayed in realistic setting. To date, a log cabin, a log barn, an Orange Hall, a church, blacksmith's shop, carriage shop, a general store, barber shop, gun shop and harness shop, have been erected. These buildings have been furnished with material that has been collected by the Curator over the past forty years, in the London area.

Under construction is a large log barn in which will be housed a spectacular collection of carriages and sleighs donated to the University some years ago by the late Mr. Arthur Little. The Fanshawe Pioneer Village was visited by 20,000 persons. A student of the University of Western Ontario was employed as a guide.

The Huron Indian Village, Midland, built and supervised by the Curator of the University Museum and staffed by four University students, was visited by approximately 800 school children daily during the month of June. The total attendance for the 1962 season was 50,000 . The number of
school children and tourists visiting the Officers' Quarters Museum at the Naval and Military establishment at Penetanguishene has doubled during the past summer. The Museum, also supervised by the University and staffed by two students from Western, housed much of the military material in the University's collection.

Archaeological investigations continued in the Naval establishment in August, with the uncovering of the foundations of the first Naval Hospital and a house, both erected in 1817. It is in the Officers' Quarters Museum that the classes of the Summer School of Indian Archaeology are held. This Summer School, which ran from July 3 to 13 , was the thirteenth such programme supervised by the University. The number of applicants has increased to the point where restriction is absolutely necessary. The School worked on the Forget site near Wyebridge where a long-house was examined, and 1,700 finds were recorded.

A further examination of the Quesnelle Site was conducted for two weeks in August. This is a triple-palisade Hur on Indian site of the Contact Period. From Champlain's written description of the village Carhagouha and because of its geographical location it is possible that the Quesnelle Site may be the historic village where Father Le Caron, first missionary, lived in 1615-16 and where Champlain arrived a few days after the Father in August 1615. European-made nails similar to those used in Ste. Marie have been found. Until further conclusive evidence is discovered, however, no identification of the village can be made.

The Chamber of Commerce of the Village of Wasaga Beach requested that we searchfor the location of old Schoonertown, the Naval establishment of the Upper Great Lakes used from 1814 until 1817 when it was removed to Penetanguishene. For some years it continued, however, to be in use as the Northern terminal of the supply route to the garrison on Drummond Island and to Penetanguishene. We were successful in discovering the sites of three log buildings on the south shore of the Nottawasaga River about two miles above Nazi Island. Numerous valuable finds were made from the War of 1812 period.

To sum up the summer's activities, excavations were carried on at fur sites; the Military Museum at Penetanguishene, the Indian Viliage at Midland, and Fanshawe Pioneer Village, attracted a total of 35,000 visitors, including visiting school classes. Thirteen university students and three senior high school students were given pleasurable and instructive summer employment.

# DEPARTMENT OF THE DEANOF WOMEN <br> Report of the Dean - Leola E. Neal 

## Registration

This year the total number of women in the constituent University increased by 13.7 per cent. There were 1,152 women students compared with 994 a year ago and 620 five years ago.

Most of the women, 911, are full-time undergraduate students in the Faculty of Arts and Science and represent 37 per cent of the student population in this Faculty. Of the 911 students, 562 were registered in University College, 324 in Middlesex College and 26 in the College of Music. For the previous four years the figures for University College were as follows: $528,608,658,619$. Registration of women in the College of Music is slightly higher than in the previous years. Only slight increases were reported in the Faculties of Medicine and Graduate Studies but in the School of Nursing the increase was larger ( 163 to 173). There were three women in the Faculty of Law and one in the School of Business Administration.

## Student Activities

The women students have once again played an important role in extra-curricular activities. Their interests are varied and embrace nearly every phase of student life. Of the six U.C.C. Honour Awards three were won by women. All three Merit Awards were received by women students.

The Council of the Undergraduate Women's Organization had a busy year. Council members provided from their funds a bursary and a gift for the University. The gift of $\$ 1,000.00$ was for the purpose of endowing two gold medals in honour of two outstanding women, Miss Helen Allison and Miss Dorothy Turville. Both Miss Allison and Miss Turville are graduates of Western and they have made unique contributions to the University. As well they have given generously of their time
and have been of tremendous assistance to generations of students. The two medals will be called the Helen M. B. Allison Gold Medal in English Language and Literature and the A. Dorothy Turville Gold Medal in French and Spanish.

The Co-Ed Ball and the activities planned for the Freshettes were highly successful. A supper party for city freshettes and students not in residence was very well attended and much enjoyed. In February the Council sponsored a tea in honour of Miss Allison and Miss Turville. About 70 women, active in the various phases of the University Student Government, were present.

On the whole, the women students had excellent academic records. Of the 59 Ontario Scholars registered at Wester, 35 were women. The failure rate is traditionally low for freshettes. The most recent figures provided by the Registrar are 2.19 per cent for 1959-60 and 3.57 per cent for 1960-61. A number of women won gold medals at graduation. It is interesting to note that two of the nine M.A. degree candidates at Spring Convocation were women. No woman received the Ph.D. degree.

There are three Greek-letter organizations for women on this campus. The total membership is 137. The sororities are strong, well-organized groups and their members make a real contribution to campus life. Their academic averages are always higher than the all-women's average and many of the members show exceptional leadership qualities.

## Spencer Hall

This year the number of applications and inquiries about accommodation at Spencer Hall increased from 349 to 359. Thus residence accommodation is urgently needed. This year approximately 78.6 per cent of the freshettes were from out-of-town and about 75 per cent of them applied for accommodation at Spencer Hall. First year students especially benefit from residence life but this experience enriches the lives of all undergraduates. In the 104 places there were nine upper class women and 95 freshettes. One upper class woman was a transfer from another university.

There were fewer special groups at Spencer Hall during May, June and early September this year. However, there were 40 students in residence for the University Summer School session. At the same time there were five staff members and four students registered in the Physical Education course for men, a five-week summer course sponsored by the Department of Education.

The 1961-62 Spencer Hall Council set aside funds for a contribution to the Student Welfare Fund and presented a painting for the residence. These gifts are gratefully acknowledged.

This year marks the end of an era at Spencer Hall. Mrs. Struckett who has been Warden since the opening of the residence in 1951 retired in June. Spencer Hall has been and is a popular residence and a pleasant place to live and much of the credit for this must go to Mrs. Struckett. It has been extremely pleasant to be associated with Mrs. Struckett for the past eleven years and I am glad to have this opportunity to express my gratitude for her co-operation, her patience, and her conscientiousness. The approximately 800 women students, who have lived at Spencer Hall, and I wish her health and happiness in the years ahead.

## Counselling

More and more time is devoted to personal counselling. Students make appointments for interviews and discuss their varied problems. Personal counselling is concerned not only with emotional problems but with those problems which are associated with study, housing, employment and finance. Members of the Faculty and the Administration frequently refer students for help. This gracious co-operation is much appreciated.

In counselling students one becomes acutely aware of the importance of scholarships, bursaries and loans. Without such financial assistance many bright, conscientious students would not receive a university education. It is a pleasant duty to acknowledge and express gratitude for assistance from governmental agencies, industry, special groups, foundations and private individuals.

# DEPARTMENT OF THE DEAN OFMEN <br> Report of the Dean - T. L. Hoskin 

## Number of Men Students

Within the constituent University the re were 3,396 full-time intramural graduate and undergraduate students of whom 2,413 or 70.1 per cent were men. In the previous year of 1961-61 the re were 3,286 of whom 2,315 or 70.4 per cent were men.

## Counselling

This is by far the most important and most timeconsuming function of this department. It can be quite frustrating at times but fortunately it can be very gratifying.

Most of the counselling interviews are voluntary. Many, however, are referred by members of faculty and this co-operation is very much appreciated because it is impossible for this office alone to keep in close touch with needs of each and every one of the 2,400 male students on campus.

The Joint Committee on Freshmen Orientation has very kindly provided in its programme a time for the Dean of Men to speak to all male freshmen in Convocation Hall. This provides an excellent opportunity for some very worthwhile group counselling and an opportunity to explain to the new students the services provided for them in this department. It is hoped that provision for this type of session will always be possible in the Frosh Orientation Programme.

## Student Financial Assistance

Western has been recognized across Canada as a progressive leader in the field of student-aid. The organization and administration of its programme has been followed on more than one campus over the past ten years. Because of the tremendous growth in student-aid, the larger Universities, and some of the smaller ones like Sir George Williams, have found
it necessary to a ppoint an awards officer.
At present, the office of the Dean of Men interviews 99 per cent of all applicants for bursaries, grants and loans, receives and processes the applications, maintains records, prepares annual reports for the growing list of donors, and prepares reports for each Faculty. There regrettably is not the time and staff available in the office to do all of the things we would like to be able to do. It should eventually be possible to programme all student-aid records in the Computing Centre where valuable statistical information for research and followup purposes could easily be provided and put to good use. Since all vouchers for the payment of awards go to the Comptroller's Department, the information is available for programming. The magnitude of the student aid programme at this University may be seen in detail in Appendix $F$.

## Placement

The function of the placement service is to assist students of this University to obtain permanent, summer, and in some cases part-time employment, with the greatest possible saving of the time and energy of students concerned. Mr. Bruce Wells administers the service for all students except those in the School of Business Administration which looks after its own placement programme in close liaison with Mr. Wells.

In 1961-62 there were 183 recruiters with positions open to Western graduates. The recruiters were representatives of the Federal Government, Provincial Government, Industry and Education. The placement office arranged 1,604 student interviews with the se men.

Two hundred and eleven graduating students requested assistance in securing secondary school teaching positions so that they could attend the O.C.E. Summer Course and begin work in September. A list of these students with concise information about each one was sent to 225 secondary schools in Ontario. The placement office provided facilities for principals and representatives of School Boards to interview applicants on campus.

A placement library has been established with information about many of the careers open to university graduates in Gove rnment, Industry and Education.

## Medway Hall

The Warden reports that the following were on the staff of Medway Hall in 1961-62:

Acting Warden
Assistant to the Warden Dons

Administrative Assistant
W. Cameron Henry, Ph.D. Alan T. Olson, M.A. Alan T. Olson, M.A. Donald O. McKay, Ph.D. Gary M. Keyes, LL.B. Robert T. Kelson, Ph.D.

Also associated with the residence are nine distinguished members of faculty who are designated as Fellows of Medway Hall. These are:

> Allison H. Johnson, Ph.D. Dwight R. Ladd, D.B.A. Robert G. W. Murray, M.D., C.M. Ralph W. Nicholls, Ph.D. Edward G. Pleva, Ph.D. Ivan C. Rand, LL.D. Grant L. Reuber, Ph.D. Harold B. Stewart, M.D. Robert J. Uffen, Ph.D.

From September 1961 to May 1962 the residence was full at all times. There were 250 formal applications from which 178 freshmen, 95 upperclassmen, and 27 foreign students were carefully selected. During the summer of 1962, 18 graduate students, 31 summer school students, and 718 others from special groups were accommodated in Medway Hall.

## Fraternities

The Colony of Phi Delta Theta won the Northern Life trophy for the highest record of scholarship achieved by any Greek Letter fraternity or society at this university in the May 1961 examinations. Although its point score was 63 points above the all men's average, it was only three points above Alpha Kappa Kappa which was a close second.

Delta Upsilon fraternity with a quality point score 31 points above the all men's average, won a prize for being
the "top Chapter in Province No. 7 of Delta Upsilon".
Although each fraternity included members who individually brought academic honours to its chapter, the overall record of scholarship in the eight fraternities was down and for the first time in the past ten years since these statistics have been compiled two chapters, Sigma Chi and Beta Theta Pi, were below the all men's average. It is encouraging to note that both of the se chapters are making a special effort to improve their scholarship record by not pledging men whose academic records are borderline, and by assisting their members by tutoring, etc.

During the year new house rules were introduced by the University and the chapters deserve much credit for their cooperation in this matter.

The Dean of Men wishes to thank the Undergraduate and Alumni Interfraternity Councils for their assistance in fraternity affairs at Western.

## PRESIDENT'S MEDALS

Report of M. H. M. MacKinnon<br>Chairman of the Committee

The University of Western Ontario President's Medals, which have been awarded annually since 1951, are intended to supplement the Governor General's Awards for Literature. Medals are awarded for the best single poem, the best short story, the best scholarly article and the best general article published each year by a Canadian citizen or a resident of Canada. Special committees of judges are chosen from the faculty of the University.

The Medals were presented at the Awards Dinner of the Canadian Authors' Association on June 29th at Edmonton, Alberta at the time of the annual convention of the Association. It was my privilege to attend the convention and to present the medals on behalf of the President.

In addition to the four medals in the four categories mentioned, a special medal was awarded to the late Anne Wilkinson (1910-1961) in recognition of her distinguished career as a poet. Anne Gibbons Wilkinson was related to the Gibbons and Harris families of London.

The winners of the regular four medals were as follows:

Single Poem: "The Necklace", published in the magazine, Prism, by Wilfred Watson of the Department of English, University of Alberta, Edmonton.

Short Story: "The Tomorrow-Maker", published in the magazine, Prism, by Margaret Laurence of Vancouver.

Scholarly Article: "The Central Problem of Philosophy" published in the University of Toronto Quarterly, by Professor F. E. Sparshott of the Uniyersity of Toronto.

General Article: "The Nuclear Death of a Nuclear Scientist" published in Maclean's Magazine by Barbara Moon of Toronto.

UNIVERSITY ATHLETIC ASSOCIATION<br>Report of the President - C. W. Gowdey

The Athletic Directorate believes that this past year has been a successful one as far as athletics at the University are concerned. There was more and keener participation in intercollegiate events and an increasingly greater number of students made good use of the interfaculty and intramural facilities. The year saw the completion of three new tennis courts, and the outdoor skating and hockey rinks. The question of making rugger an intercollegiate sport is being discussed. Rowing, in spite of the limitations imposed by the climate, is becoming more popular and in March the Eastern Canadian Intercollegiate Rowing Association held its first meeting. The Women's Intercollegiate Athletic Union has included in their new schedule two additional sports, golf and ice hockey, and the Westoamac League have added curling and field hockey. This increasing interest and participation in athletics has necessitated the setting up of a special committee to review the whole organization of the athletic programme, and to plan for the additional athletic facilities required by the expanding University.

The Annual Meeting of the Athletic Association of the University of Western Ontario was held following the Men's Athletic Banquet on April 4, 1962, at which time the following appointments to the Athletic Directorate were announced:

$$
\begin{array}{ll}
\text { Mr. Peter Fowler } & \text { Faculty of Medicine } \\
\text { Mr. Peter Purvis } & \text { University Students' Council } \\
\text { Miss Mary Lou Whitwill } & \text { University College }
\end{array}
$$

The Athletic Directorate held five meetings during the Year. Aside from routine business, the following matters were discussed:

A national body, called the Canadian Intercollegiate Athletic Union (C.I.A.U.) has been formed to organize intercollegiate athletics and has named its first president, Dr. D. A. McLarty, who is our representative to the Ontario-Quebec Athletic Association (O.Q.A.A.). This Union is composed of the

Ontario-Quebec Athletic Association, the Western Canadian Intercollegiate Athletic Union, the Ottawa-St. Lawrence Intercollegiate Athletic Association and the Maritime Intercollegiate Athletic Union. Its avowed purposes are:

To provide all members with a medium of discussion for problems of common interest.

To set basic eligibility regulations under which all Union competitions shall be conducted.

To encourage and coordinate inter-association and/or national championships and to keep all records and make awards for such championships. To approve such playing rules and codes (of other national sports organizations) as may be deemed suitable to govern intercollegiate sport.

To enter into agreement with other sports bodies, in cases where it is deemed desirable to do so, whereby the status and jurisdiction of this organization is recognized.

To reflect and interpret to the Canadian public the highest possible standard of amateur sport and sportsmanship.

At its September meeting the Directorate, after congratulating Dr. McLarty on his appointment, approved the list of officers of the C.I.A.U. and its Constitution.

The Canadian Broadcasting Corporation televised several of the Intercollegiate Football Games. These programmes (aside from adding to the game receipts of the participants) did a great deal to maintain the interest of the public in Canadian football a very worthwhile objective in this writer's opinion.

Regulations and scheduling for the Ice Rink were approved by the Directorate. Arrangements were made for hockey and for recreational skating by students, and by faculty and staff and their children. Intramural hockey teams sprang up on all sides so quickly that it was obvious that the rink was the answer to a longfelt need.

The Directorate approved in principle the acceptance of rowing and rugger as intercollegiate sports and requested Mr . Metras to explore the possibility of competition within the O.Q.A.A. To the question raised at the Administrative Council of the O.Q.A.A. re the splitting of the basketball league into two sections, east and west, the Directorate voiced its disapproval. Although there has been some student agitation towards competing in intercollegiate hockey, there are many problems involved, not the least of which is the question of whether the other intercollegiate teams of the O.Q.A.A. would wish to play on an outdoor rink where the ice surface is exposed to the vagaries of the weather.

The Football Rules Committee are preparing a Rules Book for the O.Q.A.A., which it is hoped will be adopted by the Canadian Intercollegiate Athletic Union and by all colleges and high schools in Canada.

The Directorate approved of the intermediate football team entering the Junior O.R.F.U. League but, in accordance with the wishes of the Director of Intercollegiate Athletics, did not approve of the team entering the play-offs. An exhibition game to be held in September for the senior football team was approved.

At the annual meeting of the Ontario-Quebec Athletic Association, held in Montreal in March, the Constitution was amended to give more representation on the Executive Committee to universities which up to the present time have not competed in athletics to the same extent as have the older members of the O.Q.A.A. The Executive Committee will now consist of one delegate from each of: Queen's, McGill, Toronto and Western; one delegate representing Laval and the University of Montreal; one delegate representing McMaster and the Ontario Agricultural College, and one representing Assumption and Waterloo. The O.Q.A.A. also changed the limits on the number of players which could be used in football and in basketball, and made minor changes in playing regulations and the awarding of crests.

On behalf of the Directorate I should like to express our appreciation to those responsible for the various phases of the athletic programme, and to welcome Mr. J. O. Hughes as the representative of the Board of Governors. Mr. Hughes replaces Mr. E. P. Dignan, whose interest, support and wise counsel were of great help to the Athletic Directorate.

# INTERCOLLEGIATEATHLETICS 

Report of the Director - J. P. Metras

The students, both men and women, once again taxed the athletic facilities to their limits during 1961-62. With the proposed increase in enrolment over the next few years, it will be quite a challenge to keep the students happy in the matter of adequate facilities.

During the past year we have acquired new tennis courts. The courts were not finished in time for the fall activities, but will be greatly appreciated in the coming year. The generosity of the Board of Governors in building a new outdoor ice rink did a tremendous job to relieve the pressure on the other winter facilities. The rink was open seven days a week from November through March.

The biggest problem ahead is to work as many activities as possible into the congested gymnasia. There are five different men's intercollegiate sports teams: Badminton, Volleyball, Basketball, Wrestling and Gymnastics, and five women's intercollegiate teams: Badminton, Volleyball, Basketball, Gymnastics and Archery, plus the many and varied men's and women's intramural competitions all trying to jockey practice times and games into the gymnasia from 4:30 to $10 \mathrm{p} . \mathrm{m}$. each weekday and Saturdays. It is easy to see that there are a lot of disappointments. Some of the teams have been forced to practice at $7 \mathrm{a} . \mathrm{m}$. to get in a little practice time before the gymnasia are taken over for classes during the day. We are looking into the possibility of keeping Thames Hall open on Sundays next year to help alleviate some of the overcrowding.

During 1961-62, the men of the Athletic Association competed in eleven senior sports on the Intercollegiate level. The only championship we managed to win was the Senior Basketball Championship for the fourteenth time in seventeen years. The Association realizes that this is not too impressive from the point of view of wins, but we are proud of the way the
students conducted themselves in the high level of competition that prevailed in the league this year.

The following shows the achievements of the Men's Intercollegiate Teams during the $1961-62$ season:

| Senior Football | -3 rd |
| :--- | :--- |
| Senior Basketball | - Championship |
| Senior Soccer | -5 th |
| Senior Wrestling | -3 dd |
| Senior Swimming | -2 nd |
| Senior Badminton | -3 rd |
| Senior Golf | -4 th |
| Senior Tennis | -5 th |
| Senior Harrier | -4 th |
| Senior Track | -3 rd |
| Senior Squash | -3 rd |

## Women's Athletics

The year 1961-62 was a most successful one for the women athletes at Western. Out of seven intercollegiate sports championships, four were won by Western: Volleyball, Basketball, Indoor and Outdoor Archery. Individual and team records were broken. Ice Hockey was played for the first time in an Intercollegiate Invitational Tournament. Western girls placed third in Ice Hockey, third in Swimming, and fourth in Tennis and Badminton.

Intramural sports suffered badly because of the lack of facilities. From the beginning of November, there were only ten evenings available for girls' Intramural Basketball, Volleyball and Badminton. There were eight competitive units in intramural sports competing in twelve different sports with a total of 535 participants. The actual number of girls participating was slightly over 300 .

## Men's Intramurals

1,072 individual male students participated in nineteen different sports events on a competitive level. Many of these
students participated in more than one sport. The total number of "competitors" as distinguished from individual students was 1,886 . The total male enrolment in the various competing units was 3,252 . The percentage of individual participation figures is approximately 33 and the "competitor" percentage is approximately 58. We feel that this is a very healthy situation. The highest aggregate score by a faculty, and thus the winner of the University Championship Shield, was Huron College with 257 points. In second place with 239.5 points was Christ the King College, and Middlesex College followed with 214.5 points.

## THE WESTERNONTARIO

SECONDARY SCHOOLS' ASSOCIATION

Report of the Secretary - W. A. McWilliams

In this the 40 th year of operation, seventy-eight schools were members of the Association. Of these, twenty-three schools competed as "AA", twenty-four as "A", and thirty-one as "B". The total enrolment in these schools exceeded fifty-one thousand students, an increase of fourteen percent over the enrolment of the previous year.

Participation in activities sponsored by W.O.S.S.A. both on and off the campus brought together the following number of students in interschool activities.

| Badminton | 260 | Soccer | 440 |
| :--- | ---: | :--- | ---: |
| Basketball | 2,730 | Swimming | 182 |
| Cross Country | 121 | Tennis | 41 |
| Curling | 140 | Track \& Field | 2,700 |
| Football | 2,400 | Volleyball | 1,825 |
| Gymnastics | 48 | Wrestling | 54 |
| Hockey | 292 |  |  |
|  |  | Total | 11,223 |

The officers elected for 1962-63 were:
President - Mr.E.W. Rice, Beck S.S., London
lst Vice-President - Mr. W. Wood, St. Clair S.S., Sarnia
2nd Vice-President - Mr. E. MacIlveen, Huron Park S.S.,
Woodstock
Secretary-Treasurer - Dr. W.A. McWilliams

It has been apparent for some time that, in view of the increased enrolment in individual schools and in the total enrolment of member schools of W.O.S.S.A., a second division of W.O.S.S.A. would again extend the opportunity of both schools and students to participate in inter-school and inter-district competition. At the Annual Meeting held on April 28, 1962, the schools of Essex and Kent counties requested W.O.S.S.A. to agree to the formation of a new Association to be known as the South Western Ontario Secondary Schools' Association and to ask the Ontario Federation of School

Athletic Associations to accept this new Association as a member with all rights and privileges.
W.O.S.S.A. agreed and O.F.S.A.A. accepted S.W.O.S.S.A. into membership with the usual one year probation period.

This means that W.O.S.S.A. will retain 45 schools with a total enrolment of 30,395 situated in Lambton, Huron, Perth, Oxford, Norfolk, Elgin, and Middlesex counties.

At the same Annual Meeting the districts remaining in W.O.S.S.A. were realigned as Conferences with the understanding that W.O.S.S.A. would deal with the member schools through the Conferences. The Conferences in the future will collect all fees and submit the se to W.O.S.S.A. and the Conferences also would sponsor and conduct the various W.O.S.S.A. Tournaments and Meets. In this way, the W.O.S.S.A. office will be relieved of a great deal of routine duties and the conference sports' convenors are given the added experience of organizing particular activities in a wider sphere.

