

Report of the Council 1980



Monash University



Report of the Council of Monash University 1980

Report of the Council for the period
1 January 1980 to 31 December 1980

Report of the Council

1980

Monash University

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Front cover: North aspect of the Union Building with the Robert Menzies School of
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Photographs in this Report are by Hervé Alleaume, Bob Bryant, Rick Crompton, Julie
Fraser and Neville Weeraratne (C.I.T.)

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REPORT OF THE COUNCIL FOR 1980

In accordance with Section 41 of the Monash University Act 1958, as amended, I submit the Report of the Council for 1980.

For and on behalf of the Council

**R.M. Eggleston
Chancellor**

THE COUNCIL

Members of Council as at 31 December 1980*

Members ex officio

The Honourable Sir Richard Moulton
Eggleston, Q.C., LL.B., Hon.LL.D.(Melb.)
— *Chancellor*
Raymond Leslie Martin, M.Sc.(Melb.), Ph.D.,
Sc.D.(Cantab.), D.Sc.(A.N.U.), F.R.A.C.I.,
F.R.S.C., F.A.A. — *Vice-Chancellor*

Appointed by the Governor in Council to represent the Parliament of Victoria

Ian Robert Cathie, M.L.A., B.A.,
Dip.Ed.(Melb.)
The Honourable James Vincent Chester
Guest, M.L.C., M.A.(Oxon.),
M.B.A.(Melb.), of Lincoln's Inn, Barrister-
at-Law, Barrister-at Law (Vic.)
Neil Malcolm McInnes, M.L.A.

Appointed by the Governor in Council to represent Commercial and Industrial Interests

Edward Forbes
Geoffrey Alistair Knights, M.A.,
Ph.D.(Cantab.)
Hugh Mitchell McKenzie
Sir James Charles McNeill, C.B.E., F.A.S.A.,
F.A.I.M.
Sandford Saul Nevile, O.B.E., B.Com.(Melb.)

Elected by graduates of the University

Anthony Henry May, B.Ec., LL.B.
Kay Christine Lesley Patterson, B.A.(Syd.),
Ph.D., Dip.Ed., M.A.Ps.S.

Elected by the Faculties

David Hector Monro, M.A.(N.Z.), F.A.S.S.A.,
F.A.H.A. (*Arts*)
Charles Barrington Goode, B.Com.(Melb.),
M.B.A.(Col.), A.A.S.A. (*Economics and
Politics*)
Maxwell Wilkinson Oldmeadow, B.A.(Melb.),
Dip.Ed., T.P.T.C., M.A.C.E. (*Education*)
Robert John Neil Kinsman, B.Mech.E.(Melb.)
(*Engineering*)
The Honourable Mr Justice Richard Elgin
McGarvie, B.Com., LL.B.(Hons.)(Melb.)
(*Law*)
Nigel John Gray, A.M., M.B., B.S.(Melb.),
F.R.A.C.P., F.R.A.C.M.A. (*Medicine*)
Sir James Robert Price, K.B.E., D.Sc.(Adel.),
D.Phil.(Oxon.), F.R.A.C.I., F.A.A. (*Science*)

Elected by the Professors

Martin Joseph Patrick Canny, M.A.,
Ph.D.(Cantab.)
Ross Henry Day, B.Sc.(W.Aust),
Ph.D.(Brist.), F.A.Ps.S., F.A.S.S.A.
Richard Charles Nairn, M.D., Ch.B.,
Ph.D.(Liv.), F.R.C.Path., F.R.C.P.A.,
F.R.A.C.P., F.R.S.E.
Ian James Polmear, B.Met.E., M.Sc.,
D.Eng.(Melb.), F.T.S., F.I.M., F.I.E.Aust.

Elected by teaching staff other than the Professors

Ian McCance, M.Sc.(Melb.), Ph.D.
Brendon Aston Parker, B.Sc.(Eng.),
Ph.D.(Lond.), D.I.C.
Jennifer Strauss, B.A.(Melb.)