The members attending the Annual Meeting hoped that the University would continue to aid W.O.S.S.A. by permitting the facilities of the Athletic Department to be used for W.O.S.S.A. events whenever such use does not interfere with the University's program. The excellent facilities afforded in the Little Memorial Stadium, the use of the W. M. Spencer Memorial Pool and other sports areas will go a long way to ward impressing the secondary school students in the W.O.S.S.A. Conferences with what the University of Western Ontario has to offer them.

I wish to express to Mr. J. P. Metras, Professor W. J. L'Heureux, and the members of their Departments sincere thanks for the help they have given so generously in the past to W.O.S.S.A. I trust that the same cooperative spirit will continue in the future.

# UNIVERSITY HEALTH SERVICE <br> Report of the University Physician <br> Richard Bowen, M.D. 

## General

The academic year 1961-62 was one of growth for the Service. Increased demands added to the fulfillment of its purpose. It was evident that more students presented themselves for treatment, with consequent benefit to themselves and an increased work potential. The staff in turn were happy that more requests were made for their services.

With the increased use of University facilities and the increase of on-campus population, University policy was changed in regard to the Health Service. In accordance, the Health Service was held open five days a week throughout the year and during examination time and other reque sted perlods the services were available. This was broken down in the following manner:

1. During the first and second semesters the nurse was on duty at 8:00 a.m. to $4: 30 \mathrm{p} . \mathrm{m}$. . Monday to Friday inclusive.
2. During the same period a physician was present in the clinic from 10:00 a.m. to $12: 30 \mathrm{p} . \mathrm{m}$., and from 1:30 p.m. to $4: 30$ p.m., Monday to Friday inclusive, except Wednesday morning.
3. During Summer School the nurse was on duty from 1:30 p.m. to $4: 30 \mathrm{p} . \mathrm{m}$. five days a week, and a physician was available for consultation from $12: 30 \mathrm{p} . \mathrm{m}$. to 1:30 p.m.

The Summer School students had the benefit of telephone advice at any time and, if necessary, the students were seen in the offices of the University Physicians. In the opinion of the University Physician the administration should be complimented on the handling of the Summer School students. These students were under pressure and medical consultation was of value to them.

The academic sessions 1961-62 were not characterised by widespread infections; accidents were few, and loss of time, except in special cases, was not too marked.

## Physical Examinations

Examinations of all freshmen and students coming to the University for the first time were carried out. All abnormalities were noted and they were subsequently seen by the medical staff and suitable disposition made. Follow-ups were carried out on students already enrolled in senior years and finalization, if possible, was brought about in regard to their abnormalities.

Good liaison has been maintained with the Department of Physical Education, Athletic coaches, etc., and no misplacement has occurred.

## Tuberculosis Survey

The University is most interested in modern methods of tuberculosis case finding with good control existing in the institution. Beck Memorial Sanatorium staff carried out the survey; the staff work was done by the Health Service Staff.

Proper follow-up of reactors has been attended to and no admissions to sanatoria were made during 1961-62.

## Health Education

No formal course of instruction was given in 1961-62.
Extensive counselling was done by the Victorian Order nurse, who is qualified. The medical staff have advised in matters of health on a group and personal basis.

Student Insurance

No changes were made in student insurance in 1961-62. The diagnostic clause was found to be particularly valuable for those still lacking O.H.S.C. coverage. Insurance claims processed by the Health Service office numbered 423.

## Staff

Dr. Frederick J. Milner was appointed Assistant University Physician during 1961-62. Dr. Milner is a senior practitioner with a flair for the treatment of young people and his efforts and help have been invaluable.

Mrs. Renona Wood, Reg.N., B.Sc.N., of the Victorian Order of Nurses has rendered the department service far beyond the call of duty and staff and students alike have been aided continually.

The success of the tuberculosis survey, follow-up disability, insurance finalization and physical examinations are directly due to the efforts of Mrs. Mary Jarvis whose staff work was excellently done with a willingness that was invaluable.

It was the privilege of the University Physician:

1. To prepare a scheme of standardization practice in things medical.
2. To attend the Annual Meeting of the American College of Health Association.
3. To deliver a paper on Geriatrics at the section on Geriatrics of the Ontario Medical Association.
4. To sit in on the committee for the preparation of a form to be used for the medical examination of incoming students.

## Statistical Survey

Prophylactic Innoculations
1960-61 1961-62
Allergy Serum ..... 209 ..... 313
Typhus and Cholera ..... 15 ..... 12
Poliomyelitis ..... 239 ..... 109
Polio and Tetanus ..... 159 ..... 112
Tetanus ..... 159 ..... 75
Typhoid-Paratyphoid ..... 65 ..... 72
Typhoid-Para-Tetanus ..... 20 ..... 14
Smallpox ..... 47 ..... 258
Cold Serum ..... 11 ..... 10
Staphylococcus Toxoid ..... 23 ..... 39
Schick Test ..... 1 ..... 4
Paul Bunnell ..... 35 ..... 42
Wassermann ..... 4 ..... 6B.M.R.24
Diagnostic Procedures
1960-61 ..... 1961-62
Admission to Sanatorium ..... 1 ..... 0
Arthritic ..... 1
Cardiac ..... 1 ..... 0
Diagnostic x-ray ..... 162
Treatment $x$-ray ..... 30
Dermatological ..... 14
Orthopedic ..... 20
Psychiatric ..... 6
Allergy ..... 3
Medical ..... 19
Surgical ..... 85 ..... 39
Endocrinology ..... 2
Eye, Ear, Nose and Throat ..... 47 ..... 54
Dental ..... 15
Gynaecological ..... 8
Neurological ..... 1
Urological ..... 6 ..... 4

## Current and Comparative Study of Clinic Activity

|  | 1960-61 | 1961-62 |
| :---: | :---: | :---: |
| Consultations | 6309 | 8630 |
| Insurance Claims | 320 | 423 |
| House calls | 45 | 48 |
| Office calls | 48 | 60 |
| Staff seen in Health Service | 98 | 115 |
| Other consultations | 4927 | 6959 |

## Comment

1. The incidence of infectious mononucleosis increased.
2. Interest in prophylactic innoculation was increased.
3. In this analysis neuropsychiatric disability has not markedly increased.
4. The morale was good. Stability level also above average.
5. Student motivation favourable.

Administrative Problems Militating Against Full Efficiency of Department

1. The writer did not succeed in implementing a plan for the efficient care of medical students. Efforts throughout theyear brought forth no solution to seeing the men without considerable loss of instructional time. Care was mainly given in private office of the university physician and in making hous e calls.
2. The student body did not report illness causing lost time to the Health Service for incorporation in the records.

## Acknowledgement

The University Physician was aided at all times by the kind consideration of the President, Comptroller, Registrar, Deans of Faculties, Deans of Men and Women.

# ALUMNI ASSOCIATION <br> Report of the Director - G. O. Hartwell 

## Administration

The work of the Alumni Association continues to be directed by an Executive Council of elected Alumni under the control of the Alumni Assembly.

The Alumni Assembly meets once a year to:

1. Review the actions taken in the previous year by the Executive Council.
2. Review the financial situation of the Association.
3. Make recommendations for future Alumni activities.

The voting members of the Alumni Assembly are as follows:

1. Two representatives from each Branch Association.
2. The ten Alumni members elected to the University Senate.
3. The two Alumni members elected to the University Board of Governors.
4. The Honorary, and regular, officers and members of the Executive Council.

The 196l-62 president of the Association was Dr. J. Stewart Lott.

The wo rk of the Association is done by Standing Committees. and for special events by Special Committees.

Chairmen of the Standing Committees for 1961-62 were: Alumni Clubs, Mrs. Joyce (Kemp) McMeekin; Citations, Miss Jessie

MacFarlane; Constitution, Mr. Frank Dowler; Finance, Mr. Arnold Harris; Fund Campaign, Mr. James Chick; Homecoming, Dr. Earl Plunkett; Nominations, Mr. George Bowie; Publications, Mrs. Maxinne (Wyatt) Barker.

The chief special event for $1961-62$ was the second annual U. W. O. Alumni Spring Festival (see under Activities).

Two special committees were appointed in addition to the above. Both were chaired by Mr. Fred Norwood, first vicepresident of the Association.

1. A committee to investigate the advisability of continuing the Alumni Spring Festival.
2. A committee to investigate the feasibility and advisability of conducting a Major Building Fund Campaign by the Alumni Association for an objective of one million dollars.

The annual Alumni Assembly voted to promote these activities.

## Report of Finances and Alumni Fund Appeal

Funds for Alumni Association activities in 1961-62 were derived from two main sources.

1. The Annual Alumni Appeal for funds to support the University。
2. Grants from the Board of Governors for salaries, pensions, etc., office accommodation and overhead.

## Alumni Fund Appeal

Solicitation for Alumni financial assistance to the University has been conducted entirely by mail. The chief objective starting in 1959 has been to redeem a $\$ 100,000$ pledge to the Western Building Fund (1957). A substantial increase in donations in 1961 and early 1962 enabled the Annual Alumni Assembly, at its meeting in May, 1962, to increase the payment
to the University from $\$ 15,000$ to $\$ 25,000$. It is the intention to complete the remainder of the Alumni pledge ( $\$ 19,000$ as of June 1962) by December 31, 1962. Progress of the Alumni Fund in financial support to the University is noted in the table below.

| Year | No. of Contributors | \% of Alumni Contributing | Amount of Contributions | Average Donation |
| :---: | :---: | :---: | :---: | :---: |
| 1952-3 | 662 | 9.0 | \$ 8,696.00 | \$13.14 |
| 1956 | 1579 | 18.1 | 16,229.00 | 10.16 |
| 1961 | 2798 | 24.0 | 36,253.00 | 12.96 |

Donations from Alumni residing in the U.S.A. are held by the University of Western Ontario Foundation, Inc。in New York. Although there were only six donations from our Alumni in 1961, due to income tax exemption deliberations. the flow has been resumed and approximately $\$ 9,000$ of Alumni donation funds are in the hands of the U.S.A. Foundation at this time.

## Alumni Financial Support to the University

Through the activities of the Alumni Association the re are many facets of financial contribution to the welfare of the University and the students. A few of these are (1) direct grants to the Univesity from Alumni donations, (2) student loan funds, (3) gifts to the University from Alumni for various projects not passing through the Alumni Annual Fund Appeal, (4) grants from earned funds to assist student organizations and projects, (5) scholarship and bursary awards, (6) an Alumni program of seeking out and encouraging better-than-average students to enroll at the University.

## Summary of Alumni Financial Support

Alumni funds invested for student loans amount to a total of $\$ 19,082.13$. This is distributed as follows: Arts and Science - \$6,466.27, Medical - \$10,115.86, Graduate - \$2,500.00.

During the period 1955-61 total gifts from the Annual Alumni Fund Appeal amounted to $\$ 79.586 .00$, and $\$ 25,000.00$ was transferred to the Building Fund pledge in 1962.

Since 1954, $\$ 9,996.48$ has been contributed from earned funds as direct aid to Student Welfare. During the same period $\$ 199,096.91$ has been given directly to the University from Alumni, $\$ 48,179.43$ of this amount having been given during the year under review, 1961-62. The grand total of Alumni known aid to the University from 1954 to 1962 is \$313,679.39.

## Activities of Alumni Association

Branch Associations
Besides a constant underlying activity in student recruitment, aid in requested projects, and promotion of the interests of the University whenever needed or requested, Western Alumni held annual meetings with varied programmes in the following localities since the last report: Essex County at Windsor, Hamilton district at Burlington, London Alumnae (2, Montreal area (2), Niagara Peninsula, St. Lawrence district at Kingston, Toronto area, Don Mills, Waterloo County, Elgin County, Oxford County at Tillsonburg, Sault Ste. Marie, Fort William - Port Arthur Lakehead area, Winnipeg, Regina, Saskatoon, Edmonton, Calgary, Vancouver, and Victoria, B.C.

Plans are presently underway to establish two new U.W.O. Alumni Branch Associations in the Guelph and Oakville areas.

The Alumni Director was present at every meeting except the one in Elgin County. Also, excepting the meetings from Sault Ste. Marie to Victoria, B.C., one or more members of the University faculty or administration were present as speakers or guests.

## Homecoming Weekend

The Alumni Homecoming Weekend on the occasion of the second home football game each fall draws back increasing numbers of graduates to revisit the campus and University staff friends. The popularity of five-year class reunions under the direction of Dr. Dorothy Turville, Associate Alumni Director, grows steadily each year. The success of the whole weekend is a tribute to the family-like cooperation of the University Administration, staff, and students, combined with the volunteer efforts of dozens of Alumni.

The U.W.O. Alumni Spring Festival of Music
This cultural activity of U.W.O. Alumni is in its third year and ranks as the greatest contribution ever made by Western Alumni to the cultural and artistic life of the University and the immediate community.

Conceived, born, and raised by Alumni who felt the University should take the lead in the cultural life of the community, this effort was aided and abetted by all sections of the University administration, faculty, and staff. The Festival is, in its third year, on a firm financial and artistic basis with its central core the world famous Cleveland Symphony Orchestra. Many Alumni, led by Dr. Jack Walters and Dr. Stewart Lott, deserve credit for their tenacity and hard work. A past president of the Alumni Association, Mr. George Bowie, who has been a tower of strength in several fields, will be the chairman of the Festival Committee for 1963.

## Publications

Under Publications, the Alumni Association is concerned with a variety of typed and printed communications. These include the origin of the communication, the composition and duplicating, or printing, of the particular article(s), or notices, through to the final mailing.

A close count was kept during 1961 of all pieces of mail and duplicated matter distributed or used by the Alumni Office. Mailing pieces include the Alumni Gazette, the Annual

Alumni Fund Appeal brochures plus return of membership cards and receipts, mailing for special groups which make use of the facilities of our addressograph machine and trained operators, mailings for Alumni Clubs and class reunions, football and Homecoming promotion, tracing cards, general correspondence, and miscellaneous.

The actual count came to 266,500 pieces.
In addition, either by typing or using the addressograph machine a total of 13,000 names and addresses were printed as lists on 530 separate sheets of paper for the use of Alumni Clubs and reunion class years.

## General

The enlarged space granted to the Alumni Association's office quarters in 1961 has proved to be of great advantage in promoting activities of the University's Alumni.

There will be over 1500 new names and addresses added to Alumni rolls in 1962. Approximately 1,250 of these will be Alumni of the University - the remainder will be recipients of special courses for businessmen conducted by the School of Business Administration.

An increasing number of recently graduated Alumni are entering specialty and professional training courses. As continuing students, little can be expected from these people as working Alumni for several years.

The wide range of Alumni activity would not be possible without the voluntary assistance contributed by many graduates, and the cooperation of the University Board of Governors, the administrative officers, the members of the faculty, and other University staff. The Alumni Director is frequently requested by other Canadian Universities to out line this University's Alumni set-up, its constitution, and many of its particular activities. In scanning Alumni publications from other Universities, it is observed that many of our Alumni activities are incorporated directly into 'heir programmes. In promoting the University's interest through an active Alumni programme, the Alumni Council and your Alumni Director are greatly encouraged with the cooperation and assistance of all concerned.

## JOINT McINTOSH COMMITTEE

Report of the Secretary-R.A.Allen

The McIntosh Memorial Gallery enjoyed another active and stimulating year in 1961-62 under the direction of the Resident Artist, Mr. Tony Urquhart. Seven exhibitions were arranged for the Gallery, each for a period of two to three weeks. These included paintings, drawings, photographs and sculpture, the work of both Canadian and foreign artists but with the emphasis on contemporary Canadian art.

Mr. Urquhart also conducted weekly painting classes and weekly discussion groups throughout the academic year for both students and faculty. In the second term he gave a series of ten Monday evening lectures under the general title "Looking at Pictures"。

The Joint MicIntosh Committee again offered the usual prizes in Business Administration, Geography, Debating and Public Speaking. A total of $\$ 1,512.50$ was awarded in prizes. Debating in particular had a successful year, stimulated in part by the McIntosh prizes and in part by the Debating Society itself which was supported by grants from the University Students Council and from the Chairman of the Board of Governors, Lieutenant-Colonel D. B. Weldon.

Purchases were made for the permanent collection of the McIntosh Gallery to the extent of approximately $\$ 1,333.00$, mainly drawings and etchings by Richard Ziemann, F. H. Varley, J. H. Morrice, Ghitta Caiserman, Alex Colville, Graham Coughtry, Herbert Ariss and Kazuo Nakamura.

The Committee also assisted in the promotion of music on the campus by making grants to the University Choir for the purchase of music and to the College of Music for its library of books and records.

## THE DEPARTMENT OF

BUILDINGS AND GROUNDS

Report of the Superintendent - J. Shortreed

During this year the staff of the Department of Buildings and Grounds averaged approximately 167 permanent and part-time people who were distributed as follows: technical-3, clerical 8, operative - 38, maintenance - 34, and caretaking - 84.

In addition to normal maintenance as authorized in the budget for this Department, 663 work orders were set up for labour and materials for other departments and for alterations. Approximately 3,100 purchase requisitions were initiated in the Department during the year.

## Alterations to Grounds

The University-owned houses at 1126 and 1128 Sunset Avenue were removed by contract in preparation for the construction of the new Men's Residence.

The program of curb installations commenced in 1960-61 was continued throughout this year.

Úsing gravel excavated from the site of Sydenham Hall, a gravel road was built south and east of the Stadium from Huron Street and also one from the Greenhouse area to the proposed Grounds Yard north of the Agricultural Research Institute.

The parking area southwest of the Stadium was extended and graded, providing spaces for an additional 72 vehicles.

A formal garden was planted on either side of University Drive near the Richmond Street gates and several hundreds of flowering trees, shrubs, and evergreens were planted from a fund provided by a generous gift for that purpose by Dr. R. G. Ivey.

During the summer of 1961, three asphalt tennis courts were constructed on the river flats just west of University Bridge.

## Alterations to Buildings

Concurrent with the construction of the new library in the Richard G. Ivey School of Business Administration Building, the original Reading Room area was converted into offices.

Alterations were made in the Physical and Chemical Sciences Building with three rooms on the third floor being fitted for use as chemical laboratories.

Additional transformer capacity was added in the Biological-Geological Sciences Building.

The two year program for the re-conditioning of the eight-inch steam main in the pipe tunnel from the Heating Plant to the Physical and Chemical Sciences Building was completed.

Additional fire screens were installed at stairway locations in the Medical School.

The program of re-planking the Stadium was completed.

Minor alterations made in Middlesex College provided a recording studio for the Department of Romance Languages.

Equipment

The major equipment additions for the year consisted of one half-ton pick-up truck and two battery-operated floor scrubbing machines.

## Traffic and Parking

The ruling made last year cancelling Freshman parking permits for 1962-63 was reviewed thoroughly with student and Faculty participation and was confirmed.

## Reservations

Room scheduling for all functions outside the academic curriculum increased by 33 per cent to a total of approximately 3,500 reservations.

It is planned to have facilities available in the reservations section for the various colleges and schools who may wish to use them, for all room scheduling revisions following the original academic timetable.

## New Buildings and Projects

The Cancer Research Laboratory, for which the contract was let in November 1960, was completed in February 1962.

The Ice Rink and Change House, the construction of which commenced in the spring of 1961, were completed and in operation in November, the fluorescent lighting for the project being erected by our own forces. During the summer of 1962 a concrete pad protection was poured over the rink areas. This pad will provide three tennis courts in the future.

The Library addition to the Richard G. Ivey School of Business Administration Building was completed in March, 1962.

The additional Greenhouse and Potting Shed for the Department of Botany was completed by the end of 1961.

Although the work on the Lawson Memorial Library addition was not quite finished, the building was occupied during the summer break in 1962.

In March 1962 tenders were called and the general contract awarded for the construction of a second men's residence, later named Sydenham Hall, to be located on the southeast corner of University Drive and Sunset Avenue, immediately adjacent to Medway Hall. Occupancy is planned for September 1963, but it is anticipated that it will be available for Summer School that year.

The residence, as planned, will accommodate 312 beds, including 132 single and 80 double rooms for students.

The building is to be constructed in a hollow square design, similar to the present residence and is arranged in six houses of approximately 50 beds each, with two houses being located in each of the north, east and south wings. A Student Lounge is
provided for each of these three wings. One lounge for the Dons, and one for the Fellows will also be constructed in the building.

The west wing will contain a Library, a Dining Room seating 170, and several Music and Recreation Rooms.

In general the finish, furniture, and facilities will be of similar quality and style to those provided for Medway Hall.

Construction of the H.A. and W.J. Stevenson Medical Library commenced in November 1961 with completion scheduled for November 1962. The building is located at 351 Hill Street, being attached to the Victoria Hospital School of Nursing. It contains one large Reading Room with provision for future stacking for 45,000 volumes and the various necessary offices and washrooms.

Tenders were called in February 1962 for the erection of a small addition at the northwest corner of University College, to be completed by September of the same year. It is intended that this should relieve the present shortage of staff offices by providing 11 offices on each of 4 floors. All offices are constructed with built-in bookcases and wardrobes. The addition also includes the required additional washroom facilities. Air conditioning is supplied throughout the new structure.

## Planning for Expansion

The Basic Sciences Building, previous planning of which had been authorized by the Board of Governors in October 1959 but which had been deferred pending agreement with the Medical Faculty, was finally passed to the University architect in December 1961 for preliminary plans. These are expected to be completed in the fall of 1962 for detailing and for tender call in the spring of 1963 with consequent delivery of the building in the spring of 1965. The building will be located west of and adjoined to the Cancer Research Laboratory and the Kresge School of Nursing Building.

The Board of Governors approved of the preparation of plans, and specifications for a Services Building for the Department of Buildings and Grounds. The approval was based on the necessity of acquiring the present Stores and Carpenter Shop areas for the installation of an additional heating boiler, and to release the areas in Stevenson Hall and Thames Hall now occupied by this Department.

The building will be constructed in the present garage area. Tenders are expected to be called during the summer of 1962 with the completion date set for early in 1963.

UNIVERSITY NAVALTRAINING DIVISION
Report of the Commanding Officer
Lt. M. P. Poucher, RCN(R)

This report covers the period 19 September 1961 to 15 May 1962.

## Selection and Recruiting

The training year began well with a good and successful recruiting period, which was remarkable not only for the number of applicants, but also for their quality in comparison with recent years. No difficulty was experienced in meeting the quota of First Year Probationary Cadets, and the January Selection Board for promotion to Cadet recommended this unit be manned in excess of its first year complement.

## Winter Training

Training proceeded according to schedule and no difficulties were experienced despite the fact that half of the training staff were quite inexperienced. The average overall attendance for the Cadets during this period has been 90 per cent and their interest in Naval subjects has been maintained at a high level throughout the year. In consequence, when final examinations were held in March, a very low failure rate was experienced.

## Sports

For the second year running, the Cadets have, on their own initiative, organized and entered a UNTD Basketball Team in the Garrison League of this city and, for the second time, have won the championship.

## Social Functions

The Annual Mess Dinner was held on Board H.M.C.S. "Prevost" on 9 March 1962. Dr. E. G. Pleva, Professor of Geography, was the Guest Speaker. At this dinner the Annual Efficiency Awards were presented to Cadet G. W. Downing,
(First Year), Cadet R. W. Mackay, (Second Year), and Cadet L. J. Hamilton, (Third Year).

On 16 February the Annual Tri-Service Ball was held on board H.M.C.S. "Prevost", the host service being the Canadian Officers Training Corps.

Gunroom Mess activity this year has expanded a great deal, largely due to the efforts of the Mess President, Cadet L. J. Hamilton, who devoted much of his spare time and energy to stimulating and maintaining the Cadets' interest in this important social activity.

Rear-Admiral P. D. Budge, RCN, visited London to address the United Services Institute during March on the subject of "Drake's Drum". Officers and Cadets of the UNTD attended this meeting in lieu of training and the Gunroom was visited by the Admiral later in the evening.

UNTD Strength

The breakdown of strength of the UNTD at 15 May 1962 into components and years of training is as follows:
First Year Cadets ..... 15
Second Year Cadets ..... 7
Third Year Cadets ..... 6
ROTP Cadets ..... 2
CTP Cadets ..... 3
Total Active Cadet
Strength ..... 33
Officers ..... 6
Total Unit Strength ..... 39

# CANADIAN OFFICERS' TRAINING CORPS 

Report of the Commanding Officer
Lt.-Col. A. E. Raymond, CD

This report covers the period 1 September 1961 to 31 August 1962.

The Contingent has continued to operate at a good level of efficiency, with the Contingent Officers ably assisted by the new Resident Staff Officer, Capt. R. K. Tomlinson. The shortage of clerical assistance from $C A(R)$ resources was finally overcome by securing the call-out on full-time duty from the $\mathrm{CA}(\mathrm{M})$ of $\mathrm{S} / \mathrm{Sgt}$. G. E. Jones, CWAC.

## Enrolment and Contingent Strength

The gratifying enrolment of 39 for 1960-61 resulted in an increased quota of 31 for 1961-62. As in the past few years, additional vacancies for acceptable candidates were secured up to a total enrolment of 34 . Unfortunately, owing to a shortage of vacancies, the total number fell short by 5 of the number of acceptable candidates. Statistics for recruiting are as follows:

| College | No. of Applicants | No. of Rejections | Accepted lst Yr. Cdts. | Quota |
| :---: | :---: | :---: | :---: | :---: |
| UWO | 20 | 8 | 11 | 15 |
| Waterloo | 19 | 5 | 10 | 9 |
| Assumption | 26 | 13 | 13 | 7 |
| TOTALS | 65 | 26 | 34 | 31 |

The total strength of the Contingent as of 30 April 1962 was as follows:

|  | UWO | Waterloo | Assumption | Total |
| :---: | :---: | :---: | :---: | :---: |
| Contingent |  |  |  |  |
| Officers | 3 | 2 | 1 | 6 |
| COTC | 31 | 21 | 21 | 73 |
| ROTP | 4 | 0 | 7 | 11 |
| TOTAL | 38 | 23 | 29 | 90 |

## Theoretical Training

Theoretical training was carried out from 27 September 1961 to 4 April 1962. Each Detachment paraded one evening per week as follows:

Waterloo University College - Tuesday, 6.00 p.m. to 8.00 p.m.

University of Western Ontario - Wednesday, 6.30 p.m. to $8.30 \mathrm{p} . \mathrm{m}$.

Assumption University - Thursday, 4.30 p.m. to $6.30 \mathrm{p} . \mathrm{m}$.

The Training Standards of 1960 continued in use, with general satisfaction. Considerable changes have already been notified for 1962-63.

## Special Events

During the academic year, the members of the Contingent participated in the following social and military functions:

Dec. 61 Smoker - HQ Staff \& Services Officers Mess
Nov. 61 Smoker - Assumption
10 Nov. 61 Remembrance Day Parade
22 Nov. 61 Joint Parade with UNTD and URTP at RCAF Station Centralia

7 Feb. 61 Joint Parade with UNTD and URTP at HMCS Prevost
23 Feb. 62 Tri-Service Ball-Assumption
24 Feb. 62 Mess Dinner - Assumption Detachment
16 Feb. 62 Tri-Service Ball - HMCS Prevost
16 Mar. 62 Waterloo College Detachment Ball
31 Mar. 62 Exercise Pennant - Annual Mess Dinner

## Practical Phase Training

A total of 70 members of the Contingent (excluding ROTP) were despatched for summer training at training establishments and units of the Regular Army.

Of the 38 vacancies for COTC second lieutenants to serve with Canada's NATO Forces in Europe during the summer, four we re allotted to members of this Contingent, as follows:

| 2Lt. C. R. Anglin | - Infantry Corps | (UWO) |
| :--- | :--- | :--- |
| 2Lt.J.B. Davis | - Engineer Corps | (UWO) |
| 2Lt.D.C. Holmes | - Artillery Corps | (Waterloo) |
| 2Lt. R. W. J. Miller | - Signal Corps | (UWO) |

Regular Officer Training Plan
During the period a total of eleven ROTP Officer Cadets were attached to the Contingent for training. The closer supervision of their academic standing, instituted two years ago, continues to be beneficial. It was very gratifying that $\mathrm{O} / \mathrm{Cdt}$. D. A. Dawson was gold medalist in Honours Economics.

## Contingent Statf

Operation of the Waterloo College Detachment was greatly assisted by the appointment of Capt. J. M. Ryan as a second contingent officer for the detachment.

At Assumption the continued increase of interest under Maj. P. A. Deneau has well warranted application for an indep endent contingent there. Final decision on this application has not yet been received. If the request is not granted, it is hoped that, at the very least, an additional contingent officer will be provided, plus some local assistance from CA(R) which will reduce the heavy workload and travelling of the RSO.

Since I shall relinquish command of the contingent on 31 August 1962, I wish to express my thanks to the President for the assistance and support unfailingly given me on many occasions. I am sure it will be provided with equal generosity for my successor, Maj. J. H. Blackwell, who in his four years as Second in Command has amply demonstrated that he will be a devoted and capable Commanding Officer.

Commanding Officer
Second in Command

Adjutant

Detachment Commander Waterloo

Contingent Officer Waterloo

Detachment Commander Assumption

Resident Staff Officer

Clerk

- Lt. Col. A. E. Raymond
- Major J. H. Blackwell
- Major G. F. H. Chess
- Major J. M. Clark
- Captain J. M. Ryan
- Major P. A. Deneau
- Captain R. K. Tomlinson, RCAC
- S/Sgt G. E. Jones, CWAC


# 105 UNIVERSITY SQUADRON (RCAF) 

Report of the Commanding Officer
W/C John E.K. Foreman

The University of Western Ontario (Primary Reserve) Squadron, RCAF, has undergraduates taking RCAF training under the University Reserve Training Plan (URTP) and the Regular Officer Training Plan (ROTP).

Under the URTP, selected undergraduates take three winters and three summers training to qualify them for commissioned rank in the Reserve or Regular Air Force on graduation from University.

Under the ROTP, selected undergraduates also take winter and summer training, and in addition, the cost of their university education is paid by the government, including a subsistence allowance and pay-at-rank. After graduation at commissioned rank, they are required to serve in the Regular Air Force for a minimum of three years. Also during the past year there were four Regular Force Officers (recent graduates of Royal Military College) taking their Degree year at the University of Western Ontario.

The training policy of the Squadron over the period of this report remains basically unchanged from reports of previous periods. This policy may be stated as follows:
(a) To assist in the development of good citizenship and leadership in young men and women
(b) To engender in these individuals an awareness of the needs, problems and responsibilities of the RCAF and an understanding of the role of the Armed Services in Canada ạnd Overseas
(c) To provide RCAF reserve components with individuals possessing both academic and military training, so that they will be of immediate use in the event of a national emergency
(d) To introduce university students to service life, so that they may make an intelligent appraisal of the advantages of a service career through the ROTP or by enlisting in the Regular Force after graduation.

Squadron Strength
The strength of the Squadron as of 31 March 1962 was as follows:

|  | UWO <br> London |  | Assumption Windsor |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |
| Reserve Staff Officers | 3 |  | 1 |  |
| URTP ( $\mathrm{F} / \mathrm{Cs}$ \& P/Os) | 30 | 2 | 6 |  |
| ROTP | 20 |  | 5 |  |
| RCAF Regular (Ex-Airmen) | 5 |  |  |  |
| Regular Officers attending |  |  |  |  |
| University | 4 |  |  |  |
| Regular Force Support | 2 | - | - |  |
| TȮTALS | 64 | 2 | 12 | 0 |

Total: 76m 2f

Recruiting
The UWO Squadron $1961-62$ recruiting quota for 1 st Year Flight Cadets was 16 male and 1 female undergraduates in the URTP at UWO and Assumption University. 16 male Cadets were eventually accepted and enrolled, 14 from UWO and 2 from Assumption University.

Under ROTP Recruiting, 10 male applicants from UWO and 1 from Assumption University were accepted from lst year.

## Winter Training

The Winter Training for URTP and ROTP Flight Cadets was carried out on Wednesday evenings in the Engineering Science Building. Lectures by Staff Officers, University Professars and
guest lecturers were given on RCAF History and Organization, Military and Social Geography, Military History, World Affairs, the United Nations, Space Medicine, Physiology, Radiation, Effective Speaking, Service Information and Elementary Theory of Flight. The Cadets were encouraged to participate in debates on military and world affairs topics, and these again proved to be successful in stimulating interest in current news topics. During the last academic session, two Tri-Service Parades and integrated lectures were again conducted with the UNTD and COTC at Wolseley Barracks and RCAF Station Centralia. It is hoped that these will be a continued part of the training of each of the Services in the future.

The senior cadets participated in the Remembrance Day Service in Convocation Hall, the Tri-Service Ball was held at HMCS Prevost on 16 February 1962 and the RCAF Squadron Annual Mess Dinner was held in the Officers Mess at Station Centralia on 23 March 1962. A/C J. H. Verner of Training Command Headquarters, Winnipeg, was guest of honour and speaker at the Mess Dinner.

The Squadron was pleased to welcome the following visitors to UWO during the year:

G/C R. R. Hilton, CO Station Camp Borden
S/L L. Jewett, TCHQ, Station Winnipeg
S/LC. LeFrance, OC Officer Selection Unit, Centralia F/LR.A.G. Martin, OC Recruiting Unit London

> Summer Training

All first year cadets proceeded to the Reserve Officers ${ }^{8}$ School at Station Centralia for basic training before proceeding to other RCAF Stations for specialized training in various branches of the Service.

Second and third year cadets proceeded directly to RCAF stations to continue formal courses or to take contact training in their specialized branches.

The following third year cadets were selected, on the basis of merit, for summer overseas posting:

F/C R. H. Hollands to 4 Fighter Wing, Germany
F/C W. T. Wells to 1 Fighter Wing, France.

## Faculty Tours

UWO Faculty members again participated in a tour of an RCAF unit, in which Professors Inman, Taylor, Gow, Kearns, Wild and Bulani visited RCAF Station Trenton. Also Dr. A. C. Burton accompanied the Air Officer Commanding Air Transport Command on his annual tour of Northern RCAF units.

$$
\underline{\text { Staff }}
$$

The following comprised the establishment of the University of Western Ontario 105 Reserve Squadron for 1961-62:

Commanding Officer
Chief Training Officer Staff Officer RCAF Representative -

Assumprion
Resident Staff Officer University Support Clerk

W/C John E.K. Foreman S/L J.R.W. Gwynne-Timothy F/LW. Bulani

F/LW. G. Benedict
F/LC. P. Mullin
Cpl.J.V.Forestell

F/LC. P. Mullin continued for the third year in the capacity of Resident Staff Officer (RCAF) and Armed Forces Co-Ordinator on the campus.

I wish again to express my sincere appreciation to the Squadron Staff, Cadets and Faculty who have extended their support to me during the past year. This cooperation has contributed immeasurably toward both the excellent training program which was offered and the successful year which was again enjoyed by the Squadron.

## STAFF CHANGES

## UNIVERSITY COLLEGE

Retirements
C. Sivertz
H. M. Thomas

Resignations
J. D. Ralph

Mrs. E. McLeod
F. Stiling
T. E. Frank
T. Sandquist
S. Gandhi

Mrs. M.S.Sansom
J.K. Watson
D. P. Scott

Professor, Department of Chemistry,
Professor, Department of History
W. Sherwood Fox Professor and Head, Department of Classics, but to continue as Professor

Instructor (Part-Time), Department of Classics

Lecturer, Department of English, but to continue as Dean, Faculty of Arts and Science

Instructor, Department of German

Lecturer, Department of History
Instructor (Part-Time), Department of Pure and Applied Mathematics and Astronomy

Lecturer (Part-Time), Department of Psychology

Professor, Department of Chemistry, upon transfer to University Registrarship, 1st July, 1962.

Honorary Lecturer, Department of Zoology

Leave of Absence
R. L. Wonnacott

Appointments
M. J. Mama lakis
W. E. Mann
F. Brownlow

Miss M. Davis
G.L.Tracy
K. H. W. Hilborn
M. M, Ali
C. N. Lee

Miss A. Bode
J. P. Denny
R. G. Gardner
J. B. Sanders

Associate Professor, Department of Economics and Political Science

Visiting Assistant Professor, Department of Economics and Political Science

Assistant Professor, Department of Economics and Political Science

Lecturer, Department of English
Instructor, Department of English
Associate Professor, Department of German

Lecturer, Department of History
Assistant Professor, Department of Pure and Applied Mathematics and Astronomy

Assistant Professor, Department of Pure and Applied Mathematics and Astronomy

Instructor, Department of Pure and Applied Mathematics and Astronomy Lecturer, Department of Psychology Lecturer, Department of Psychology

Assistant Professor, Department of Romance Languages

Appointments (continued)

Miss D. F. Jones
W. E. Collin
D. B. Walden
C. J. Willis
P.A. Forsyth
M. H. A. Keenleyside

Instructor, Department of Romance Languages

Lecturer (Part-Time), Department of Romance Languages

Assistant Professor, Department of Botany

Lecturer, Department of Chemistry

Professor and Head, Department of Physics

Assistant Professor, Department of Zoology

Promotions
R. J. Uffen
A. E. Raymond
R. L. Wonnacott
H. B. Berry
T. Sandquist

From Professor and Head, Department of Geophysics, Acting Head, Department of Physics, and Assistant Principal, University College, to Principal, University College, and Lecturer, Department of Geophysics

From Associate Professor to Professor, Department of Classics, and to continue as Lecturer, Department of History

From Assistant Professor to Associate Professor, Department of Economics and Political Science

From Assistant Professor to Associate Professor, Department of English

From Instructor to Lecturer, Department of History

## Promotions (continued)

| W. H. Wehlau | From Associate Professor to Professor, Department of Pure and Applied Mathematics and Astronomy |
| :---: | :---: |
| G. Cross | From Assistant Professor to Associate Professor, Department of Pure and Applied Mathematics and Astronomy |
| J. Sanders | From Assistant Professor to Associate Professor, Department of Pure and Applied Mathematics and Astronomy |
| J..Mereu | From Instructor (Part-Time) to Lecturer (Part-Time), Department of Pure and Applied Mathematics and Astronomy |
| L. Heller | From Lecturer to Assistant Professor, Department of Romance Languages |
| Mrs.E.Ward | From Instructor to Lecturer, Department of Secretarial Science |
| J. B. Stothers | From Lecturer to Assistant Professor, Department of Chemistry |
| H. W. Baldwin | From Lecturer to Assistant Professor, Department of Chemistry |
| J. R.Kramer | From Lecturer to Assistant Professor, Department of Geology |
| A. E. Beck | From Assistant Professor to Assistant Professor and Acting Head, Department of Geophysics |
| D. R. Hay | From Assistant Professor to Associate Professor, Department of Physics |

Promotions (continued)

| T. W. Stewart | From Instructor to Lecturer, Department of Physics |
| :---: | :---: |
| J. A. Fulford | From Lecturer to Assistant Professor, Department of Physics |
| M. S. Yuhasz | From Assistant Professor to Associate Professor, Department of Physical, Health and Recreation Education, and to continue as Assistant, Department of Athletics |
| J.A. McIntyre | From Assistant Professor, Department of Economic and Political Science, to Director, Summer School and Extension Department and Lecturer, Department of Economics and Political Science |
| Mrs. H. Kunkel | From Instructor to Lecturer, Department of Physical, Health and Recreation Education |

## MIDDLESEX COLLEGE

Resignations
W. McLeod Lecturer, Department of Classics
E. Schulman
F. M. Kelly, Jr.
D. L. McMurry

Miss L. S. Roden

Lecturer, Department of Economics and Political Science

Assistant Professor, Department of English

Honorary Lecturer, Department of History

Lecturer, Department of Romance Languages
D. Ivor
P. C. Stratford

Appointments
W. McLeod
F. M. Kelly, Jr.
R. C. Overton
D. L. McMurry
I. Block
F.K. Harper
R. Teghtsoonian
L. Lozano

Promotions
H. B. Mayo
J. J. Madden

Professor and Head, Department of Economics and Political Science (Deceased September 23rd, 1961)

Assistant Professor, Department of English

Lecturer, Department of Classics

Assistant Professor, Department of English

Professor, Department of History

Honorary Lecturer, Depart ment of History.

Lecturer, Department of Philosophy
Lecturer, Department of Romance Languages

Assistant Professor, Department of Psychology

Instructor, Department of Romance Languages

From Professor to Professor and Acting Head, Department of Economics and Political Science

From Assistant Professor to Associate Professor, Department of Economics and Political Science

## Promotions (continued)

| P. V. Lyon | From Assistant Professor to Associate Professor, Department of Economics and Political Science |
| :---: | :---: |
| J. Reaney | From Assistant Professor to Associate Professor, Department of English |
| J. W. Davis | From Assistant Professor and Head to Associate Professor and Head, Department of Philosophy |
| P.A.Angeles | From Lecturer to Assistant Professor, Department of Philosophy |
| F.W.R. Taylor | From Lecturer to Assistant Professor, Department of Psychology |
| C.J.F. Whebell | From Lecturer to Assistant Professor, Department of Geography |
| W. Parisien | From Instructor to Sr. Eng lish Assistant, Trois-Pistoles Summer School |

## Return from Leave of Absence

P. Fleck Lecturer, Department of English

## FACULTY OF ENGINEERING SCIENCE

Promotions
M. P. Poucher From Assistant Professor to Associate Professor
G.F.H. Chess From Lecturer to Assistant Professor
W. H. Davis

From Lecturer to Assistant Professor

Appointments

| E. S. Nowak | Assistant Professor |
| :--- | :--- |
| L. G. Soderman | Assistant Professor |

FACULTY OF MEDICINE
Resignations
Miss O. J. Stewart Instructor (Part-Time), Department of Medicine
W.A. Tillmann
M. A. Platt Fellow, Department of Obstetrics and Gynaecology

## Promotions

D. H. Carr
M. S. Smout
W. B. Barton
D. B. Meltzer
L. M. Spratt
N. M. Lefcoe

From Instructor and Research Assistant to Assistant Professor and Research Associate, Department of Medicine

## Promotions (continued)

G. W. Preuter
H. H. Allen

W. E. G. A. Spoerel

C. W. Dyson
R.E. Greenway
I. H. Smith
J. M. Wanklin

J. S. Lott

Miss L. M. Myers
C. A. Cleland

From Instructor to Sr . Associate (Part-Time), Department of Obstetrics and Gynaecology

From Instructor to Sr . Associate, Department of Obstetrics and Gynaecology

From Sr. Associate and Head; etc., to Associate Professor and Head, Department of Anaesthesia

From Assistant Professor and Head to Associate Professor and Head, Department of Ophthalmology

From Assistant Professor and Head to Associate Professor and Head, Department of Otology, Rhinology and Laryngology

Associate Professor and Head to Professor and Head, Department of Therapeutic Radiology (Deceased April 7th, 1962)

From Instructor to Lecturer, Department of Psychiatry and Preventive Medicine

From Instructor to Assistant Professor, Department of Therapeutic Radiology

From Sr. Teaching Fellow to Lecturer, Department of The rapeutic Radiology

From Lecturer to Sr. Associate, Department of Psychiatry and Preventive Medicine

Promotions (continued)
D. H. Thomson
G. E. Jenkins
J.C.M.Fetterly
D. M. Wickware
W. A. Tillmann
O. J. Stewart
W. E. Keil
H. Rochman

Appointments
O. H. Warwick
J. Hamilton
H. C. Soltan
G. Sainte-Marie

From Instructor to Lecturer, Department of Therapeutic Radiology

From Instructor to Sr . Associate, Department of Psychiatry and Preventive Medicine

From Sr. Teaching Fellow to Instructor, Department of Therapeutic Radiology

From Lecturer to Sr. Associate, Department of Psychiatry and Preventive Medicine

From Lecturer to Sr. Associate, Department of Psychiatry and Preventive Medicine

From Instructor to Lecturer, Department of Psychiatry and Preventive Medicine

From Fellow to Instructor, Department of Psychiatry and Preventive Medicine

From Fellow to Instructor, Department of Psychiatry and Preventive Medicine

Dean, Faculty of Medicine
Lecturer, Department of Pharmacology
Assistant Professor of Human Genetics, Department of Microscopic Anatomy

Assistant Professor, Department of Microscopic Anatomy and Research Assistant, Cancer Research Laboratory

Appointments (continued)

| T. D. McLarty | Instructor, Department of Surgery |
| :--- | :--- |
| A. M. Lansing | Lecturer, Department of Surgery |
| L. L. De Veber | Instructor, Department of Paediatrics |
| G. G. Hinton | Acting Teaching Fellow, Department <br> of Paediatrics |
| F. C. Heagy | Assistant Professor, Department of <br>  <br> Therapeutic Radiology |
| W. R. Inch | Assistant Professor, Department of <br> Therapeutic Radiology |
| W. F. MacDonald | Assistant Professor, Department of <br> Therapeutic Radiology |
| P. Barton M. Pfalzner | Lecturer, Department of Therapeutic <br> Radiology |
|  | Lecturer, Department of Therapeutic <br> Radiology |

## SCHOOL OF BUSINESS ADMINISTRATION

Resignations
L. Agranove
R. Sproule

Leaves of Absence
S. Martin
B. Pearson
M. Leenders
A. Grindlay

Lecturer (Part-Time)

Instructor

Lecturer (Continuation)
Lecturer (Continuation)

Lecturer

Instructor (Continuation)

Leaves of Absence (continued)
R. Sproule
Instructor (Continuation)

Returns from Leave of Absence
D. W. Ladd Professor
C. B. Johnston Assistant Professor

Promotions
F. H. Rowland From Guest Lecturer to Assistant Professor
J. Graham

From Lecturer to Assistant Professor
A. Mikolachki From Instructor to Lecturer
J. Preston From Instructor to Lecturer
W. Weber From Instructor to Lecturer

Appointments
J. W. McDougall Professor
K. May
J. Humphrey

Assistant Professor
J. Kennedy

Instructor
SCHOOL OF NURSING

Resignations
Miss E. M. McDowell
Professor of Nursing Administration (Post-retirement resignation)

Miss J. Nevitt
Lecturer
Miss J. Shaw
Instructor (Part-Time)

## Appointments

Miss E. M. McDowell

Miss E. Healey

Miss R. Grexton

Professor of Nursing Administration (Sessional)

Lecturer

Lecturer

## COLLEGE OF MUSIC

Resignation
J. Cook Professor (Part-Time)

Promotion
D. A. McKellár

From Instructor (Part-Time)
to Assistant Professor (Part-Time)
FACULTY OF LAAW

Resignation
G. Keyes Lecturer

Appointments
G. Keyes
E. Cherniak

Lecturer

Lecturer (Part-Time)
GENERAL
Retirements

Miss H. M. B. Allison
Registrar

Mrs. D. Struckett
Warden, Spencer Hall

Resignations
Brigadier The Honourable Warden, Medway Hall M.F.Gregg, V.C.