Appointed by the Minister for Education

Barry John Joy, A.R.M.I.T., A.A.S.A.(Senior),
A.C.I.S.

Co-opted

Keith Thomas Henry Farrer, O.B.E.,
M.A.(LaT.), D.Sc.(Melb.), C.Chem.,
F.R.S.C., F.R.A.C.I., F.I.F.S.T.(U.K.),
F.A.I.F.S.T., F.T.S.
Margaret Elizabeth Hamer, B.E.(Syd.),
B.A.(Melb.)
Patricia Frances Hutson, M.B., B.S.(Melb.)
The Honourable Joseph Ezra Isaac, B.A.,
B.Com.(Melb.), Ph.D.(Lond.), F.A.S.S.A.
— *Deputy Chancellor*

Co-opted from among the Deans of the Faculties

Peter William Musgrave, M.A.,
Cert.Ed.(Cantab.), Ph.D.(Lond.), F.A.S.S.A.
John Melvin Swan, Ph.D.(Lond.),
D.Sc.(Melb.), F.R.A.C.I., F.A.A.

Elected by the non-academic staff

Geoffrey Steven Wilson, A.L.C.M.

Elected by the students of the University

David Graham Bloom
Peter Golding, B.Sc.

*See Appendix I for changes in membership during 1980

REPORT OF THE CHANCELLOR

THE HON. SIR RICHARD EGGLESTON, Q.C., LL.B., Hon.LL.D.(Melb.)

As is usual, ten meetings of Council were held during 1980, from March to December inclusive. At the first of these meetings I commenced my third term as Chancellor, and Dr J.E. Isaac assumed office as Deputy Chancellor following the retirement of Dr I. Langlands, who had, as mentioned in last year's report, held that office since 1974.

In October I left for overseas on a private visit, in the course of which I made some enquiries in the United States concerning the U.S. Federal Evidence Code (in my capacity as an honorary consultant to the Australian Law Reform Commission), and also gave seminars at Arizona State University, Oxford and Edinburgh. During my absence Dr Isaac presided over the November and December meetings of Council. Prior to the June and September meetings, members of Council visited the Faculties of Engineering and Science respectively where they inspected facilities and learned something of the current teaching and research programs of each faculty.

Of the many important matters considered by Council during the year, two which attracted a great deal of discussion were the report on headship of departments from the Monash Review Committee and the introduction of a new superannuation scheme for all employees of the University. The report on headship of departments was the first report of the Monash Review Committee which was established by Council to inquire into various aspects of University government and administration. Its recommendations reaffirmed the current practice at Monash of having professors as the academic and administrative heads of departments while, in addition, suggesting ways in which staff might more fully participate in the life and affairs of their department. In recommending a new superannuation scheme for all Monash staff,

the Superannuation Administrators and Trustees succeeded in the difficult task of designing an equitable scheme which provides improved benefits over the old F.S.S.U. scheme for academic staff and the existing managed fund for general staff.

There were, as always, a number of changes in the membership of Council during the year and details of these are given in Appendix I. The Council records its sincere appreciation of the contribution made to its proceedings by all who so willingly gave of their time and interest to the University.

At its meetings in March, Council extended its congratulations to Professor M.D. Neale of the Faculty of Education on being awarded an O.B.E. in the New Year Honours. In July, Council noted with pleasure the appointment of Mr S.S. Nevile, a member of Council since 1975, as President of the International Wool Textile Organisation for a two-year term.

In response to a direction of Council in late 1979, a portrait of the University's second Chancellor, the late Sir Douglas Menzies, painted by Melbourne artist John Scurry, was completed in December. This completes the series of portraits of Chancellors of the University to date, all of which are now hanging in Robert Blackwood Hall.

At graduation ceremonies during the year, the following honorary degrees were conferred: Doctor of Laws — Ian Langlands; Doctor of Science — Archibald Keverall McIntyre; Doctor of Laws — Frederick Ronald Williams; Doctor of Laws — Henry Arthur Winneke. In all, there were seven conferrings at which 1,942 degrees were conferred, 908 degrees were conferred in absentia and 338 diplomas were awarded. The physical burden of conferring degrees (by no means negligible) was shared between the Deputy Chancellor and myself.