Resignations (continued)
J. Lepianka

Leave of Absence

Kitchen Porter, Somerville House (post-retirement resignation)

Warden, Medway Hall (continuation)

Appointment

Hon. Curator, Museums

- 147 -

REGISTRATION SUMMARY - WHOLE UNIVERSITY - 1961-62

| FACULTY OF ARTS AND SCIENCE | FULI-TIME |  | PART.-TIME |  | T O T A LMen Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | Men | Women |  |
| University College | 1088 | 562 | 28 | 23 | 1116 | 585 | 1701 |
| Middlesex College | 450 | 324 | - | - | 450 | 324 | 774 |
| The College of Music | 16 | 25 | 3 | - | 19 | 25 | 44 |
|  | 1554 | 911 | 31 | 23 | 1585 | 934 | 2519 |
| Correspondence |  |  | 354 | 176 | 354 | 176 |  |
| Extension |  |  | 723 | 444 | 723 | 444 |  |
| Summer School |  |  | 1103 | 4.97 | 1103 | 497 | 3297 |
|  |  |  | 2180 | 1117 | 2180 | 1117 |  |
| Duplicates |  |  | 594 | 267 | 594 | 267 | 861 |
|  |  |  | 1586 | 850 | 1586 | 850 | 2436 |

## The Affiliated Colleges

| Huron College ...... | 352 | 135 | 6 | 2 | 358 | 137 | 495 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ursuline College ... |  | 176 | 3 | 40 | 3 | 216 | 219 |
| College of Christ the King ............... | 233 | - | 16 | 7 | 249 | 7 | 256 |
| St. Peter's College. | 73 | - | - | - | 73 | - | 73 |
|  | 658 | 311 | 25 | 49 | 683 | 360 | 1043 |
| TOTALS | 2212 | 1222 | 1642 | 922 | 3854 | 2144 | 5998 |


| OTHER FACULTIES AND SCHOOLS | (undergraduate) |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: | ---: |
| Business School | 137 | 1 | - | - | 137 | 1 | 138 |
| Engineering Faculty | 228 | - | - | - | 228 | - | 228 |
| Law Faculty | 93 | 3 | - | - | 93 | 96 |  |
| Medical Faculty | 214 | - | 173 | - | 5 | 214 | 27 |
| Nursing School |  |  | - | - | 178 | 178 |  |
| UNDERGRADUATE TOTALS | $\ldots$ | 2884 | 1426 | 1642 | 927 | 4526 | 2353 |

FACULTY OF GRADUATE STUDIES

| Arts and Science | 144 | 20 | 29 | 9 | 173 | 29 | 202 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business Administration | 202 | - | 5 | - | 207 | - | 207 |
| Medicine | 22 | 5 | - | - | 22 | 5 | 27 |
| Nursing | - | 12 | - | - | - | 12 | 12 |
|  | 368 | 37 | 34 | 9 | 402 | 46 | 448 |
| UNIVERSITY TOTAL ENROLMENT | 3252 | 1463 | 1676 | 236 | 4928 | 2399 | 7327 |

The overall not increase is 10.40\%
The proportion of men $(67.26 \%)$ to women (32.74\%) is practically unchanged (men were 68.09\% last year)

## WINNERS OF ONTARIO SCHOLARSHIPS

The following students enrolled at this University in September 1961, with Grade XIII averages of $80 \%$ or more on eight papers.

Name of Student

Ainslie, Mary A. Beatty, Carol A. Bennett, Brian Bezaire, SaraE. Bloor, Earl G.
Boughner, Barbara
Bragg, Sharon
Broy, Patricia V.
Cameron, James J.
Carpenter, Donna J.
Carter, James H.
Charlton, Phyllis
Clark, David A.
Clarke, Diane
De Boer, Gerrit
Eaton, Janet E.
Gilhuly, James J.
Given, J anet D. Gow, T. Trenton
Grace, John R. Grant, Elizabeth A. Hair, Jane L. Hammar, H. Karen Hartwell, Georgina R. Hayes, Margaret A. Hindmarsh, Carol Hornby, D. Brock Hotson, Peggy A. * Hughes, John E. Jago, Charles J. Koprich, Stephen R. Lawson, Ruth M. Lee, Robert Luksts, Margarita MacIsaac, Melvin G. MacLachlan, Ann

Home Address

St. Marys
London
Toronto
Kingsville
Kincardine
Windsor
Woodstock
Windsor
Toronto
Burlington
Innerkip
Belmont
Peterborough
Brownsville
Strathroy
North Bay
Wallaceburg
London
Toronto
London
Staffordville
Watford
Kitchener
London
Willowdale
Goderich
London
Woodstock
St. Catherines
St. Cathe rines
Delhi
Kingsville
Wheatly
London
Sarnia
London

College Enrolled In
Huron College
Middlesex College
University College
Middlesex College
University College
University College
Middlesex College
Middle sex College
Middlesex College
University College
Middlesex College
Middlesex College
University College
Middlesex College
University College
University College
Christ the King College
University College
Middlesex College
Engineering
Middlesex College
University College
Middlesex College
Middlesex College
Middlesex College
Middlesex College
University College
Middlesex College
Middlesex College
Huron College
St. Peter's College
Middlesex College
University College
University College
St. Peter's College
Middlesex College

## Winners of Ontario Scholarships (cont'd)

Name of Student Home Address
McCorquodale, Joyce C.
McEwing, Wayne B.
McGregor, Bonnie
Maki, Brenda C.
Mead, Ernest Roy
Medd, Eileen E.
Mitchell, Heather
Monkman, Eleanor A.
Page, Stephen
Pagnucco, Guido D.
Pegelo, Marilyn M.
Pequegnat, Penelope
Richardson, Robin M.
Robinson, Malcolm P.
Schwartz, Peter
Silcox, James A.
Smart, Kenneth Smith, Susan E. Tamblyn, C. David Thomson, Jo Ann Vickery, James G. Von Hochstetter, Andrea Waldron, Ian D. Warner, Carolyn Willis, Robert Francis Wilson, Alice Louise Wright, Sheilla *Iler, Deanna L.

Glanworth
London
Leamington
Sudbury
Ingersoll
London
London
Toronto
Toronto
Windsor
Cargill
Kitchener
St. Catherines
London
London
Windsor
Woodstock
Waterloo
London
Hamilton
Port Credit
London
Toronto
Windsor
London
London
Toronto
Toronto

College Enrolled In
Middlesex College
Middlesex College
Middlesex College
Middlesex College
Middlesex College
Middlesex College
University College
University College
Middlesex College Middlesex College
University College
Middlesex College
Middlesex College
Middlesex College
Middlesex College
University College
University College
University College
University College
University College
University College
University College
Middlesex College
University College
Middlesex College
Middlesex College
University College
University College

## SENIOR AWARDS

The following awards were held during 1961-62 or were announced during 1961-62 to be held by graduating students or recent graduate students.

| Name of Student | Department | Donor and Amount |
| :---: | :---: | :---: |
| Bannister, John C. | School of Business Administration | Supertest Petroleum Corporation Fellowship, \$500 |
| Barat, Arthur M. | Faculty of Law | Mr. Frank Little <br> Little, Calder, Morrissey and Gillespie, London. For highest standing in final year. \$200 |
| Bayer, Marvin B. | School of Business Administration | Supertest Petroleum Corporation Fellowship, \$500 |
| Bell, Morley B. | Physics | National Research Council Studentship, \$2400 |
| Buchanan, Ronald L. | Chemistry | National Research Council Studentship, \$2400 |
| Budden, Leonard J. | Mathematics | Dupont Scholarship for attendance at intramural session O.C.E. \$1500 |
| Burt, Walter Laurenc | Faculty of Medicine | Medical Research Council Summer Undergraduate Medical Scholarship, \$1,000 |
| Chase, Richard | School of Business Administration | The Procter and Gamble Company Fellowship, $\$ 600$ |
| Chamberlain, L.W. | Physics | Commonwealth Scholarship in Communications at Keele University, Keele, England, covering fares, university fees, maintenance, books, and apparatus approved travel expenses, etc. |


| Name of Student | Department | Donor and Amount |
| :---: | :---: | :---: |
| Dorenfeld, Morris | School of Business Administration | Minnesota Mining and Manufacturing of Canada Limited, \$500 |
| Duffy, J. P. | Faculty of Engineering Science | Ontario Research Foundation Scholarship \$1400 |
| Dugan, John J. | Chemistry | National Research Council Bursary, \$2000 |
| Durst, Tony | Chemistry | National Research Council Studentship, \$2400 |
| Element, Melville | School of Business Administration | Riddell, Stead, Graham <br> \& Hutchison Award, \$490 |
| Fallona, Mary C. | Chemistry | National Research Council Studentship, \$2400 |
| Foster, C.D.O. | Biochemistry | Wisconsin Alumni Research Foundation Fellowship, \$2400 |
| Grant, Gary E. | School of Business Administration | The Procter and Gamble Company Fellowship, \$600 |
| Hollands, T. Ralph | Chemistry | National Research Council Studentship, \$2400 |
| Holyer, R. H. | Chemistry | Dow Chemical Fellowship $\$ 2000$ |
| Johnston, Robert W. | Physics | National Research Council Studentship, \$2400 |
| Klein, Stuart Walter | Faculty of Medicine | Poulenc Award, \$250 and Gold Medal |
| Klein, Stuart Walter | Faculty of Medicine | The Rowntree Prize in Medical History, \$150 |
| Klein, Stuart Walter | Faculty of Medicine | The Dr. F. R. Eccles Scholarship, \$1200 |


| Name of Student | Department | Donor and Amount |
| :---: | :---: | :---: |
| Lacroix, Roderick | School of Business Administration | The John Labatt Fellowship, \$500 |
| Lecocq, D.S. | Faculty of Engineering Science | Stamford University, Department of Electrical Engineering, Research Assistantship |
| McCorquodale, J.A. | Faculty of Engineering Science | Athlone Fellowship for study at Imperial College for two years; travel costs, plus tuition, plus maintenance |
| MacDonald, John | Chemistry | National Research Council Studentship \$2400 |
| McEachran, Robert | Physics | National Research Council <br> Postdoctorate Overseas <br> Fellowship, \$4500 |
| McGregor, Andrew | Physics | National Research Council Studentship, \$2400 |
| McNamara, Anthony | Chemistry | Canadian Industries Limited Fellowship, \$2000 |
| McQuillan, Archibald | Physics | National Research Council Studentship, \$2400 |
| Manuel, Peter W. | Physics | National Research Council Studentship, \$2400 |
| Manz, Herbert Josef | Biochemistry | Lederle Medical Student Research Fellowship, \$600 |
| Molloy, Mary | School of Nursing | Kellogg Foundation Scholarship, \$1000 |
| Morrison, Andrew | School of Business Administration | Minnesota Mining and Manufacturing of Canada Limited, \$500 |


| Name of Student | Department | Donor and Amount |
| :---: | :---: | :---: |
| Moss, John S. | Physics | National Research <br> Council Bursary, \$2000 |
| Murray, Harry G. | Psychology | Canada Council Pre- <br> Master's Scholarship, $\$ 1500$ |
| Newby, Wilfred J. | Chemistry | Cominco Fellowship, \$1000 |
| Nixon, Kenneth E. | School of Business Administration | The John Labatt Fellowship \$500 |
| Norminton, Edward J | . Mathematics | National Research Council Studentship, \$2400 |
| Pews, R. Garth | Chemistry | National Research Council Studentship, \$2400 |
| Pews, R. Garth | Chemistry | Dow Chemical Fellowship $\$ 2000$ |
| Purvis, James H. | Biophysics | Lederle Medical Student Research Fellowship, \$600 |
| Rice, Delbert W. | Physics | National Research Council Studentship, \$2400 |
| Rudd, Bruce L. | Faculty of Law | Bursary of $\$ 250$ from an anonymous law firm in London, toward payment of tuition fees in any one year |
| Runstedtler, John | Mathematics | Canadian Mathematical Congress Award, for attendance at summer session O.C.E. |
| Sister Miriam | School of Nursing | Kellogg Foundation Scholarship \$2000 |
| Sister St. Roch | School of Nursing | Kellogg Foundation Scholarship $\$ 2000$ |


| Name of Student | Department | Donor and Amount |
| :---: | :---: | :---: |
| Smith, Gordon R. | Mathematics | Dupont Scholarship for attendance at intramural session, O.C.E., $\$ 1500$ |
| Struthers, Telford | Mathematics | Canadian Mathematical Congress Award, for attendance at summer session O.C.E., \$150 |
| Thomson, David | School of Business Administration | The Industrial Acceptance Corporation Fellowships, \$750 |
| Thomson, David M. | Physiology | Medical Research Council <br> Summer Undergraduate Medical <br> Scholarship, \$1000 |
| Turnbull, Ross M. | Physics | National Research Council Bursary, \$2000 |
| Turner, H. Edward | Physics | National Research Council Studentship, \$2400 |
| Varah, Janet G. | Psychology | Canadian Council PreMaster's Scholarship \$1500 |
| Watts, Evelyn M. | School of Nursing | Kellogg Foundation Scholarship $\$ 2000$ |
| Watts, George H. | Chemistry | National Research Council Bursary, \$20no |
| Williams, Ross E. | Chemistry | National Research Council Bursary, \$2000 |

## THE DEANS' HONOURS LISTS

The students listed have obtained Grade A General Averages on the work of the 1961-62 year. Some students with I Class Honors Averages did not obtain Grade A standing on the combined Pass and Honors courses of their year. The list includes only undergraduates working toward a first degree in each Faculty. Extension and Summer School students are not included.

## The Faculty of Arts and Science

Huron College

Mary Ann Ainslie William Alfred Benbow
Charles Joseph Jago

## Middlesex College

Carol Anne Beatty
Sara Bezaire
Mary Carolyn Biehn
Stephen Ross Cameron
Sue Carter
Dana Clunis
Tanny de Zwart
David J. Farrell
Fred J. Gorman
Trenton Gow
Kenneth Grant
Georgina Hartwell
Colin Hayward
E. Jane Horton

John Edwin Hughes
Mary Louise Howay
Eva Marie Hurtig
Karen Kearney
Donald H. La powich
Ruth Lawson
Judy Anne Little

Edward Miles
Susan Florence Sharples Robert Murlin Wills

Brenda Maki
Neil McCormick
Robert K. McDermott
Wayne McEwing
Ann MacLachlan
Jean McNally
Eileen Medd
Elizabeth Ann Mills
Heather Jean Mitchell
John Charles Olmstead
Helgard Opitz
Daniel Guido Pagnucco
Robin Richardson
M. P. Sinclair Robinson

Ian Waldron
Robert F. Willis
Alice L. Wilson
William Woloshyn
Joyce McCorquodale

The College of Music
Betty Ann Petz Andrea von Hochstetter
St. Peter's College (College of Christ the King)
Martin E. Carbone James J. Gilhuly
David J. DuCharme
Gerald G. Gormely
(St. Peter's Seminary College of Arts)
John W. Brothers
Archie V. Campbell
Donald Dietrich
Donald Dufraimont
Patrick W. Fuerth
CarlHerteis
University College

John D. Aberhart
Judith Anderson
John P. Ashmore
Ronald Atkey
Robert Baguley
William F. Barnicke
Janet-Jean Bathgate
Mark Bender
John Benny
Lother Bode
Barbara Boughner
George W. Brandie
Linda Browne
Robert J. Browne
Barbara Burrows
John P. Cain
David A. Clark
Susan Corey
John E. Cronkwright
Gordon Darroch
G. Michael Deacon

Gerrit De Boer
Christina DeJonge
Wm. Paul Denham
Isobel Dennis
Corinne Devlin

Patrick Hudak
Jacob Krechowechyj
Melvin MacIsaac
Phillip Rody
Roger Spalding

Allan J. Douglas
Sally Anne Doyle
Mara Dreimanis
Robert Dynes
Janet Eaton
Dale V. Edwards
Wayne Elford
Kenneth Fadelle
Mario Faveri
Ronald J. Ferguson
Kathleen Fowler
Brian Gamble
Paul A. Gingrich
Helmuth Glaesner
Gloria Glenister
Robert Gutcher
J. Peter Guthrie

Jane L. Hair
Doris Hamill
William Henneker
Brock Hornby
Ross Hotchkiss
Wm. Bruce Jackson
Charles H. Johns
Diane Kennedy
David Leitch

## University College (continued)

Robert Love
Paul Marriage
William K, Marshall
Phyllis J. McAlpine
Mary E. McCallum
Bruce McCraw
Gary McLean
Gaye Minshall
Eleanor Monkman
Robert Morrison
Emilie Novak
Marilyn Pegelo
Sister M. Perpetua
Thomas Pitts
Elisabeth Pollock
Donna-Rae Prong
Philip Reed
John B. Rice
Peter C. Russell
Valda Schaller
Paul T. Schmidt
Steven Scott

Ursuline College
Margaret Lorraine Lefevre Margaret Ann McIlhargey
Sheila McKeown
Sister M. Michaeleen

James A. Sharpe
David Sheppard
James A. Silcox
Robert Sillick
J. Edward Smith

Susan E. Smith
Janice Spencer
Joan Stachow
Paul Stager
Margaret Steel
Catherine Steels
Ruth Strangways
Edward Syrett
Jo Ann Thomson
Frank Tucker
Henk Vanden Heuvel
Charles H. Warren
James G. Weaver
Gordon R. Whiting
Don Wigle
Wayne Wilson

## The School of Business Administration

(The top ten per cent on the Dean's recommendation)

Donald J. Graham
Thomas V. McCarthy
Kenneth G. Hardy
D. Michael McMillan

Bruce J. Hopkins
J. Philip Walden

Peter H. Jackson

## The Faculty of Engineering Science

Ronald E. Alward
Paul Barnett
Kenneth A. Burrill
Peter J. Does
David John Fader
John Ross Grace
Donald G. Grattan
Robert H. Harper
Carl Erik Kohn

Juri Kortschinski
Robert R. Marley
John D. McDougall
Robert Earl McPhail
John Robert Nancekivell
Roger Shorey
Murray Ross Sinclair
Leonard Stass
LeRoy van Koughnett
Peter von Arnhem

The Faculty of Law
Thomas I. A. Allen
Thomas A. Cline
Gary Greatrex
John E. Hall
Donald C. Lewis

The Faculty of Medicine

Phyllis Burk
Larry Burt
Gary Ferguson
Gary Gibson
Michael Grace
James Hiscox
Raymond Hollands
James G. Johnston
W. Patrick Mazier

Dorothy McDade
James H. Purvis
William D. Reid
Anna Rush
Henry Schmidek
Dora Ann Stinson
David M. P. Thomson
James M. Tisdale
Diana Willis
Roderick Willis

The School of Nursing

All its students of Grade A standing graduated in May in Diploma or Degree courses.

## STUDENT LOANS AND BURSARIES

Faculty of Arts and Science

| Name of Loan or Bursary $\quad$ Nun Re | Number of Recipients | Average Amount | Total Amount |
| :---: | :---: | :---: | :---: |
| Ontario Student-Aid Loans | 212 | \$ 389 | \$ 82, 555 |
| U.W.O. Combined Loan Funds | 16 | 294 | 4,700 |
| Alumni Bursary | 1 | 400 | 400 |
| ATA Trucking Industry Educational Foundation Bursaries | 12 | 146 | 1,750 |
| ATA Trucking Industry Educational Foundation Admission Bursaries | $\begin{array}{ll}\text { al } & \\ \text { s }\end{array}$ | 450 | 2,700 |
| Atkinson Charitable Foundation Grade XIII Bursaries | 65 | 351 | 22,800 |
| Atkinson Charitable Foundation Student-Aid Grants | 15 | 120 | 1,800 |
| J. P. Bickell Foundation Bursaries | es 4 | 125 | 500 |
| Canadian Bechtel Limited Bursaries | 1 | 200 | 200 |
| Dominion-Provincial Student-Aid Bursaries Type "A" | 159 | 428 | 68,180 |
| Canadian Legion and Ladies Auxiliary Bursaries | 2 | 400 | 800 |
| Canadian Legion Leo P. Cunningham Memorial Bursary | 1 | 400 | 400 |
| City of London Tuition Bursaries | 4 | 250 | 1,000 |
| Isable Dingman Memorial Bursary | $y \quad 1$ | 50 | 50 |
| Dominion-Provincial Type "B" Bursary | 200 | 290 | 57,975 |
| The Lady Eaton Bursaries | 7 | 143 | 1,000 |
| Education Assistance Act | 26 | 900 | 23,400 |
| Greek Ladies Philoptochos Society of London \& Vicinity StudentAid Fund | y | 100 | 100 |
| Huron County Bursaries | 4 | 100 | 400 |
| IBM - Thomas J. Watson Memorial Bursaries | 4 | 150 | 600 |
| I.O.D.E. Bursaries - 15 Chapters | s 15 | 100 | 1;500 |
| John Labatt Limited Children of Employee Scholarships | 2 | 200 | 400 |
| Gilbert A. LaBine Bursaries | 8 | 319 | 2,550 |

Faculty of Arts and Science

| Name of Loan or Bursary | Number of Recipients | Average Amount |  | otal <br> mount |
| :---: | :---: | :---: | :---: | :---: |
| Leonard Foundation Bursaries | 15 | \$ 247 | \$ | 3,700 |
| National Secretaries Association |  |  |  |  |
|  |  |  |  |  |
| Bursary | 1 | 100 |  | 100 |
| O-Pee-Chee Company Limited |  |  |  |  |
| Bursary | 2 | 500 |  | 1,000 |
| The Olga Alice Miller Bursary | 1 | 100 |  | 100 |
| The John Robert Palmer |  |  |  |  |
| Student Aid Fund | 2 | 425 |  | 850 |
| Perth County Bursaries | 3 | 133 |  | 400 |
| Procter \& Gamble Co. of Canada |  |  |  |  |
| Ltd. Bursaries | 8 | 119 |  | 950 |

Faculty of Medicine

| Ontario Student-Aid Loans | 59 | 402 | 23,750 |
| :--- | ---: | :--- | ---: |
| Faculty of Medicine Bursaries |  |  |  |
| First Year | 14 | 282 | 3,950 |
| Second Year | 7 | 250 | 1,750 |
| Third Year | 22 | 239 | 5,250 |
| Fourth Year | 28 | 195 | 5,450 |

Faculty of Law

| Ontario Student-Aid Loans | 33 | 415 | 13,700 |
| :--- | ---: | ---: | ---: |
| Faculty of Law Bursaries |  |  |  |
| First Year | 12 | 215 | 2,575 |
| Second Year | 9 | 189 | 1,700 |
| Third Year | 5 | 270 | 1,350 |
| U.W.O. Combined Loan Fund | 2 | 400 | 800 |

## Affiliated Colleges

Ontario Student-Aid Loans
Christ the King College
Huron College
18
426
7,665
Ursuline College
8
496
3,965

School of Business Administration

| Name of Loan or Bursary | Number of Recipients | Average Amount | Total Amount |
| :---: | :---: | :---: | :---: |
| School of Business Administration |  |  |  |
| Bursaries |  |  |  |
| Business III | 8 | \$ 275 | \$ 2,200 |
| Business IV | 9 | 188 | 1,700 |
| M.B.A. I Students | 3 | 150 | 450 |
| M.B.A. II Students | 8 | 183 | 1,465 |
| Ontario Student-Aid Loans |  |  |  |
| Undergraduate | 27 | 385 | 10,420 |
| Graduate | 13 | 425 | 5,750 |
| U.W.O. Combined Loan Funds |  |  |  |
| Graduate Students Loan Fund | 3 | 400 | 1,200 |
| General Loan Fund | 2 | 275 | 550 |
| Business Administration Student |  |  |  |
| Aid Fund | 14 | 235 | 3,300 |

School of Nursing
School of Nursing Bursaries

Nursing I Students
8
2
206
125
300
400
Kellogg Nursing Fund

Faculty of Graduate Studies

| Gilbert A. LaBine Bursaries | 5 | 210 | 1,050 |
| :--- | :--- | :--- | :--- |
| Dominion Provincial Type "B" | 4 | 187 | 750 |
| American Cyanamid | 1 | 100 | 100 |
| Atkinson Foundation Grants | 1 | 150 | 150 |
| Canadian Women's Press Club |  |  |  |
| $\quad$ Bursary | 1 | 100 | 100 |
| W. F. Thomas Student Aid Fund | 2 | 125 | 250 |
| IBM - T. J. Watson Memorial |  |  |  |
| $\quad$ Bursary | 2 | 125 | 250 |
| Minnesota Mining \& Manufacturing | 1 | 500 | 500 |

Faculty of Graduate Studies

| Name of Loan or Bursary | Number of Recipients | Average Amount | Total <br> Amount |
| :---: | :---: | :---: | :---: |
| Procter \& Gamble Co. Ltd. | 2 | \$ 125 | \$ 250 |
| I.O.D.E. Bursary | 1 | 100 | 100 |
| Educational Assistance Act | 1 | 900 | 900 |
| Northern Electric Company |  |  |  |
| Employee Bursary | 1 | 415 | 415 |
| Ontario Student-Aid Loans | 27 | 402 | 10,850 |
| U.W.O. Combined Loan Funds | 1 | 250 | 250 |
| The Faculty of Engineering Science |  |  |  |
| Faculty of Engineering Science Bursaries |  |  |  |
| First Year | 32 | 432 | 13,850 |
| Second Year | 24 | 240 | 5,750 |
| Third Year | 10 | 180 | 1,800 |
| Fourth Year | 3 | 150 | 450 |
| U.W.O. Combined Loan Fund | 3 | 350 | 1,050 |
| Ontario Student-Aid Loans | 19 | 384 | 7,350 |
| Faculty of Arts and Science |  |  |  |
| Redpath Sugar Children of |  |  |  |
| A.E. Silverwood Foundation |  |  |  |
| Employees | 2 | 497 | 895 |
| Steel Company of Canada, Limited | 2 | 500 | 1,000 |
| W. F. Thomas Student-Aid Fund | 32 | 118 | 3,775 |
| Undergraduate Women's Organization | ion 1 | 100 | 100 |
| Board of Governors Tuition Bursary |  |  |  |
| War Correspondents Bursary | 1 | 100 | 100 |
| Wellington Square-Purple Spur Student-Aid Grants | 3 | 117 | 350 |

## PUBLICATIONS OF THE FACULTY

AND GRADUATESTUDENTS

## FACULTY OF ARTS AND SCIENCE

Department of Botany

Cook, F. S. The serviceberries. The Cardinal, No. 41, 1962, 3-4.

Cook, F. S. The Sherwood Fox Wild Plant Preserve. The Cardinal. No. 42, 1962, 15-16.

Goodier, R. and Phipps, J.B. Vegetation map of the $\frac{\text { Chimanimani National Park. Kirkia, Vol. 3, 1962, }}{2-7 \text {. }}$

Hickman, C. J. Physiologic races of Phytophthora fragariae. Annals of Applied Biology, Vol. 5, No. 1, 1962, 95-103.

Husain, S. S. and McKeen, W. E. Stimulation of a new Rhizoctonia species by strawberry root exudates. Abstracts in Phytopathology, Vol. 52, No. 1, 1962.

Jhooty, J.S. and McKeen, W. E. The perfect stage of Spaerotheca macularis on strawberry plants. Plant Disease Reporter, Vol. 46, No. 4, 1962, 218-219.

McLarty, D. A. Observations on the control of excessive growths of rooted aquatic plants in southern Ontario. Report of Aquatic Weeds Investigations, Ontario Water Resources Commission, 1960, 1-24.

McLarty, D. A. Observations on the nature and control of excessive growth of Cladophora sp. in Lake Ontario. Report on Cladophora investigations, Ontario Water Resources Commission, 1959. 1959.

Phipps, J. B., and Goodier, R. A preliminary account of the plant ecology of the Chimanimani Mountains. Journal of Ecology, Vol. 50, No. 2, 1962, 292-319.

Walden, David B. and Everett, H. L. A quantitative method for the In Vivo measurement of the viability of corn pollen. Crop Science, Vol. 1, No. 1, 1961, 21-25.

Wellman, A. M. Studies on vesicular-arbuscular endophytes IV. Inoculation of species of Allium and of Lactuca sativa with Pythium isolates. Transactions British Mycological Society, Vol. 45, No. 2, 1962, 179-189.

## Department of Chemistry

Ayer, W. A., Hayatsu, R. and de Mayo, P., Reid, S.T. and Stothers, J. B. The Photodimers of a-pyridones. Tetrahedron Letters, No. 18, 1961, 648-653, Pergamon Press.

Bains, M.S. and Bradley, D.S. Kinetic studies on the MeerweinPonndorf reaction. Chemistry and Industry, 1961, 1032.

Barraclough, C.G. and Bradley, D.C., Lewis J. and Thomas, I.M. The infrared spectra of some metal alkoxides, trialkylsilyloxides and related silanols. Journal of the Chemical Society, 1961, 2601-2605.

Bidinosti, D. R., and Porter, R. F. Mass spectrometric studies of low pressure pyrolysis reactions of chlorinated and fluroinated $C_{1}$ and $C_{2}$ compounds of graphite. Vol. 83, 1961, 3737-3743.

Bradley, D.C. The stereochemistry of some elements of Group III. Progress in Stereochemistry, Vol. 3, 1962, l-52.

Bradley, D.C. and Carter, D. G. Metal oxide alkoxide polymers, Part I. The hydrolysis of some primary alkoxides of zirconium. Canadian Journal of Chemistry, Vol. 39, 1961, 1434 to 1443.

Bradley, D. C. and Carter, D. G. Metal oxide alkoxide polymers. Part III. The hydrolysis of secondary and tertiary alkoxides of zirconium. Canadian Journal of Chemistry, Vol. 40, 1962, 15-21.

Bradley, D. C. and Holloway, H. Metal oxide alkoxide polymers, Part III. The hydrolysis of tantalum pentaethoxide. Canadian Journal of Chemistry, Vol. 39, 1961, 1818-1826.

Bradley, D. C. and Holloway, H. Metal oxide alkoxide polymers. Part IV. The hydrolysis of some tantalum alkoxides. Canadian Journal of Chemistry, Vol. 40, 1962, 62-71.

Bradley, D. C., Prevedorou, C.C.A. and Wardlaw, W. Intermolecular forces and liquid structure in some metal alkoxides. Vol. 39, 1961, 1619-1624.

Bradley, D.C. and Thomas, I, M. Metallo-organic compounds containing metal-nitrogen bonds. Part II. Some dialkylaminoderivatives of $\mathrm{Nb}(\mathrm{V})$ and $\mathrm{Nb}(\mathrm{IV})$. Canadian Journal of Chemistry, Vol. 40, 1962, 449-454.

Bradley, D.C. and Westlake, A.H. Structures of polymeric titanium ethoxide and titanium oxide ethoxides. Nature. 191, 1961, 273-274.

Clark, H. C. and Willis, C. J. Trifluoromethyl compounds of Germanium. Journal of the American Chemical Society, Vol. 84, 1962, 898-900.
de Mayo, P. and Reid, S. T. Photochemical rearrangements and related transformations. Quarterly Reviews, Vol. 15, No. 4, 1961, 393-417.
de Mayo, P., Takeshita, H. and Sattar, A.B.M.A. Photochemical synthesis of 1,5 -Diketones. Proceedings of the Chemical Society. March 1962, 119.
de Mayo, P., Spencer E. Y., and White, R. W. Constitution of Melminthosporal. Journal of the American Chemical Society. Vol. 84, 1962, 494-495.
de Mayo, P., Spencer, E. Y., and White, R. W. Helminthosporal, the Toxin from Helminthosporium Sativum. Canadian Journal of Chemistry
de Mayo, P. and Starratt, A. N. The constitution of ceanothic acid, a ring-contracted triterpenoid. Tetrahedron Letters, No. 7, 1961, 259-262, Pergamon Press.
de Mayo, P. and Starratt, A. N. Constitution and stereochemistry of ceanothic acid. Canadian Journal of Chemistry, Vol. 40, 1962, 788-795.
de Mayo, P. and Stossel, A. Irradiation of acenaphthene with Benzil. Canadian Journal of Chemistry, Vol. 40, 1962, 57-61.
de Mayo, P., Stothers, J.B. and Yip, R. W. Irradiation of $\mathcal{A}$-Ionone. Canadian Journal of Chemistry, Vol. 39, 1961, 2135-2137.

Henmo, E., de Mayo, P., Sattar, A.B.M.A., and Stoessl, A. Irradiation of unsaturated sultones. Proceedings of the Chemical Society. July 1961, 238-239.

Ito, S., Endo, K., Takeshita, H., and Nozoe, T. and Strothers, J. B. The structure of widdrol. Chemistry and industry. 1961, 1618-1619.

King, J. F., and Durst, T. The base-catalyzed rearrangement of $N$-alkyl triphenylisoxazolium salts. Canadian Jo urnal of Chemistry, Vol. 40, 1962, 882-889.

King, J. F., and Vig, B. Near-infrared spectra of aliphatic $\frac{\text { aldehydes. Canadian Journal of Chemistry, Vol. 40, 1962, }}{1023-1025 .}$

Klinck, R. E. and Stothers, J. B. N.M.R. Studies, I. The chemical shift of the formyl proton in aromatic aldehydes. Canadian Journal of Chemistry, Vol. 40, 1962, 1071-1081.

Pattison, F. L. M. and Dear, R. E. A. Synthesis of the toxic $\frac{\text { principle of dichapetalum toxicarium (18-fluoro-cis-9- }}{\text { octa-decenoic acid). Nature, } 4809,1961,1284-1285 \text {. }}$

Porter, R. F., Bidinosti, D. R. and Watterson, K. F.
Mass spectrometric study of the reactions of $\mathrm{BF}_{3}(\mathrm{~g})$ with $\mathrm{BCI}_{3}(\mathrm{~g}), \mathrm{B}(\mathrm{OH})_{3}(\mathrm{~g})$ and $\mathrm{B}_{2} \mathrm{O}_{3}(\mathrm{l})$. Journal of Chemical Physics, Vol. $36,1 \overline{962,2104-2108 . ~}$

Sivertz, G. and Goldsack, D. Table of values based on a Maxwell-Boltzmann distribution for calculations of the kinetic properties of energized molecules. Journal of Chemical Physics. Vol. 36, No. 2, 1962, 569-570.

Stothers, J. B. A note on C=C diamagnetic anisotropy and long-range shielding effects. Monthly Ecumenical Letters from Laboratories of N.M.R. No. 35, 1961, 7-8.

## Department of Classics

McLeod, Wallace E. An ancient treatise on military archery. Journal of the Society of Archer-Antiquaries, Vol. 5, No. 1, 1962, 10 - 11 .

Mc Leod, Wallace. E. Egyptian composite bows in New York. American Journal of Archaeology. Vol. 66, No. 1, 1962, 12-19.

Mcleod, Wallace E. The family of Richard Vanderburgh of Richmond Hill (1797-1869). 1962, ii, 32. Privately mimeographed at London, under the auspices of the Vanderburgh Reunion Association.

McLeod, Wallace E. Review of Marathon, by W. Kendrick Pritchett (U. Cal. Publ. Class Archaeology, Vol. 4, No. 2). American Journal of Archaeology, Vol. 65, No. 4, 1961, 403.

McLeod, Wallace E. Oral bards at Delphi (Abstract) The Classical World, Vol. 55, No. 3, 1961, 84.

## Economics and Political Science

Duncan, K. J. Review of Beyond the welfare state, by G. Murdal. Canadian Welfare.

Lyon, Peyton V. A balance of advantage in East German recognition. Globe and Mail, June 27, 1961, 7.

Lyon, Peyton V. Canada in Europe's eyes. The Canadian Commentator. Dec. 1961, 11 and 21.

Lyon, Peyton V. A Canadian views the post-election scene $\frac{\text { in West Germany. Globe and Mail, October 16th, } 1961 .}{\text { P. } 6 .}$

Lyon, Peyton V. Review of Disengagement, by E. Hinterhoff. International Journal, Vol. XVI, No. 3, 1961, 291-292.

Lyon, Peyton V. The election and foreign policy discussion in Canada. The Canadian Commentator, May 1962,

Lyon, Peyton V. Review of A forward strategy for America. by R. Strausz-Hupé et al. R.C.A.F. Staff College Jcurnal. Annual, 1961, 121-122.

Lyon, Peyton V. Review of The German peace settlement and the Berlin Crisis. by M. Gottlieb. International Journal Vol. XVI, No. 3, 1961, 294-295.

Lyon, Peyton V. Review of The Great Contest by I. Deutscher. Canadian Journal of Economic and Political Science, Vol. 27, No. 3, 1961, 403-404.

Lyon, Peyton V. Howard Green's strength and weaknesses. The Canadian Commentator, 1962, 6-7.

Lyon, Peyton V. New Europe and Old Canada. Globe and Mail. Nov. 18, 1961, 6.

Lyon, Peyton V. Review of Northern Approaches and The art of the possible, by James Eayrs. Queen's Quarterly, LXIX, No. 2, 1962, 161-162.

Lyon, Peyton V. Problems of Canadian independence. International Journal, Vol. XVI, No. 3, 1961, 250-259.

Lyon, Peyton V. Review of Russia and the West under Lenin and Stalin, by G. F. Kennan. Canadian Journal of $\overline{\text { Economic }}$ and Political Science, Vol. 28, No. 2, 1962, 322.

Lyon, Peyton V. Review of the Saar Conflict, by I. Freymond. International Journal Vol. XVI, No. 3, 1961, 289-290.

Lyon, Peyton V. Should we keep Britain out of the Common Market? Globe and Mail, July 14th, 1961, 7.

Lyon, Peyton V. Review of Survey of international affairs, 1955-1956. by G. Barraclough and R.F. Wall. Canadian Journal of Economic and Political Science, Vol. 27, No. 4, November 1961, 559-560.

Lyon, Peyton V. Ulbricht's wall and Canada。 Winnipeg Free Press, Nov. 11, 1961.

Lyon, Peyton V. West Germany's election. The Canadian Commentator, Novemker 1961, 2 and 22.

Lyon, Peyton V. Would recognition of Pankow send the Germans "Off the rails"? Globe and Mail. October 20, 1961, 6.

Madden, John J. Review of The Economic growth of the United States, 1790-1860, by D. C. North. Canadian Journal of Economics and Political Science, Vol. 28, No. 1, 1962, 168-170.

Mann, W. E. Chapter in Blishen, Bernard R., ed. Sect and Cult in Western Canada, entitled Canadian Soc iety, Sociological perspectives, p. 388-408. MacMillan ${ }^{1}$ s, Toronto, 1961.

Mann, W. E. Review of Micheal Kelway, ed., Social purpose for Canada, in Christian outlook, Montreal, January 1962.

Mann, W. E. Chapter in S. D. Clark, Urbanism and the Changing Canadian Soc iety, entitled The lower ward, the social system of a islum. University of Toronto Press, Toronto, 1961, vii, 150 p .

Mayo, H. B. The future of local government in Ontaxio. Proceedings, Ontario Municipal Association, August 61, 82-84.

Mayo, H. B. Review of The Necessity for Choice, by Henry A. Kissinger, International Journal, 1962, 170-171.

Mayo, H. B. Note on Local Government, The Listening Post, Montreal, February 1962, 2.

Mayo, H. B. The theory of democracy outlined. Distinguishing Principles of a Democratic System. Communism, Fascism and Democracy, ed. by Carl Cohen.1962, 651663. Random House, New York.

Peitchinis, S. G. Employment and labour costs in Canadian manufacturing. Business Quarterly, XXVI, No. 3, Fall, 1961, 152-164.

Reuber, G. L. European trade blocs and Canada's export trade. Canadian Banker, Vol. 69, No. 3, Winter 1962.

Reuber, G. L. Western Europe's demand for Canadian
Industrial materials. The Canadian Journal of Economics and Political Science, Vol. 28, No. 1, February 1962, 16-34.

## Department of English

Bates, Ronald G. Arnold Bennet and H. G. Wells, ed. Harris Wilson. Review. Queen's Quarterly, LXVIII, 1961, 194.

Bates, Ronald G. Five poems, in Poetry 62, edited by Eli Mandel and Jean-Guy Pilon, 28-33, 1961.

Bates, Ronald G. Canadian books: Review of a number of volumes of Canadian poetry. Dalhousie Review, Vol. 41, 1961, 554-558.

Bates, Ronald G. Review of Six Volumes of Cana dian Poetry in Alphabet, No. 3, December 1961, 39-42.

Conron, A. B. Liaison with secondary schools, School Progress in Canada, XXX, No. 7, July 1961, 26, 27 and 46.

Klinck, Carl F. Canadian literature. Compton's Pictorial Encyclopedia, Chicago, 1962.

Klinck, Carl F. Creative writing in Canada, by Desmond Pacey. Review. The Globe and Mail, January 20th, 1962.

Klinck, Carl F. The history of Emily Montague, edited with introduction, 1961. McClelland and Stewart, Toronto.

Klinck, Carl. F. The journals of Ralph Waldo Emerson, Volume II. Review. The Canadian Forum, XVII, April 12th, 1962, 22-23.

Klinck, Carl F. The Stepsure Letters, The Imperialist and the Second Scroll. Review. Queen's Quarterly, LXVIII, Winter 1962, 692-693.

Rans, Geoffrey. The swinging flesh, by Irving Layton. Review. Alphabet, Vol. 1, No. 3, September 1961,

Reaney, James. The Condition of Light: Henry James, The Sacred Fount. University of Toronto Quarterly, XXXI, No. 2, January 1962.

Reaney, James. Librettor Canadiencis: A rare bird. Opera in Canada, Vol. 3, No. 9, January 1962.

Reaney, James. A message to Winnipeg, Poetry 62, ed. by E. Mandel, 1962, Ryerson Press, Toronto.

Reaney, James. Mythical elements in English literature, by E. M. Tillyard, Review. Queen's Quarterly, Vol. LXVIII, No. 4, Winter 1962.

Reaney, James. Tears for a golden age. Review of A Tearful Tour of Toronto's Riviera of Yester Year by John Raymond. Canadian Literature, No. 10, 1961, 88-89.

Reaney, James. Twelve letters to a small town. 1962, Ryerson, Toronto.

Stratford, Philip. Between strikes, a civilized breath. Saturday Night, July 7, 1962, 36.

Stratford, Philip. The Canadian farm, home and business cyclopedia of 1885. Dramatic reading for Four's Company, broadcast, September 1961.

Stratford, Philip. Paris: Le tilt to le shake-hand. Saturday Night, March 3rd, 1962, 30-31.

Stratford, Philip. The uncomplacent dramatist: Some aspects of Graham Greene's theatre. Wisconsin studies in Contemporary Literature. Vol. 2, No. 3, Fall 1961, 6-19.

Stratford, Philip. Unlocking the potting shed. The Kenyon Review, Vol. XXIV, Winter 1962, 129-143.

Woodman, Ross. Literature and life. Queen's Quarterly, Vol. LXVII, No. 4, Winter 1962, 621-632.

Woodman; Ross. Shelley's Prometheus. Alphabet, Vol. 2, Se ptember $\overline{1961 .}$

Department of Geography
Pleva, Edward G. Highways in a balanced transport program. The Municipal World, Vol. 72, No. 3, March 1962, 75-78.

Pleva, Edward G. Multiple purpose land and water districts in Ontario, in Resources for the future, Comparisons in resource management. 1961. 189-207. Johns Hopkins Press, Washington.

Pleva, Edward G. Research needs in recreational land use, in Outdoor Recreation in the Upper Great Lakes Area.
Paper No. 89, August 1961, 96-98. The Lake States Forest Experiment Station, St. Paul, Innesota.

Pleva, Edward G. The Thames River Valley, Ontario. Canada, Department of Northern Affairs and National Resources. Resources for tomorrow: Conference background papers. 1961, 471-477, Queen's Printer, Ottawa. 2v. Also published in French: La Vallee de la Riviere Thames, en Ontario, in French edition of the papers.

## Department of Geology

Dreimanis, Aleksis. Postglacial mastodon remains at Tupperville, Ontario. Abstract. Geological Society of America, Abstracts for 1961, Special GSA paper, No. 68, 1962. 167.

Dreimanis, Aleksis. Deformational structures of glacial origin in ground moraine areas. Programme of Papers, The Royal Society of Canada, June meeting, 1962. 1962, 21.

Dreimanis, Aleksis. Tills of southern Ontario. Soils in Canada, Ed. by Robert F. Legget, The Royal Society of Canada Special Publication. No. 3, 1961, 80-96. University of Toronto Press.

## Department of Geophysics

Beck, A.E. and Valliant, H.D. Discussions on minimum pendulums. Geophysics, Vol. 27, No. 2, 1962. Society of the Exploration Geophysicists, Tulsa, Oklahoma, 274.

Beck, A. E. Energy requirements of an expanding earth. Journal of Geophysical Research, Vol. 66, No. 5, 1961, 1485-1490. The American Geophysical Union, Washington.

Carmichael, C. M. The magnetic properties of ilmenitehematite crystals. Proceedings of the Royal Society of London, Vol. A 263, 1961, 508-530.

Carr, M. H. The bedrock geology of the Naugatuck quadrangle, Connecticut. Connecticut State Geological and Natural. History Survey, Quadrangle Report No. 9. Vol. 9, 1960.

Carr, M. H. and Tikannen, K. Chromium, cobalt and strontium standards in some Bureau of Standards reference samples. Geochim. et Cosmochim. Acta. Vol. 24, 1961, 1-9.

Carr, M. H. and Tikannen, K. K. Chromium in granitic rocks. Geochim et Cosmochim, Acta. Vol. 26, No. 411, 1962.

Carr, M. H. and Tikannen, K. The geochemistry of cobalt. Geochim et Cosmochim. Acta. Vol. 23, No. 9, 1961.

Kollar, F., Russell, R.D., and Ulrych, T. J. Precision intercomparisons of lead isotope ratios; Broken Hill and Mount Isa. Nature, Vol. 187, 1960, 754-756.

Russell, R. D., Ulrych, T. J., and Kollar, F. Anomalous leads from Broken Hill, Australia. Journal of Geophysical Research, Vol. 66, No. 5, 1961, May, 1495-1498. The American Geophysical Union, Wa shington.

Uffen, R. J. S.C.U.M. Physics in Canada, Vol. 17, No. 2, 1961, 23-31.

## Department of History

Ferguson, W. K. Review of The Renaissance: A reconsideration of the theories and interpretations of the age. Edited by Tinsley Helton, American Historical Review, LXVII, 1961-62, 386-387.

Hilborn, K. H. W. Viewpoint: The social responsibility of the $\frac{\text { businessman. Business Quarterly, Vol. 27, No. 1, 1962, }}{15-20 .}$

Kerr, D. G. G. Canadian History Maps ( 10 maps). 1961-62. Denoyer-Geppert Co., Chicago, U. S. A.

Kerr, D. G. G. Review of The Canadian Journal of Lady Aberdeen. Edited by John T. Saywell, Canadian Journal of Economics and Political Science, Vol. 28, No. 1, February 1962, 163-164.

Kerr, D. G. G. Review of Politics in New Brunswick, by Hugh G. Thorburn. Canadian Historial Review, Vol. XLIII, No. 1, March 1962, 70-71.

Overton, Richard C. Review of Preston Hubbard, Origins of the T.V.A. The Canadian Historical Review, XLIII, No. 1, March 1962, 79-80.

Overton, Richard C. The place of business history in academic curricula. Business History Review, XXXVI, No. 1, Spring, 1962.

Overton, Richard C. Ralph Budd, 1879-1962. Bulletin of the Railway and Locomotive Historical Society, No. 106, 1962.

Tucker, A. V. Disraeli and the natural aristocracy.
Canadian Journal of Economics and Political Science. Vol. 28, No. 1, February 1962, 1-15.

Tucker, A. V. Review of S. Graubard, Burke; Disraeli, Churchill, Canadian Historical Review, Vol. 42, No. 1, March 1962, 58-59.

Tucker, A. V. Review of P. Bloomfield, Edward Gibbon Wakefield. Canadian Historical Review, Vol. 43, No. 1, March 1962, 58-59.

Tucker, A. V. W. H. Mallock and late Victorian conservatism. University of Toronto Quarterly, Vol. 31, No. 2, January 1962, 223-241.

## Department of Philosophy

Block, Irving. Review of C. Kahn's Anaximander and the origins of Greek Cosmology. Philosophy of Phenomenological Research, Vol. 23, March 1962, 422.

Block, Irving. Aristotle and the physical object. Philosophy and Phenomenological Research, Vol. XXI, No. 1, September 1960, 93-101.

Block, Irving. The order of Aristotle's psychological writings. American Journal of Philology, Vol. LXXXII, No. 325. January 1961, 50-77.

Block, Irving. Review of Philip Wheelwright Heraclitus. Philosophy and Phenomenological Research, Vol. XXI, No. 4, June 1961, 560-579.

Block, Irving. Review of S. Sambursky, Physics of the stoics. Philosophy and Phenomenological Research, Vol. XXI, No. 1, June 1961, 583-584.

Block, Irving. Truth and error in Aristotle's theory of senseperception. The Philosophical Quarterly, Vol. 11, No. 42, January 1961, 1-9.

Davis, J. W. Berkeley's phenomenalism. Dialogue: Journal of the Canadian Philosophical Association, Vol. 1, No. 1, 1962, 67-80.

Davis; J. W. The permanent element in Empiricism. Philosophical Forum. Vol. XIX, 1962, 16-32.

French, S. G. Hume's hurdle. Abstract. The Journal of Philosophy, Vol. 58, No. 22, October 1961, 710-711.

Johnson, A. H. Foreword. Dialogue, Vol. 1, No. 1, June 1962, 3.

Johnson, A. H. Some aspects of Whitehead's social philosophy (Abstract). Journal of Philosophy, Vol. 58, No. 22, October 1961, 692.

Johnson, A. H. Whitehead's interpretation of science, Ed. with introductory essay. 1961, Bobbs-Merrill, New York.

Robinson, P. R. Critical review of T. A. Goudge, The ascent of life. Dialogue, Vol. 1, No. 1, June 1962, 93-95.

Department of Physical, Health and Recreation Education
Eynon, Robert B. Competitive swimming - An integral part of the complete swimming programme. Splash, March 1962, Ontario Red Cross Society, Water Safety Division.

Yuhasz, M. S. Physical fitness appraisal booklet for adult men. 1961, 22. The University of Western Ontario.

Department of Physics
Blackwell, J. H. and Manuel, P. W. Axisymmetric perturbations in a conducting liquid confined by rigid walls. Vol. 4, No. 8, 1961,1012-1014.

Brannen, E. and Froelich, H. Preliminary operation of a four-sector $\frac{\text { race track minrotron }}{\text { 1961, } 1179 \text {. Journal of Applied Physics, Vol. 32, }}$

Brannen, E. and Greenwood, R. C. Decay scheme of Sn ${ }^{113 .}$ Physical Review, Vol. 122, 1961, 1849.

Brannen, E. and Olde, G. L. The response of organic scintillators to electron energy deposited in them. Radiation Research, Vol. 16, No. $1,1962,1-6$.

Brannen, E., and Olde, G. L. Surface dose measurements with a scintillation dosemeter. Physics in Medicine and Biology. Vol. 6, 1961, 325 .

Carmichael, C. M. The magnetic properties of ilmenitehaematite crystals. Proceedings of the Royal Society, A. Vol. 263, 1961, 508-530.

Forsyth, P.A., P.E.Kelly, and Hansen, D. R. The azimuthal distribution of ultra-high frequency radar. echoes from aurora. Canadian Journal of Physics. Vol. 39, No. 11, November 1961, 1535-1543.

Forsyth, P. A. On the association of radio reflections with optical aurora. Canadian Journal of Physics, Vol. 39, No. 11, November 1961, 1721-1724.

Forsyth, P.A. and Hector, F. On the statistical properties of optical and radio aurora. Canadian Journal of Physics. Vol. 39, No. 10, October 1961, 1423-1428.

Forsyth, P. A. and Lyon, C. F. Radio-auroral reflection mechanisms. Canadian Journal of Physics, Vol. 40 , No. 6, June 1962, 749-760.

Forsyth, P. A. and Ziauddin, Syed. Three-frequency measurements of auroral absorption. Journal of Geophysical Research. Vol. 66, No. 8, August 1961, 2315-2319.

Fraser, P. A. The scattering of low energy orthopositronium by Helium atoms. Proceedings of the Physical Society. Vol. 79, No. 4, April 1962, 721 - 740 .

Fraser, P. A. The scattering of low-energy orthopositronium by hydrogen atoms. Proceedings of the Physical Society. Vol. 78, No. 3, September 1961, 329-347.

Fraser, P. A., Smith, Kenneth, and McEachran, R. P. Effect of virtual excitation of the 2 s State on the elastic scattering of electrons by atomic hydrogen. The Physical Review, Vol. 125, No. 2, 1962, 553-558.

Hay, D. R., Martin, H. C., and Turner, H. E. A light-weight refractometer. Review of Scientific Instruments, Vol. 32, No. 6, June 1961, 693-697.

Hay, D. R. and Reid, W. M. Radar angels in the lower troposphere. Canadian Journal of Physics. Vol. 40, No. 1, 1962, 128-138.

Jarmain, W. R. Numerical solution of the Schrodinger wave excitation. Scientific Report XXI, Molecular Excitation Group, Department of Physics, Nov. 15th, 1961, 11.

Jarmain, W. R. Tabulated Klein-Dunham potential energy functions for ten states of $\mathrm{C}_{2}, \mathrm{O}_{2}, \mathrm{OH}$ and SiO . Scientific Report XX, Molecular Excitation Group, Department of Physics. July 1, 1961, 18.

Nicholls, R. W. Condon parabolae in molecular spectra. Nature, Vol. 193, No. 4819, 1962, 966-967.

Nicholls, R. W. Franck-Condon factors to high vibrational _quantum numbers for bands of the ${ }^{2} \mathrm{II}_{\mathrm{g}}-\mathrm{A}^{2} \mathrm{II}_{\mathrm{u}}$ system $\mathrm{N}_{2}^{+}$.
Canadian Journal of Physics, Vol. 40, No. 4, 1962, 523-527.

Nicholls, R. W. Franck-Condon factors to high vibrational quantum numbers II: SiO, $\mathrm{MgO}, \mathrm{SrO}, \mathrm{AlO}, \mathrm{VO}, \mathrm{NO}$. Journal of Research of the National Bureau of Standards, Vol. 66A, No. 3, 1962, 227-231.

Nicholls, R. W. Laboratory astrophysics. Journal of Quantitative Spectroscopy and Radiative Transfer. Proceedings of the First International Symposium of the Physics of the Vacuum Ultra-Violet, University of Southern California, April 1962.

Nicholls, R. W., Krishnamachari, S.L.N.G., and Broida, H.P. Emission spectra from solids condensed at very low temperatures from the electrical discharge products of nitrogen-carbon monoxide and nitrogen-acetylene mixtures. Indian Academy of Sciences, Proceedings, Vol. 54, 1961, 61-68.

Nicholls, R. W., and Stewart, A. T. Allowed transitions. Chapter 2 of Atomic and Molecular Processes, ed. by D. R. Bates. Academic Press, New York, 1962, 47-78.

Nicholls, R. W. and Herbert, G. R. Intensity measurements in emission on 29 banks of the $\mathrm{O}_{2}$ Schumann-Runge system. Proceedings of the Physical Society. Vol. 78, No. 5 (ii), 1961, 1024-1037.

Nicholls, R. W. and Reeves, E. M. Measurement of rotational energy distributions in ionic collisions. Proceedings of the $\overline{\text { Physical Society. Vol. 78, No. 4, 1961, 588~593. }}$

Nicholls, R. W., Armstrong, B.H., Sokoloff, J., Meyerott, R.E. Radiative properties of high temperature air. Journal of Quantitative Spectroscopy and Radiative Transfer. Vol. 1, No. 2, 1961, 143-162.

Rose, G. S. Wire explosions in air and in vacuo. Journal of Applied Physics, Vol. 33, No. 4, April 1962, 1604-1606.

## Department of Psychology

Brush, F. R., Goodrich, K., Teghtsoonian, R. and Eisman, E. The dependence of learning (habit) in the runway on deprivation under three conditions of sucrose incentive. Psyohol. Rep., 1962.

Brush, F. R., Goodrich, K., Teghtsoonian, R. and Eisman, E. Running speed as a function of deprivation condition and concentration of sucrose incentive. Psychol. Rep. 1961, Vol. 9, 627-634.

Camphell, B. A., Teghtsoonian, Robert and Williams, Ruth Ann. Activity, weight loss, and survival time of food-deprived rats as a function of age. Journal of Comparative Physiology and Psychology, Vol. 54, 1961, 216 - 219.

Denny, J. Peter. The effect of group counseling on the academic performance of anxious college freshmen. Southeastern Psychological Association Meeting, April 1961.

McClelland, W. J. Rorschach's test. Ontario Medical Review, 1961, Vol. 28, 883.

Schnore, Morris M. Memory-for-designs tests in the diagnosis of brain damage. Ontario Hospital Psychological Bulletin, Vol. 7, 1961, 2-4.

Department of Pure and Applied Mathematics
and Astronomy
Goes, G. Some spaces of Fourier coefficient. Presented at the April 1962 meeting of the American Mathematical Society, Chicago, Notices of the Soc iety. Abstract, Vol. 9, No. 2, 1962, 112.

Talman, J.D. A calculation of the energy levels of the first Rotational Band of $\mathrm{Ne}^{20}$. Canadian Journal of Physics.

Wehlau, W. Light variability of HD 173650. Publications of the Astronomical Society of the Pacific. Vol. 74, 1962, 137-141.

Wehlau, W. and Leung, K. C. Photoelectric observations of 44(i) Bootis. Journal of the Royal Astronomical Society of Canada. Vol. 56, No. 3, 1962, 105 - 110.

Department of Zoology
Brown, A.W.A. Anophelines and resistance: Practical problems. Industry and Tropical Health (Harvard School of Public Health), Vol. 4, 1961, 197-206.

Brown, A. W. A. The challenge of insecticide resistance (Memorial Lecture for 1961). Bulletin of the Entomological Society of America. Vol. 7, No. 1, 1961, 6-19.

Brown, A.W.A. Negatively-correlated insecticides: a possible counterme asure for insecticide resistance. Pest Control, Vol. 29, No. 9, 1961, 24.

Brown, A. W. A. Protective mechanisms against nerve poisons in insects. Transactions of the Royal Society of Canada. Vol. 55, Series III, June 1961, 25-35.

Brown, A. W. A. Studies on the biochemistry and genetics of insecticide-resistance in mosquitoes: a progress report. Proceedings of the 48 th Annual Meeting of the New Jersey Mosquito Extermination Association. Vol. for 1961, 1961, 139-146.

Brown, A. W. A. and Abedi, Z. H. Cross-resistance characteristics of a malathian-tolerant strain developed in Aedes aegypti. Mosquito News, Vol. 20, No. 2, 1960, 118-124.

Brown, A. W. A. and Abedi, Z. H. DDT-resistance hazard in North American populations of Aedes aegypti. Mosquito News, Vol. 21, No. 1, March 1961, 1-4.

Brown, A. W. A. and Abedi, Z. H. Peritrophic membrane as vehicle for DDT and DDE excretion in Aedes aegyptilarvae. Annals of the Entomological Society of America. Vol. 54, No. 4, 1961, 539-542.

Brown, A. W. A. and Carmichael, A. G. Lysine and alanine as mosquito attractants. Journal of Economic Entomology, Vol. 54, No. 2, April 1961, 319-324.

Brown, A. W. A.and Khan, N. H. Genetical studies on dieldrinresistance in Aedes aegypti and its cross-resistance to DDT. Bulletin of the World Health Organization, Vol. 24, 1961, 519-526.

Brown, A.W.A. and Matsumura, F. Biochemistry of malathion resistance in Culex tarsalis. Journal of Economic Entomology, Vol. 54, No. 6, December 1961, 1176-1185.

Brown, A.W.A., West, A. S. and Lockley, A.S. Chemical attractants for the adult house fly. Journal of Economic Entomology, Vol. 54, No. 4, August, 1961, 670-674.

Brown, A. W. A. and Winmill, A. E. RCAF airspray for biting fly control. Canadian Aeronautical Journal, Vol. 7, No. 10, December 1961, 349-354.

Bourns, T.K.R. Studies on tannic acid-precipitated proteins. The Serological Museum, Vulletin 26, November 1961, 4-7.

Judd, W. W. Butterflies trapped by their feet in milkweed flowers. Bulletin of the Federation of Ontario Naturalists, Vol. 93, 1961, 7-8.

Judd, W. W. Birds of a Lake Erie Farm III. The Cardinal, Vol. 38, 1960, 2 .

Judd, W. W. Insects and other invertebrates associated with $\frac{\text { flowering skunk cabbage at Fanshawe Lake, Ontario. }}{\text { Vol. 93, No. 4, April 1961, 241-249. }}$

Judd, W. W. Insects and other invertebrates from nests of the cardinal. London, Ontario. Canadian Entomologist, Vol.'94, No. 1, January 1962, 92-95.

Judd, W. W. Insects collected from woodchuck burrows in the vicinity of London, Ontario. The Canadian Field Naturalist, Vol. 75, No. 1, January - March 1961, 16-22.
Judd, W. W. Melanagromyzatiliae (Coud.) reared from linden bark galls at London, Ontario. Entomological News. Vol. 72, No. 7, July 1961, 192-193.

Judd, W. W. A mud dauber's nest on the chassis of a car. The Cardinal, Vol. 39, 1961, 12.

Judd, W. W. A muskrat living in a ditch at London, Ontario. Wood Duck, Vol. 15, 1961, 26.

Judd, W. W. Some records of birds nesting in the vicinity of London in 1960. The Cardinal, Vol. 37, 1960, 4-5.

Judd, W. W. Some records of birds nesting in the vicinity of London in 1961. The Cardinal, Vol. 40, 1961, 2-3.

Judd, W. W. Spiders and harvestmen trapped on the surface of Spettigue's pond at London, Ontario. The Canadian Field-Naturalist, Vol. 75, No. 4, October - December, 1961, 238-241.

Judd, W. W. Studies of the Byron Bog XII. The population of insects emerging as adults from Redmond's Pond in 1957. American Midland Naturalist, Vol. 65, N . l,

Kerswill, C. J. and Keenleyside, M.H.A. Canadian salmon caught off Greenland. Nature, Vol. 1962, No. 4799, October 1961, 279.

McMillan, D. B. and Engelbert, V. E. Morphology of blast cell nuclei in Vivo and in Vitro. Canadian Journal of Zoology, Vol. 40, 1962, 83-86.

Scott, D. M. Summer tanager at London, Ontario. Canadian Field-Naturalist, Vol. 75, 1961, 264.

## SCHOOL OF BUSINESS ADMINISTRATION

Lundberg, Craig C. Administrative decisions: A scheme for analysis. Journal of the Academy of Management, Vol. 5, No. 2, 1962, 165-178.

Lundberg, Craig C. Attitude change and management training. Personnel Administration. May-June, 1962, 35-42.

Lundberg, Craig C. Evolving Administrative relationships. The Business Quarterly, Vol. 7, No. 2, 1962, 61-69.

Lundberg, Craig C. New directions for personnel research. Journal of Personnel, November 1962.

Ladd, D. R. On some differences between European and North American businessmen. Business Quarterly, XXVII, No. 1, Spring 1962, 47-52.

Thompson, W. A. Executive training. The Canadian Chartered Accountant. February, 1962.

## COMPUTING CENTRE

Hart, J. F. Minimax approximations for square root and cube root routines. Proceedings of the Computing and Data Processing Society of Canada. June 1962, with Dr. W. Fraser, Defence Research Board.

## FACULTY OF ENGINEERING SCIENCE

Davenport, A. G. The application of statistical concepts to the wind loading of structures. Proceedings of the Institute of Civil Engineers, Vol. 119, August 1961, 449.

Davenport, A. G. Buffetting of suspension bridges by storm winds. Journal of Structures Division. Proceedings of the American Society of Civil Engineers, Vol. 88, No. ST 3, June 1962, 233-268, Ann Arbor, Michigan.

Dillon, R. M. and Edwards, P.H.D. The inspection, repair, and maintenance of highway bridges in London, Ontario. Engineering Journal. Vol. 44, No. 11, 1961, 39-48.

Foreman, J. E.K. Inferential metering of incompressible $\frac{\text { fluids. }}{73-82 \text {. }}$ The Instrument Engineer, Vol. 3, No. 4, 1961,

Nowak, E. S. and Grosh, R.J. An analysis of specific heat data for water and water vapor in the critical region. Argonne National Laboratory Report, ANL 6436, 1961.

Nowak, E. S. and Grosh, R. J. The coefficient of volume expansion for water and water vapor in the critical region. Argonne National Laboratory Report, ANL 6404. 1961.

Nowak, E. S. and Grosh, R. J. An investigation of enthalpy data for water and water vapor in the critical region. Argonne National Laboratory Report ANL 6505, 1962.

Nowak, E. S. and Grosh, R. J. On the equation of state for water and water vapour in the critical region. Argonne National Laboratory Report ANL 6508, 1962.

Nowak, E. S., Grosh, R. J., and Liley, P. E. Smoothed P-V-T values for water and water vapour derived from experimental measurements. Journal of Heat Transfer Transactions ASME, Vol. 83, Ser. C., 1961, 14 -27.

Nowak, E.S., Grosh, R.J., and Liley, P. E. A survey of $\mathrm{P}-\mathrm{V}-\mathrm{T}$ data available for water and water vapor in the critical region. Journal of Heat Transfer Transactions ASME, Vol. 83, Ser. C., 1961, 1-13.

Soderman, L. G., Kenney, T.C., and Loh, A. Geotechnical properties of South Western Ontario clays. Proceedings of the 14th Canadian Soil Mechanics Conference 1960. N.R.C. Technical Memorandum No. 69, 1961, 55-85.

Soderman, L. G. and Milligan, V. Capacity of friction piles in varved clay increased by electro-osmosis. Proceedings of the 5th International Conference on Soil Mechanics and Foundation Engineering, Vol. 11, 1961, 143-147. Dunod, Paris, France.

Soderman, L. G. and Rutka, A. Application of effective stress analysis to long term stability of slopes. Proceedings of the Citizens' Good Roads Association Annual Convention, 1961.

## FACULTY OF LAW

Fatouros, A. A. Government guarantees to foreign investors. Columbia University Press, New York and London, 1962.

Fatouros, A. A. Obstacles to private foreign investment in underdeveloped countries. Current Law and Social Problems, Vol. 2, 1961, 194-242. University of Toronto Press.

Fatouros, A.A. An international code to protect private investment - proposals and perspectives. University of Toronto Law Journal, Vol. 14, No. 1, 1961, 77-102.

Johnston, D. M. The international law of fisheries: A policyoriented inquiry in outline (Part I). Current Law and Social Problems, Vol. 1, 1961, 19-67.

Johnston, D. M. The international law of fisheries: A policyoriented inquiry in outline (Part 2). Current Law and Social Problems. Vol. 3, 1962.

Palmer, E.E., and LaBrie, F.E. Cases and materials on company law. 1961, University of Toronto Press, Toronto.

Palmer, E.E.(ed.). Current law and social problems. Vol. III, 1962, University of Toronto Press.

## LIBRARIES

Bishop, Olga B. Checklist of historical works on Western Ontario in the libraries of the University of Western Ontario. Western Ontario Historical Notes, 'Vol. 18, No. 1, 1962, 37-51.

Bishop, Olga B. Notes on reference work in a medical school $\frac{\text { library. }}{1962,43}=44$.

## HURON COLLEGE

Department of English
Blissett, W.F. Review of Claes Schaar, An Elizabethan sonnet problem, English Studies (Amsterdam), XLII, 1961.

Blissett, W. F. Review of David Jones, Epoch and artist. Queen's Quarterly, LXVII, No. 1, 1961, 185-186.

Blissett, W. F. George Moore and literary Wagnerism. Comparative Literature, XIII, No. 1, 1961, 52-71.

Blissett, W. F. Review of D. B. Sands, ed., History of Reynard the fox (Harvard, 1960). Queen's Quarterly, LXVIII, No. 2, 1961, 357.

Blissett, W.F. Review of F. L. Polak, The image of the future. Canadian Forum, Vol. 41, October 1961, 162.

Blissett, W. F. Review of Pierre Teilhard de Chardin, Le milieu divin. Canadian Forum, Vol. 41, November 1961, 187 .

Blissett, W. F. Review of E. C. Pettet, Of paradise and light. Humanities Association Bulletin, Vol. XXXIV, No. l, 1961-35-36.

Blissett, W. F. Review article: Renaissance studies. University of Toronto Wuarterly, Vol. XXX, No. 3, 1961, 251-254.

Blissett, W. F. Review of J. M. Cohen, Robert Graves; G. S. Fraser, EzraPound; D. W. Jefferson, Henry James; and Frank Kermode, Wallace Stevens. Queen's


Blissett, W. F. Review of M. M. Kirkwood, Santayana. Alphabet, No. 3, 1961, 79.

Blissett, W. F. Review of F. M. Pomeroy, Tristan and Iseult. Queen's Quarterly, LXVII, No. 4, 1961, 702.

## Department of History

Rowe, J. G. Accepting the political challenges, being Chapter 5 in The Church in the 60's. Ed. by P. C. Jefferson, 1961, The Anglican Congress Editorial Committee.

Rowe, J. G. The tragedy of Aeneas Sylvius Piccolomini (Pope Pius II): An interpretation. Church History, Vol. XXX, September 1961, 3-28.

## URSU LINE COLLEGE

Department of Philosophy
Mother M. St. Michael. Existential analysis and the human condition. Reprinted and widely distributed from Proceedings of the American Catholic Philosophical Association, Washington, Catholic University of America, 1961, 125-141.

Department of Sociology
Mother Rosanna. Review of Leblanc, M. Personnalite de la femme Katangaine. American Catholic Sociological Review, Vol. 22, No. 4, Winter 1961, 365-366.

## FACULTY OF MEDICINE

## Department of Anaesthesia

Hersey, L. W., Gowdey, C.W., and Spoerel, W.E.G.A. Central effects of five muscle relaxants. Canadian Anaesthetists Society Journal, Vol. 8, 1961, 335-346.

Lewis, A., and Spoerel, W. E. A modification of Ayre's technique. Canadian Anaesthetists Society Journal, Vol. 8, 1961, 501-511.

Nielsen, J.S., Spoerel, W.E., Keenleyside, H.B., Slater, P.E., and Clancy, P.R. Continuous epidural analgesia for labour and delivery. Canadian Anaesthetists Journal, Vol. 9, 1962, 143-152.

Spoerel, W. E. Das Elektrencephalogramm nach akutem $\frac{\text { Herzstillstrand. Der Anaesthetist. Vol. 10, 1961, }}{353-358}$ 353-358.

Spoerel, W. E., and Coles, J. C. The use of intermittent positive pressure breathing following thoracic operations. Diseases of the Chest, Vol. 41, 1962, 91-94.

Spoerel, W.E. and Heagy, F. C. The use of blood volume determinations for the evaluation of blood loss during operation. Canadian Journal of Surgery. Vol. 5, 1962, 25-32.

## Department of Anatomy

Skinner, H. A. Origin of medical terms, 2nd edition. Williams and Wilkins, Baltimore, U.S.A. 1961

## Bacteriology and Immunology

Bakerspigel, A. Haplomycosis (adiaspiromycosis) in Sorex. Canadian Journal of Microbiology, Vol. 7, 1961, 676.

Bakerspigel, A. The nucleolus in vegetative hyphae of neurospora Crassa. Canadian Journal of Microbiology, Vol. 8, 1962, 271-273.

Bakerspigel., A. Sodium taurocholate medium for the identification of Candida albicans. Journal of Bacteriology, Vol. 83, 1962, 694.

Bakerspigel, A. Vegetative nuclear division in the ascomycete Ophiostoma fimbriata. Cytologia, Vol. 26, 1961, 42-49.

Duncan, I. B. R. Biological and serological properties of Frater Virus, a cytopathogenic agent associated with aseptic meningitis. Archiv fur die gesamte Virusforschung. 248-257.

Duncan, I. B. R. Poliomyelitis-like disease in 1959, a combined Scottish study. British Medical Journal, Vol. 2, 1961, 597-605.

Duncan, I. B. R. and Hession, B. L. Meningitis in an adult due to listeria monocytogenes. Canadian Medical Association Journal, Vol. 86, 1962, 329-330.

Duncan, I. B. R. and Timbury, M. C. Physical characteristics of Frater virus. Archiv für die gesamte Virusforschung. Vol. 11, 1961, 365-372.

Kavelman, D.A., Duncan, I. B. R., and Lewis, J. A. Acute benign pericarditis. Canadian Medical Association, Vol. 85, 1961, 1287-1291.

Murray, R. G.E. Fine structure and taxonomy of bacteria. in Microbial classification, 12th symposium of the Society for General Microbiology, 1962, 119-144. Cambridge Univer sity Press, Cambridge.

Robinow, C. F. Morphology of the bacterial nucleus, British Medical Bulletin, Vol. 18, 1962, 31-35.

Robinow, C. F. Some observations on the mode of division of somatic nuclei of mucor and allomyces. Archiv fur Mikrobiologie. Vol. 42, 1962, 369-377.

Windeit, I. In Vitro sensitivity testing of pseudomonas.
Canadian Medical Association Journal, Vol. 86, 1962, 420-421.

Young, I. E. and Fitz-James, P. C. Chemical and morphological studies of bacterial spore formation IV. The development of spore refractility. Journal of Cell Biology, 115-133.

## Department of Biochemistry

Graff, G. L. A., Hudson, A. J., and Strickland, K. P. Arylamine acetylase in human erythrocytes (Abstract). Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 33.

Heick, H. and Stewart, H. B. The formation of 2 -oxomalonate (mesoxalate) in Lipomyces (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 35.

McMurray, W. C., Mohyuddin, F., Rossieter, R.J., Rathbun, J.C., Valentine, G.H., Koegler, S.J., and Zarfas, D.E. Citrullinuria: A new aminoaciduria associated with mental retardation. Lancet, Vol. 1, 1962, 138.

Purko, J., and Stewart H. B. Biosynthesis of nicotinamide adenine dinucleotide (DPN) in tumours (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 64.

Rossiter, R.J. Biochemistry of Wallerian Degeneration. In Folch-Pi, J., Editor, Chemical Pathology of the Nervous System. Proceedings of the Third International Neurochemical Symposium. 1961, 207-227. Pergamon, London.

Rossiter, R. J. and Strickland, K.P. Lipid synthesis in rat liver particles. Effect of cytidine diphosphate choline. (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 68.

Stewart, H. B. The Fifth International Congress of Biochemistry. Canadian Federation News, Vol. 4, 1962, 42-43.

Strickland, K. P. Phosphorylation of diglycerides by rat brain. Canadian Journal of Biochemistry and Physiology. Vol. 40, 1962, 247-259.

Strickland, K. P., Thompson, W. and Rossiter, R.J. Biosynthesis of phosphatidyl inositol in brain (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 78.

## Department of Biophysics

Burton, A. D. Physical principles of circulatory phenomena, the physical equilibrium of heart and blood vessels. In Hamilton, W.F., ed., Circulation, Vol. 1, 85-106. (Handbook of Physiology, Section 2). 1962.

Burton, A.C. Physical units and concepts useful in cardiovascular research, Chap. 6, In Luisada, A.A., ed., An encyclopaedia of the cardiovascular system, V. 5. McGraw-Hill, New York, 1961.

Burton, A. C. Special features of the circulation of the skin. In Montagna, W. and Ellis, R.A., Blood Vessels and Circulation, (Advances in Biology of Skin, V. 2), 117 to 122. Pergamon Press, Oxford, 1961.

Faber, J. J. From mitral valve to stethoscope (Abstract). Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 27.

Faber, J. J. and Burton, A.C. The temporal and spatial spread of heart sounds over the thorax (Abstract). Abstracts of the 6th Annual Meeting of the Biophysical Society, Washington, D.C. 1962, WF 6.

Newberry, P.D. and Burton, A.C. The effect of adrenalin on the secretion and amylase content of parotid saliva in man (Abstract) 。 Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 56.

Prothero, J. and Burton, A.C. The physics of blood flow in capillaries. l. The nature of the motion. Biophysical Journal, Vol. 1, 1961, 566-579.

Prothero, J. and Burton, A.C. The physics of blood flow in capillaries II. The capillary resistance to flow. Biophysics Journal, Vol. 2, 1962, 199-212.

Prothero, J. and Burton A.C. The physics of blood flow in capillaries III. The pressure required to deform erythrocytes in acid-citrate dextrose. Biophysical Journal, Vol. 2, 1962, 213-222.

Roach, M.R. Production of post-stenotic dilation in isolated arteries. (Abstract). Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962. 67.

Roach, M.R. Experimental study of the production and time course of post-stenotic dilation in arteries, in vivo and in vitro. (Abstract). Abstracts of the XI Annual Meeting of the American College of Cardiology, 1962, 5-6.

## Cancer Research Laboratory

Hagen, P. and Wallace, A.C. Effect of reserpine on growth and sexual development of chickens. British Journal of Pharmacology and Chemotherapy, Vol. 17, 1961, 267-275.

Hoshino, K. Influences of androgen prenatally administered upon mammary glands and genital tracts of offspring mice. Proceedings of the American Association for $\overline{\text { Cancer Research. Vol. 3, 1962, } 330 .}$

Hoshino, K. Influences of estrogen upon pregnancy in mice. (Abstract). Anatomical Record. Vol. 142, 1962, 242.

Hoshino, K. and Gardner, W. U. Growth potentialities of the normal mammary tissue in mice (Abstract). The Anatomical Record. Vol. 139, 1961, 240.

Sainte-Marie, G. A paraffin embedding technique for studies employing immunofluorescence. Journal of Histochemistry and Cytochemistry, Vol. 10, 1962, 250-256.

Walker I. G., with technical assistance of W. J. Watson. The involvement of carbon dioxide in the toxicity of oxygen at high pressure. Canadian Journal of Biochemistry and Physiology, Vol. 39, 1961, 1803-1809.

## Diagnostic Radiology

Allcock, J. H. Vertebral angiography: Its accuracy in the diagnosis of intra-cranial space-occupying lesions. Journal of the Canadian Association of Radiologists. Vol. XIII, 1962, 65-69.

Treleaven, R. B. and Copestake, G.G. Experiences with Seldinger catheterization. Journal of the Canadian Association of Radiologists. Vol. XIII, 1962, 58-64.

## Medical Research

Carroll, K. K. Alterations of plasma, liver, and adrenal cholesterol levels in rats fed Amphenone B and related compounds. Canadian Journal of Biochemistry and Physiology. Vol. 40, 1962. 688-693.

Carroll, K.K. Quantitative estimation of peak areas in gas-liquid chromatography. Nature. Vol. 192, 1961, 965-966.

Engel, C. R., Rakhit, S. and Huculak, W.W. Steroids and related products, XVII. The synthesis of 3,9,12,20-Tetra-oxygenated 9,12-seco-steroids. Part II. Canadian Journal of Chemistry, Vol. 40, 1962, 921-929.

Jessup, D.C., Carroll,K.K., and Noble, R.L. Recovery of Vasopressin from urine and blood by phenol extraction. Canadian Journal of Biochemistry and Physiology. Vol. 39, 1961, 1647-1652.

Murray, E. G. D. Reflections on clinical bacteriology. New York State Journal of Medicine, Vol. 62, 1962. 501-517.

Paterson, J. C. Correlation of serum cholesterol levels and human atherosclerosis and its sequelae. Illinois Medical Journal, Vol. 120, 1961, 236-237.

Paterson, J.C. Deep venous thrombosis. Abramson, D.I., ed. In Blood Vessels and Lymphatics, Part III, Chapter XXII, Section 3. 1962, 688-696. Academic Press, New York.

Department of Medicine
Bocking, D. Trends in medical education. Canadian Medical Association Journal, Vol. 86, 1962, 608-610.

Graff, G.L.A., Hudson, A.J., and Strickland, K.P. Arylamine acetylase in human erythrocytes (Abstract) Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 33.

Manning, G. W. and Sears, G.A. Postural heart block. American Journal of Cardiology, Vol. 9, 1962, 558-563。

Sears, G.A. and Manning, G.W. Complete right bundle branch block in aircrew selection. Proceedings of the Third International Conference on Aviation Cardiology. 1962. 58-65.

Sears, G.A., Movafagh, P., and Manning G.W. Intracardiac phonocardiography in ventricular septal defect. American Journal of the Medical Sciences, Vol. 243, 1962, 775-782.

Department of Microscopic Anatomy
Barr, M. L. and Carr, D.H. Correlations between sex chromatin and sex chromosomes. Acta Cytologica. Vol.6, 1962, 34-45.

Barr, M. L. and Carr, D.H. Nuclear sex, Chap. 6, in Chromosomes in Medicine, ed. by J. L. Hamerton. 1962, 61-72. Heinemann, London.

Buck, R.C. Lamellae in the spindle of mitotic cells of Walker 256 carcinoma. Journal of Biophysical and Biochemical Cytology. Vol. 11, 1961. 227-236.

Buck, R.C. Some observations on cytokinesis in mammalian cells studied with the electron microscope (Abstract). Anatomical Record, Vol. 142, 1962, 336.

Buck, R.C. and Jarvis, C.E. .Cleaning platinum apertures with a high voltage spark. Norelco Reporter, Vol. 8, 1961, 109 .

Buck, R.C. and Tisdale, J.M. An electron microscopic study of the development of the cleavage furrow in mammalian cells. Journal of Cell Biology. Vol. 13, 1962. 117-125.

Buck, R.C. and Tisdale, G.H. The fine structure of the mid-body of the rat erythroblast. Journal of Cell Biology, Vol. 13, 1962. 109-115.

Carr, D.H. and Walker, J.E. Carbol fuchsin as a stain for human chromosomes. Stain Technology, Vol. 36, 1961, 233-236.

Shaver, E.H. The chromosomes of the opossum, Didelphis Virginiana. Canadian Journal of Genetics and Cytology. Vol. 4, 1962, 62-68.

Soltan, H.C. Recent advances in human cytogenetics. Nova Scotia Medical Bulletin, Vol. 40, 1961, 300-308.

Williamson, S. M. The leucocyte method for the study of human chromosomes. Canadian Journal of Medical Technology, Vol. 24, 1962, 13-18.

Department of Neurosurgery
Drake, C. G. Bleeding aneurysms of the basilar artery. Direct surgical management in four cases. Journal of Neurosurgery, XVIII, 1961, 230-238.

Drake, C. G. Subdural haematoma from arterial rupture. Journal of Neurosurgery, XVIII, 1961, 597-601.

Drake, C. G. and McGee, D. Apoplexy associated with brain tumours. Canadian Medical Association Journal, Vol. 84, 1961, 303-305.

Department of Obstetrics and Gynaecology
Kinch, R.A.H. Factors affecting the prognosis of cancer of the cervix in pregnancy. American Journal of Obstetrics and Gynaecology. Vol. 82, 1961, 45-51.

Kinch, R.A.H. The management of the pacient in labour for twenty-four hours. Medical Services Journal Canada. Vol. XVIII, 1962, 176-178.

Kinch, R.A.H. Management of prolonged retention of the dead fetus in utero. The Canadian Medical Association Journal, Vol. 85, 1961, 932-937.

Prueter, G. W. A treatment for excessive uterine bleeding. Applied Therapeutics. Vol. 3, 1961, 351-355.

Swartz, D. P., Rathbun, J.C., Walker, J.H., and Kinch, R.A. Preventable perinatal loss. The Canadian Medical Association Journal, Vol. 86, 1962, 927-930.

Waxman, B. Induction of labour with intravenous oxytocin using a constant infusion pump. The Canadian Medical Association Journal, Vol. 86, 1962, 173-175.

## Department of Ophthalmology

Dyson, C. Personal impressions of Alpha-Chymotrypsin. Transactions of the Canadian Ophthalmological Society, Vol. 24, 1961, 39-48.

Thompson, C.A. Ligneous conjunctivitis. Transactions of the Canadian Ophthalmological Society. Vol. 24, 1961, 35-38.

Toogood, J. H., Dyson, C., Thompson, C.A. and Mularchyk, E. Posterior sub-capsular cataracts as a complication of adreno-cortical stcroid the rapy. Canadian Medical Association Journal, Vol. 86, 1962, 52-56.

## Department of Paediatrics

de Veber, L. L. Photosensitivity, loosening of the nails, and discolouration of the nails and teeth in association with Demethylchlortetracycline (Declomycin): Report of a case, with review of other reported cases. Canadian Medical Association Journal, Vol. 86, 1962. 168-172.

Maynard, M.D. and Mengebier, R.A. Some aspects of blood coagulation research. University of Western Ontario Medical Journal, Vol. 32, 1962, 155-161.

Rathbun, J.C. Problems in poisoning. Journal of the College of General Practice. Vol. 7, 1961, 25-30.

Rathbun, J. C., MacDonald, J. W. and Robinson, H.M.C., and Wanklin, J.M. Hypophosphatasia: a genetic study. Archives of the Diseases of Childhood. Vol. 36, 1961, 540-542.

Swartz, D.P., Rathbun, J.C., Walkers, J.H., and Kinch, R.A. Preventable perinatal loss. Canadian Medical Association Journal, Vol. 86, 1962, 927-930.

Valentine, G.H. Exchange transfusion by continuous drip using heparinised blood. Lancet. Vol. 1, 1962, 10-13.

## Pathological Chemistry

Brownstone, Y.S. The utilization of purine precursors by human erythrocytes (Abstract). Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 16.

Dunn, W. L. and Pearce, R.A. The clinical value of paper electrophoresis. Canadian Medical Association Journal. Vol. 84, 1961, 272-280.

Foster, T.S. and Pearce, R.H. Zone electrophoresis of acid mucopolysacharides. Canadian Journal of Biochemistry and Physiology. Vol. 39, 1961, 1771-1782.

Toogood, J.H. and Pearce, R.H. Gamma globulin and asthma. Canadian Medical Association Journal, Vol. 84, 1961, 669.

## Department of Pathology

Fisher, J. H. Endocardial fibro-elastosis. A review of 15 cases. (Abstract). Royal College of Physicians and Surgeons, Proceedings. 1962, 91-92.

Fisher, J. H. Hemangiopericytoma: a review of 20 cases. Year Book of Cancer, Section 14, Bone and Soft Tissue Tumours. 1961-62. 289-290.

Fisher, J. H. Obtaining and presenting evidence in sex cases. The Criminal Law Quarterly. Vol. 4, 1961, 150-159.

Smout, M.S. and French, A.J. The prognosis of
pseudoadenomatous basal-cell carcinoma. Archives of Pathology. Vol. 72, 1961, 107-112.

Department of Pharmacology
Barlow, R.B. and Hamilton, J.T. The effect of pH on the activity of nicotine and nicotine monomethiodide on the rate diaphragm preparation. British Journal of Pharmacology, Vol. 18, 1962, 543-549.

Barlow, R.B. and Hamilton, J.T. Effects of some isomers and analogues of nicotine on junctional transmission. British Journal of Pharmacology, Vol. 18, 1962, 510-542.

Buck, Carol and Gowdey, C.W. A clinical trial of a quaternary ammonium antiseptic lozenge in the treatment of the common cold. The Canadian Medical Association Journal, Vol. 86, 1962, 489-491.

Gowdey, C.W. Anemia-induced changes in cardiac output in dogs treated with dichloroisoproterenol. Circulation Research, Vol. X, 1962, 354-358.

Hamilton, J. T. Chemical structure and nicotine-like activity (Abstract). Federation Proceedings, Vol. 21, 1962, 331.

Hamilton, J.T. and Barlow, R.B. Effects of pH on the activity of nicotine (Abstract). Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 34.

Patel, Y. J. and Gowdey, C.W. Effects in rats of oxygen, carbon dioxide in oxygen, and air at normal and high pressure (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 59.
Philip, R.B., Burford, R.B. and Gowdey, C.W. Decompression sickness in rats during exercise at simulated low altitudes after exposure to compressed air (Abstract). Proceedings Canadian Federation of Biological Societies, Vol. 5, 1962, 61.
Department of Physiology
Busby, D. and Manning, G. W. The effects of persantin and dichloroisoproterenol on the occurrence of fatal ventricular ectopic rhythm following acute coronary occlusion. Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 16 - 17.

Gowdey, C. W. and Patel, Y.J. and Stavraky, G.W. Convulsions inducel by oxygen at high pressure in rats with brain lesions. Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 32-33.

Love, E.J. The use of the intravenous glucose tolerance test in the diagnosis of prediabetes in the puerperium (Abstract). Proceedings of the Royal College of Physicians and Surgeons of Canada, 1962, 77.

Seguin, J.J. Susceptibility of dystrophic mice to audiogenic stimulation (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5, 1962, 73-74.

Seguin, J. J., Fretz, N.A., Manax, S.J., and Stavraky, G.W. Corpus callosum and pentylenetetrazol convulsions. A study of the effects of experimental section of the corpus callosum upon Pentylenetetrazol-induced convulsions. Archives of Neurology, Vol. 5, 1961, 314-319.

Seguin, J. J., Fretz, N.A. and Stavraky, G. W. Effects of environmental temperature on pentylenetetrazol convulsions in corpus callotomized white rats. Canadian Journal of Biochemistry and Physiology, Vol. 39, 1961, 1239-1246.

Stavraky, G. W. Effects of partial denervation on spinal neurones and their possible relation to Parkinsonism. Revue Canadienne de Biologie, Vol. 20, 1961, 159-166.

Stavraky, G. W. Supersensitivity following lesions of the nervous system. 1961. University of Toronto Press, Toronto.

Thompson, G.E. and Stevenson, J. A. F. Temperature regulation and feeding in the rat. (Abstract). Proceedings of the Canadian Federation of Biological Societies, Vol. 5, 1962, 79-80.

Walsh, P. J., Manax, S. J., Butler, H. P., and Stavraky, G. W. Effects of geniculate and optic tract lesions on EEG patterns of visual cortex (Abstract). Proceedings of the Canadian Federation of Biological Societies. Vol. 5; 1962, 83.

## Department of Psychiatry and Preventive Medicine

Bryce, J. C., Wanklin, J. M., and Hobbs, G. E. Long term mortality in cardiac neuroses. Follow-up of mortality of World War I veterans with diagnoses of effort syndrome, disordered action of the heart of neurocirculatory asthenia with discussion from the clinical medical staff meeting, Westminster Hospital, London, Ontario, February 14, 1961. Medical Services Journal, Canada, Vol. 17, 1961, 669-675.

Buck, Carol. A note on trends in pertussis mortality and morbidity in Ontario. Canadian Journal of Public Health, Vol. 52, 1961, 352.

Buck, Carol and Gowdey, C. W. A clinical trial of a quaternary ammonium antiseptic lozenge in the treatmenf of the common cold. Canadian Medical Association Journal. Vol. 86, 1962, 489-491.

Rathbun, J.C. and MacDonald, J. W., Robinson, H. H., and Wanklin, J.M. Hypophosphatasia: A genetic study. Archives of Diseases in Childhood. Vol. 36, 1961, 540-542.

## Department of Surgery

Carroll, S. E., and Coles, J.C. 77 aortic aneurysms at Westminster Hospital noted during autopsy 1949-59 inclusive. Canadian Journal of Surgery, Vol. 5, 1962, 158-164.

Coles, J.C. and Carroll, S. E. and Gergely, N.F. An improved method of abdominal wound closure. Canadian Journal of Surgery, Vol. 5, 1962, 233 235.

Coles, J.C., Carroll, S.E., and Gergely, N. F. A method of providing adequate cerebral blood flow during carotid artery thromboendarterectomy. Canadian Medical Association Journal. Vol. 86, 1962, 835-837.

Coles, J. C., Carroll, S. E., and Gergely, N. F. The recognition and treatment of congenital heart disease, Part I: Differential diagnosis of congenital heart disease. Canadian Medical Association Journal, $\overline{\text { Vol. 85, 1961, 1175-1184. }}$

Grace, A. J. Experience in the surgical management of duodenal and gastric ulcers. Canadian Journal of Surgery, Vol. 4, 1961, 457-464.

Lansing, A. M. The differential diagnosis of congenital heart disease I. Lesions with no shunt. Canadian Medical Association Journal, Vol. 85, 1961, 1335 1339.

Lansing, A. M. The differential diagnosis of congenital heart disease II. Lesions with left-to-right shunt. Canadian $\overline{M e d i c a l A} s$ sociation Journal, Vol. 85, 1961, 1381-1384.

Lansing, A. M. The differential diagnosis of congenital heart disease III. Lesions with right-to-left shunt. Canadian $\overline{\text { Medical Association Jour nal. Vol. 85, 1961, }} 1444$-1449.

McCredie, J.A. and Inch, W. R. Chemotherapy of cancer in surgical patients. The Canadian Medical Association Journal, Vol. 85, 1961, 1236-1240.

McCredie, J. A. and Inch, W. R. Further experiences with the use of nitrogen mustard as an adjunct to operation in the treatment of cancer。 Canadian Journal of Surgery, Vol. 4, 1961, 483-489.

McCredie, J. A., and Inch, W. R. Nitrogen mustard ( $\mathrm{HN}_{2}$ ) toxicity: comparison of effects of administration by the systemic venous and intraperitoneal routes. Archives of Surgery, Vol. 83, 1961, 597-604.

McFarlane, R. M. Hyperkeratosis and ulceration of the heel in the nonparaplegic patient. Plastic and Reconstructive Surgery, Vol. 29, 1962, 674-683.

McLachlin, J. A., and Farley, R. O. Preauricular sinus. Canadian Journal of Surgery, Vol. 4, 1961, 537-540.

Spoerel, W. E., and Coles, J. C. The use of intermittent positive pressure breathing following thoracic operations. Diseases of the Chest. Vol. 41, 1962, 91-94.

Stromberg, W. B., McFarlane, R.M., Bell, J. L., Koch, S.L., and Mason, M.L. Injury of the median and ulnar nerves. The Journal of Bone and Joint Surgery, 43-A, 1961, 717-730.

## Department of Therapeutic Radiology

Baker, D. G. and Hunter, C. G. Metabolic studies of the rat exposed to gamma irradiation. Radiation Research, Vol. 15, 1961, 573-581.

Baker, D. G., MacDonald, J.C.F., and Hunter, C. G. A simulator for X may exposure from nuclear fallmout. Health Physics, Vol. 6, 1961, 41-45.

Heagy, F. C. and Spoerel, W.E. The use of blood volume determinations for the evaluation of blood loss during operation. Canadian Journal of Surgery, Vol. 5, 1962, 25-32.

Inch, W. R. and McCredie, J.A. A closed circuit technique for obtaining gas samples from a sealed chamber. Canadian Journal of Biochemistry and Physiology. Vol. 39, 1961, 1927-1930.

MacDonald, J.C.F. Simplified techniques in the employment of a rotational cobalt 60 beam therapy unit. American Journal of Roentgenology, Vol. 86, 1961, 730-736.

MacDonald, J.C.F., and Edney, A.E. A simple X-ray treatment time calculator. British Journal of Radiology. Vol. 34, 1961. 534-535.

Pfalzner, P. M. Dose distributions in cobalt 60 rotational the rapy obtainable from an electronic computer program (Abstract; Proceedings of the Seventh Inter-American Congress of Radiology, 1961, 42. C.I.R., Sao Paulo.

Pfalzner, P. M. A general formula for axial depth dose derived from an empirical power law for tumor-aid ratios (Abstract). Transactions of the Ninth International Congress of Radiology, Vol. 2, 1961, 1512. Thieme, Stuttgart.

Pfalzner, P. M. Intracranial directional gamma-ray point source applicators in the treatment of human brain tumours (Abstract). Transactions of the Ninth Inte rnational Congress of Radiology, Vol. 2, 1961, 958, J. Thieme, Stuttgart.

Pfalzner, P. M. The variation of axial depth dose with focal distance, with field area, and with depth. British Journal of Radiology, Vol. 34, 1961, 236-240.

## SCHEDULEOF RESEARCHFUNDS

 FOR THEYEAR ENDED JUNE 30,1962
## FACULTY OF MEDICINE

Name of Grantor $\quad$ Name of Grantee Description of Project

Schering Corpn．
Dr．J．H．Toogood Allergy research
Limited

The Am．Fdn．for
Prof．F．S．Brien Medical research
Allergic diseases
J．P．Bickell Fdn．Prof．C．W．Gowdey Central effects of clinically－ used muscle relaxants

Family of late Dr．
Golden W．Bruner

J．P．Bickell Fdn。

Abbott Laboratories Ltd．

Prof．W。E．G．A． Spoerel

Burroughs－
Wellcome Co．
Prof．C．W．Gowdey Medical Research

Ontario Junior
Red Cross
Prof。R．J．Rossiter Research professorship in biochemistry relating to mental retardation

Ont．Cancer Treatment Dr．D．P．Swartz
A study of the role of chemotherapy in gynae－ cological malignancy

Ciba Co．Ltd．

Ont．Cancer Treatment
Dr．D．P．Swartz \＆Research Fdn．

Investigation of bradosol

Clinical and laboratory studies of tumours influenced by variation in their steroid hormonal environment

## Name of Grantor

Ont. Cancer Treatment \& Research Fdn.

Collip Trust Fund
Sundry Donors

Name of Grantee
Prof. J.S. Lott \& Prof. Carol Buck

Prof. J.B. Collip
Dean, Faculty of Medicine

Description of Project
Study of the role of psychological factors in the course and prognosis of human cancer

Medical research
U.W.O. cancer research project (general)

Investigation of the effect of gama radiation on malignant brain tumours

Ont. Cancer Treatment Prof. E.R. Plunkett \& Research Fdn.

Can. Cancer Society Ontario Division
Defence Research
Board

Prof. J.B. Collip
Prof. Y.S. Brownstone

Prof. J.A.F. Stevenson

Prof. A.C. Burton

Prof. C.W. Gowdey

Prof. A. C. Burton

Prof. A.C. Burton

Investigation of the endocrine aspects of cancer in humans

Cancer research
The use of short chain ribosides as blood preservatives

Metabolic reactions to dietary temperature and traumatic stresses

Reaction of men and animals to cold and damp

The effect of changes in oxygen tension on sympathoadrenal and other systems

High oxygen effects on visual function

Salivary secretion as index tension-fatigue

Name of Grantor
R. W. Frost, Esq.

Charles E. Frosst \& Co.
F. W. Horner Ltd.

Dept. of National Health and Welfare

Dept. of National Health \& Welfare
"

11

11

Ontario Heart Fdn.

11

Dept. of National Health \& Welfare

Ontario Heart Fdn.

Dept. of National Health \& Welfare

11

11

Prof. M.L. Barr
Prof. G.E. Hobbs

Prof. G.W.Manning
Description of Project
Dr. G.E. Hall Medical research
Prof. R.A.H. Kinch To support a clinical trial of trichomycin

Prof. C.W. Gowdey A study of troxonium tosylate

Prof. G.E. Hobbs Chronicity in schizophrenia

Prof. J. A. F. Stevenson

Prof. C.W. Gowdey Schizophrenia
Prof. G. H. Valentine

Prof.R.A. H . Kinch

Dr. G.A.Sears

Prof. A.H. Neufeld

Dr. N.M. Lefcoe
Dr. N.M. Lefcoe

Prof. G.E. Hobbs

Chromosomal patterns in parents

Perinatal mortality study

Cardiovascular research

The study of atherosclerosis
Air pollution
Fellowship for William Langdon

Senile dementia

Post graduate training in psychiatry

Chromosomal abnormalities in mental deficiency

Clinical cardiovascular research

Name of Grantor

Dept. of National Health \& Welfare

Ontario Heart Foundation.

II

11

11

Mrs. W.F. Herman \& Mr. W.L. Clark

Ontario Heart
Foundation

11

Dept. of National Health \& Welfare

11

11

11

Ontario Heart Foundation
"

Can. Life Ins. Officers' Ass'n.

Name of Grantee Description of Research
Prof. R.A.H. Kinch Perinatal mortality study

Prof. A.D. Research associateship McLachlin - Dr.A.M. Lansing

Prof. A.H. Neufeld Supplementary equipment grant

Prof. K.K. Carroll Medicalresearch
Prof. A.C.Burton Medicalresearch

Dean O.H. Warwick Medical research fellowship

Prof. G.W. Manning Cardiovascular research

Prof. G.W. Manning Medical research associateships

Prof. G.E. Hobbs Neuropsychiatric disorders in children

Prof. E.R. Plunkett Endocrine and metabolic aspects of mental deficiency

Dr. Y. S. Brownstone

Dr. W.C. McMurray Investigation of the nervous system

Prof. A.C. Burton Spread of heart sounds

Prof. J.C.Coles Heart research
Prof. J.C. Rathbun Fellowship-Dr.L.L. de Veber

| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| Life Insurance Med. Research Fund | Prof. A.C. Burton | The biophysics of blood flow |
| American Cyanamid Co. | Prof. R.J. <br> Rossiter | Lederle medical student research fellowship |
| Life Insurance Med. Research Fund | Prof.K.K. Carroll | The relation of fatty acids to sterol synthesis |
| " | Prof. Robert C. <br> Buck | The permiability of arterial and venous endothelium towards large molecules and particulate matter |
| Can. Life Ins. Officers'Ass'n. | Dr. N.M. Lefcoe | Research fellowship |
| F. K. Morrow Fdn. | Prof. G. E. Hobbs | The relation of population changes to health and disease |
| Sundry donors | Prof. G.W. Manning | Dept. of Medicine cardiovascular research |
| J. McClary Memorial Fund | Prof. G.E. Hobbs | Research in industrial medicine |
| The Muscular Dystrophy Ass'n. of Canada | Prof.K. P. Strickland | Medical research |

John \& Mary R. Markle Prof. A.M. Lansing Markle fellowship
Foundation Foundation

The D.H. McDermid
Prof. M.L. Barr Memorial Fund

The Muscular Dystrophy Prof.J.J. Seguin Ass'n. of Canada

John \& Mary R. Markle Dr. D. P. Swartz Foundation

Name of Grantor

Dr. A.D. McLachlin

Mead Johnson of Canada Ltd.

Multiple Sclerosis Society of Canada

Ass'n of Canada

Dr. A.D. McLachlin

National Research
Council

Name of Grantee

Dr.J. Sweeney Fellowship re research
Prof. A.M. Lansing Fellowship re research
Prof. J.C. Coles Research re vascular surgery

Dr. H. H. Allen Obstetrical research fund

Experimental and clinical studies with long chain monounsaturated fatty acids in relationship to multiple sclerosis

Prof. K.K. Carroll
A controlrea clinical study to evaluate the treatment of multiple sclerosis by fatty acids derived from the nervous system

Prof. R.J. Rossiter Metabolism of myelin

Dean O.H. Warwick Cardiology research

Dr. T.D. McLarty Fellowship
Prof.J.J. Seguin
Description of Project

Prof. K.K. Carroll

Studies of the excitability and contractility of the decentralized neuromuscular system

Fellowship in medical research

Summer scholarship

| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| National Research Council | Professor A. von Hochstetter | Connective tissue, its functional structure and changes due to age |
| 11 | Prof. A. D. <br> McLachlin | Changes occurring in pedicle skin flaps |
| 11 | Prof. P. C. Fitz-James | Macromolecular synthesis in bacillus species |
| 11 | Dr. R. H. Pearce | The metabolism of the acid mycopolysaccharides |
| " | Prof. H.B. Stewart | The cytological organization and metabolic properties of yeast |
| 11 | Prof. H. A. Skinner | Anatomy and radiology of the spinal column |
| " | Dr.K.P. Strickland | The biosynthesis of phospholipids |
| " | Dean O.H. Warwick | Medical research |
| " | Prof. J.B. Collip | For bacteriological research |
| " | Prof. G.W. Stavraky | Responses of partially isolated structures to chemical reflex and electric stimulation |
| " | Prof. A.C. Burton | Energetics of vascular smooth muscle |
| 11 | Prof. P. C. <br> Fitz-James | Medical research associateship |
| 11 | Prof. A.H. Neufeld | Metabolic changes in disease with emphasis on proteins |

Name of Grantor
National Research Council

Name of Grantee Description of Project

| Prof. R. G.E. | General and cytological |
| :--- | :--- |
| Murray | studies of bacteria fungi <br> and related organisms |

Prof. A. D. Study of the effect of McLachlin

Prof. M.L. Barr
Prof. C.W.Gowdey
Study of function and pharmacology of the sympathetic nervous system.

Prof. M.L. Barr Cytological tests of chromosomal sex

Dr. K.P.Strickland Medicalresearch associateship

Prof. C.W. Gowdey The pharmacology of isocorydine

Prof. J.B.Collip Consolidated grant for medical research

Prof. R.J. Biochemistry of the Rossiter

Prof. R.C. Buck

Dr. J.H. Toogood

Dr. A.G.Ramsay
nervous system
An electron microscopic study of the membranes of mammalion cells in mitosis

A comparative quantitative study of antiwhealing drugs in man

The influence of parathyroid hormone and respiratory alkalosis on ionicexcretion

National Research Council

11

National Cancer Institute

Dr. R.H. Pearce

Prof. R.C.Buck

Prof. P. C.
Fitz-James

Prof. H.B.Stewart

Prof. G. W. Stavraky

Prof. J. B. Derrick

Prof. C.W.Gowdey

Prof.E.G.D. Murray

Prof. R.C. Buck

Dr.D.P.Swartz

Prof. R.J. Rossiter

## Description of Project

The role of the nervous and endocrine systems in the regulation of energy, water and electrolyte exchange

A study of the type of autonomic ganglion blockade produced by some new and some commonly used agents

The role of the hypothalomus in water and energy exchange

Special grant for equipment

Special grant for equipment

Special grant for equipment

Special grant for equipment

Special grant for equipment

Special grant for equipment

Special grant for equipment

The ultra structure of tumour cells

Medical research

Medical research

| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| National Cancer Institute | $\begin{aligned} & \text { Prof. A.C. } \\ & \text { Wallace } \end{aligned}$ | Medical research |
| 11 | V. Donish | Fellowsh ip |
| " | Dr. Y. S. <br> Brownstone | Medical research |
| 11 | Prof. K.K.Carroll | Medical research |
| " | J. Purko | Fellowship |
| " | Prof. H.B.Stewart | Cancer research |
| Ortho Pharmaceutical Limited | Dr. D.P. Swartz | Research in the field of infertility and gynaecological endocrinology |
| " | Dr. D.P. Swartz | Ortho progestin study |
| Sundry donors | Prof. J. A. F. Stevenson | Miscellaneous research in physiology |
| National Science Foundation | Prof. J. A. F. <br> Stevenson | Influence of hypothalamus on growth and development |
|  <br> French Laboratories | Prof. C.W. Gowdey | Studies on the common cold |
| Estate of Evelyn M. Sandor | Prof. A.C.Wallace | Cancer research |
| Col. J.E. Smallman | Prof. A.D.McLachlin | J. E. Smallman urological fund |
| U.S. Vitamin Corp. | Prof. R.A.H.Kinch | Investigation into the prevention of placental pathology |
| John Wyeth \& Bros. (Canada) Limited | Dean O.H. Warwick | Medical research - special |

Name of Grantor Name of Grantee Description of Project

National Research
Council \& Medical
Consolidated advance

Research Council

FACULTY OF ARTS AND SCIENCE
Abbott Laboratories Prof. P. de Mayo Chemical research
Limited

American Chemical Prof. P. de Mayo Chemical research Society

Dept. of Agriculture - Prof. A.W.A. Brown Genetics of insecticide

Canada

The American Chemical Dr. J.B.Stothers Society
resistance in the onion maggot

Organic applications of nuclear magnetic resonance spectroscopy

Alcoholism Research Foundation
J.P.Bickell

Prof. G. H. Reavely Equipment grant
Prof. F.L. M.
Pattison

Prof. R. W.Nicholls Experimental studies in aerophysics using shock tubes and spectrometers

Chemical Institute of Canada

Defence Research Board

Principal R.J. Uffen
Prof. G.H. Turner

The use of hypnosis in conjunction with other forms of therapy in the remeducation of alcoholics

Equipment grant

Foundation
"

Dow Chemical of Canada Prof. F. L. M. Limited

| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| Defence Research Board | Prof. P. deMayo | Photochemical reactions of organo-fluoro compounds |
| " | Prof. A. W. A. Brown | Factors in attractiveness of objects to adult <br> Aedes Aegypti |
| " | Prof. P.A. Forsyth | VHF radio wave scat tering in the ionosphere |
| " | Prof.A.J. Sukava | The cathodic deposition of zinc |
| " | Prof. D.R. Hay | Physics of the troposphere as related to UHF radio transmission |
| Dow Chemical of Canada Ltd. | Prof. D.C. Bradley | Chemical research |
| Defence Research Board | Principal R.J.Uffen | Shock wave propogation through solids |
| " | Prof. D.C.Bradley | The chemistry of waterrepellant compounds |
| Dept. of Mines and Technical Surveys - Can | Prof. R.W.Packer | Repose slopes of pleistocene material in Southwestern Ontario |
| " | Prof. C.G. Winder | Microfauna of Kettle Point and Port Lambton Shales Ontario |
| " | Prof. A.Dreimanis | Strategraphic correlation of glacial deposits between lake Huron and St. Lawrence lowland |
| " | Principal R.J.Uffen | Geophysical prospecting methods |


| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| Allied Chemical and Dye Corporation | $\begin{aligned} & \text { Prof. F. L. M. } \\ & \text { Pattison } \end{aligned}$ | For research in the field of fluorine chemistry |
| Dept. of Mines and Technical Surveys -Can. | Prof. G. H. Reavely | Detrital minerals in palaeozoic and precambrian rocks of Ontario |
| " | Principal R.J.Uffen | Measurement of induced and remanent magnetism of rocks |
| 11 | Prof. A.E. Beck | Re seismic observatory |
| Imperial Oil Ltd. | Prof. F. L. M. Pattison | Chemical research |
| " | Prof. P. de Mayo | Chemical research |
| John Labatt Ltd. | Prof. C.J. Hickman | Botany research fund |
| 11 | Prof. G.H. Reavely | Lake Erie research |
| Mobiloil of Canada Limited | Principal R.J.Uffen | Geophysics research |
| National Research Council | Prof. G.M. Boone | Quartz feldspar phase relation in granitic rocks |
| 11 | Prof. P.A. Fraser | Theoretical studies in atomic collisions |
| 11 | Prof. D.M. Scott | Environmental aspects of amphibion reproduction |
| 11 | Dr.J.B. Stothers | Mechanistic studies employing kinetic isotope effects |
| 11 | Prof. J.F.King | Carbon sulphur compounds |
| " | Prof. DıM. Graham | Energy transfer between electronically excited species and olefins |

Name of Grantor

National Research Council

18

11

11

11

11

11

11

11

11

11

11

Name of Grantee

Prof. J.R.Kramer Analysis of liquid inclusions in minerals

Prof. P. de Mayo

Prof. D.C.Bradley

Prof. H.I. Battle

Prof. W.H. Wehlau

Prof. C.Sivertz

Prof. A.J. Sukava

Prof. D.G.Wilson

Prof. C.J.Hickman

Principal R.J.Uffen

Prof. F. L. M. Pattison

Dr. G.F.A.tkinson

Studies in terpenoid chemistry

Studies in inorganic chemistry

The gross and microscopic anatomy of the gonad of the oyster

Photometric and spectroscopic studies of peculiar A stars

The kinetics of free radical addition reaction to olefins

Study of cathode polarization during electrodesposition of copper

Organic acid metabolism in plants

Biological and Taxonomic studies of fungi

Postdoctorate fellowship Dr.Jessop

Pharmacologically-active fluorine compounds

Studies of complex-forming reactions relevant to analytical processes Research in geophysics

| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| National Research Council | Prof. D.G. Wilson | Organic acid metabolism in plants |
| 11 | Prof. D. B. McMillan | Development and behaviour of cells of haemoporitic tissue |
| " | Prof. F. S. Cook | Biochemical studies of carbohydrates |
| " | Prof. W.C.Howell | The chemistry of some aromatic and quinonoid systems |
| " | Prof. G.R. Magee | Postdoctorate fellowship Dr. G. W. Goes |
| " | Dr. C. M. Carmichael | Rock magnetism |
| " | Prof. J. Havelka | The effects of drugs on sensory restriction |
| 11 | Dr. W.H. Baldwin | Exchange of oxygen of oxyanions with solvent water |
| 11 | Dr. T. K. R. <br> Bourns | Development of a serological test involving agglutination of antigen coated ion-exchange adsorbents |
| 11 | Prof. W.E. McKeen | Plant disease investigations |
| " | Prof. D.R. Hay | Eddy diffusion above outdoor surfaces |
| 11 | Prof. R.W. Nicholls | A rocket nose-cone vacuum spectrograph |
| " | Prof. W.E. McKeen | Postdoctorate fellowship Dr. Wellman |


| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| National Research Council | Prof. D.C. Bradley | Postdoctorate fellowship <br> - Dr. Bains |
| 11 | Prof. A.W.A. Brown | Detoxification of DDT by resistant aedes and culex mosquitoes |
| " | Prof. E. Brannen | Millimeter radiation and physics research with a racetrack microtron |
| " | Prof. J. H. Blackwell | Hydromagnetic boundary value problem |
| " | Prof. R.W.Nicholls | Studies in molecular excitation |
| " | Prof. J.A.Fulford | Temperature dependence of absorption lines in ammonia |
| " | Prof. A.E. Beck | Terestrial heat flow in Northern and Eastern Canada |
| 11 | Prof. R.H.Stinson | Effect of age upon the timing of the activity rhythm in the deer mouse |
| " | Dr. D.B.Walden | A study of the genetics and biology of the male gametophytes |
| " | Principal R.J.Uffen | Geophysical investigations |
| " | Dr. C.J.Willis | A study of the synthesis and reactions of perfluoroalkyl derivatives of the elements of groups III and IV |
| " | Prof. D.R. Bidinosti | A study of the stoichiometry in the molybdenum oxide and molybdenum oxychloride systems |


| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| National Research Council | Prof. J. W. Lorimer | Transport processes in ion-selective membranes |
| 11 | Prof. P.A.Forsyth | Radio physics of the high atmosphere |
| 11 | Prof. G.H. Reavely | Research fellowship <br> - Dr. T.N. Clifford |
| 11 | Prof. A.E. Beck | Measurement of terestrial heat flow |
| 11 | Prof. G.E. Cross | A classification of symmetric and unsymmetric integrals |
| 11 | Prof. P.A. Forsyth | Rocket measurements of ionospheric structure |
| 11 | Dr. M.H.A. Keenleyside | Reproduction behaviour of the brook stickleback |
| 11 | Dr.A.M. Wellman | An examination of antibiotics from allium |
| 11 | Prof. W.E.McKeen | Special grant for equipment |
| " | Prof. R.W.Nicholls | Special grant for equipment |
| " | Prof. F. L. M. Pattison | Special grant for equipment |
| " | Prof. F. L. M. Pattison | Special grant for equipment |
| " | Prof. E. Brannen | Special grant for equipment |
| Ontario Research Foundation | Prof. D. McLarty | Cytological investigations of simple fungi |


| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| Ontario Research Foundation | Prof. G.G.Suffel | Nature and origin of certain sedimentary bonded iron formations |
| " | Principal R.J.Uffen | A geophysical and geological study of the Guelph Reef structure |
| " | Prof. H.I. Battle | Comparative cytological and histological effect of the lamptricide |
| * | Prof. D.G. Wilson | An investigation of the "unknown" acids in succulent plants |
| 11 | Prof. C.J. Hickman | Aquatic phycomycites of freshwaters including fungus parasites of freshwater algae |
| " | Prof. W.W. Judd | Study of the population of aquatic insects of Redmond's Pond in Byron Bog. |
| 11 | Prof. D.A. McLarty | Studies of the growth and control of species of cladophora under laboratory conditions |
| " | Dr. W.H. Baldwin | A study of oxide formation on metal surfaces |
| " | Prof. E. Brannen | Research on the electron beam characteristics of a racetrack microtron |
| Ontario Food | Prof. C.J. Hickman | Research fellowship |

Name of Grantor

Ontario Research Foundation

Name of Grantee

Prof. W.C.Howell The chemistry of certain a. B unsaturated matter

Prof. D.M.Scott Biology of the cardinal
Prof. F.S. Cook A study of extension and cambial growth in deciduous tree species

Prof. R.W. Nicholls Laboratory astrophysics
Prof. J.F. King

Dr. C.J.Willis

Dr. W.H. Baldwin Synthesis of transitionmetal compounds

Prof. W.H.Wehlau

Prof. G.M.Boone

Dr. T. K. R. Bourns

Prof. A. Dreimanis
A study of very low dispersion objective prism spectra

## Description of Project

Spectroscopy and molecular structure of polyatomic molecules

Studies on the decomposition and possible synthetic use of alkyl-perfluoroalkyl tin compounds

Composition of Fe . bearing silicates coexisting with magnetite

The behaviour of Trematode Carcariae in response to different intensities and wave lengths of light

Relationship of lithologic and granulometric composition of till to bedrock

| Name of Grantor | Name of Grantee | Description of Project |
| :---: | :---: | :---: |
| Ontario Research Foundation | Prof. J.R.Kramer | Carbon dioxide, etc. measurements in Lake Erie |
| " | Dr. T.K.R.Bourns | Host-parasite relations of members of the genus Cutirebra |
| Sundry donors | Prof. E.H. Tull | Solid state physics research |
| Public Health <br> Services (U.S.) | Prof. P. deMayo | The constitution of Griseoviridin |
| Polymer Corpn. Ltd. | Prof. F. L. M. <br> Pattison | Chemical research |
| Pennsalt Chemicals Corporation | Prof. D. McLarty | Cladophora research |
| Province of Ontario | Prof. G. H. Turner | Penal reform institutions research |
| Public Health Service U. S. | Prof. A.W.A. Brown | Studies on the insecticideresistance of mosquitoes |
| Research Corp'n. | Prof. D.C. Bradley | Research in chemistry |
| " | Prof.J.F.King | The mechanism of reductive elimination |
| 11 | Prof. P. de Mayo | Chemical constituents of parasitic fungi |
| Stauffer Chemical Co. | Prof. D.C. Bradley | Research in chemistry |
| Alfred P. Sloan Foundation | Prof.E.W. <br> Warnhoff | Research fellowship in chemistry |
| J.B. Smallman Memorial Research | Dean F. Stiling | Research in Humanities and Social Sciences |

Name of Grantor
Schering Corp'n
Limited
U.S. Air Force
Office of Scientific

## "

U.S. Office of

Naval Research
U.S. Air Force Office of Scientific Research

11

11
U.S. Air Force Office of Scientific Research

## 11

Name of Grantee Description of Project
Prof. P. de Mayo Research in chemistry

Prof. R.W. Nicholls Gas scintillations from ionizing radiations

Prof. R.W.Nicholls Intensities and excitation modes of Atomic and Molecular radiation

Prof. R.W.Nicholls To investigate the excited molecular species arising in various light sources

Prof. R.W. Nicholls Research on gas scintillations from ionizing radiations

Prof. D.C. Bradley Research on developing methods of synthesis of néw metallo-organic compounds

Prof. P. de Mayo Photochemical production of strained systems

Prof. D.C. Bradley Compounds containing transition metals bonded to sulfur

Prof. E. Brannen Millimeter E-M Radiation produced by High Energy Electron Beams

Prof. D.C. Bradley
Research on organometallic compounds and polymers
U.S. Office of Naval Research

| Name of Grantor | Name of Grantee |  |
| :--- | :--- | :--- |
| U.S.Air Force <br> Office of Scientific <br> Research | Prof.D.R.Hay |  |
| World Health <br> Organization | Prof.A.W.A.Brown Investigation of refracto- |  |
| meter measurements in |  |  |

## MUSEUMS

Province of Dr.W.Jury Archaeological research
Ontario

## SCHOOL OF BUSINESS ADMINISTRATION

| Sundry Donors | Dean F.W.P.Jones | Business research |
| :---: | :--- | :--- |
| " | Dean F.W.P.Jones | Stanford Research <br> Institute research |
| Trust Companies <br> Ass'n of Canada | Prof.J.C.Taylor | Business research |
| Sundry Donors | Dean F.W.P.Jones | Research |

## SCHOOL OF NURSING

| W.K. Kellogg | Prof.E.McDowell | To support the development <br> in nursing service adminis- <br> Foundation |
| :--- | :--- | :--- |
| Schoolion <br> Council Nursing | Dean R.C.Aikin | School of Nursing Research <br> Fund |

Name of Grantor
Estate of the late
Edna E.J effery
Engineering Science
National Research
Council

National Research Council

11
"
"

Ontario Research Foundation

Atlas Steels Ltd.

## MISCELLANEOUS

National Research
Council \& W. Bulani

Name of Grantee Description of Project
Dean R.M.Dillon Engineering Science research

Profs.J.E. Foreman Combustion spectroscopy

Prof. A. G. Investigation of the

Dr. J.F. Hart Davenport

Prof. W. Bulani

Dr. E. S. Nowak dynamic response of tall buildings to strong gusty winds

Polarography of fused salts

An analysis of the thermodynamic properties of water

Prof. L.G. Soderman Study of the mineral composition of Ontario Clays

Prof. A. G.
Davenport
Dr. E.S. Nowak

Prof. L. S. Lauchland

Dr. G.E. Hall

Special grant for equipment

An analytical investigation of heat transfer

Physical metallurgy research fund

Error analysis in matrix processes

Scientific research - Special

## Name of Grantor

National Research Council
$\because$

Ontario Research Foundation

Dr.J.F.Hart

Dr.J.F.Hart
Name of Grantee Description of Project
Dr. J. F. Hart

Computing re Natural
Sciences and Engineering Faculty

For purchase of equipment
To study methods of using an electronic computer for the diagnostic statistical analysis of sales data