REPORT OF THE VICE-CHANCELLOR PROFESSOR R.L. MARTIN, M.Sc.(Melb.), Ph.D., Sc.D.(Cantab.), D.Sc.(A.N.U.), F.R.A.C.I., F.R.S.C., F.A.A.

I closed my last report with the opinion that, in terms of funding and support, Monash University was at the crossroads in relation to its capacity to contribute to the nation's development in the 1980s. With few exceptions, events in 1980 did little to dispel the uncertainty with regard to the future funding, directions, and priorities accorded by government to tertiary education in Australia — both at the State and Federal level.

Since 1980 was the middle year of the triennium, we knew in advance our allocation of recurrent funds. However, the advantages of fixed triennial funding referred to in my last report have been offset by the difficult task of having to budget for a reduced grant each year. Our 1980 grant was \$187,000 less than that for 1979 while we will face a further \$218,000 reduction in our 1981 recurrent grant — a daunting situation indeed and one which runs counter to the escalation of costs involved in running the University.

Capital and equipment funding still continues to be distributed on an annual basis and here the situation, if anything, is worse. Against the background of further reductions in capital works for the university sector as a whole, Monash was perhaps fortunate to be given funds to complete our much-needed Microbiology building on campus. We were allocated a reduced grant for minor works which contrasts with our need for increased funds for renovation and maintenance of the University's buildings and plant, parts of which are now twenty years old. To complete this dismal picture, we were dismayed at receiving a 1980 equipment grant which represented virtually no change in Monash's share of the total grant for all universities. This was despite several submissions to the Tertiary Education Commission concerning our continued difficulties in this field and the stated completion by the T.E.C. of its review of the formula for allocating equipment monies. As a result, the Monash University Council took the unusual step of transmitting the following resolution to the Universities Council:

The Monash University Council is gravely disturbed at the shortage of funds for equipment and draws the attention of the Universities Council to the obvious implications of this shortage for research, teaching, and training.

Perhaps the only encouraging federal initiative during 1980 (which was, after all, an election year) was the announcement that the Government had accepted the T.E.C.'s recommendation that a program of support for research centres of excellence in universities should be implemented, beginning in 1981 with an initial expenditure of \$1 million and an allocation of \$15 million for the 1982-84 triennium. This is an encouraging step if only as an indication of the recognition by government that high quality research has a vital role to play in the future development of the nation as a whole. Monash stands ready to participate in this program.

These and other matters were discussed in person with members of the Universities Council when they visited Monash for two days in May. The University's plans for the physical development of its campus and the future directions of its teaching and research programs were included in our submission to the U.C. for the 1982-84 triennium which was completed at the end of 1979. I believe that members of the U.C. were impressed with what they saw and heard during their two days with us and left with the conviction that Monash was now a major university in the Australian system.

In my last report, I mentioned some worrying provisions of the Post Secondary Education (Amendment) Bill which was introduced into the Victorian Parliament late in 1979. Although the principal object of the Bill was to repeal the State College of Victoria and Victoria Institute of Colleges Acts and establish the Victorian Post-Secondary Education Commission, the universities were concerned at the failure of the proposed legislation to distinguish between universities and colleges making them subject to the authority of a proposed Accreditation Board.

This not only confused the responsibilities of the Commonwealth and State for the co-ordination of university developments but constituted a serious threat to the traditional autonomy accorded to universities in their Acts of incorporation. Following representations by the four Victorian Vice-Chancellors, subsequent amendments to the Bill, with one major exception, allayed the concerns of the universities. The remaining cause for concern was that V.P.S.E.C. would still retain the authority to approve any new course of study which involved the expenditure of State or Commonwealth monies. This provision made the Victorian universities responsible to two governments with regard to new course approval, contrary to the recommendations of the Partridge and Williams Reports and surely a cause for conflict and future confusion. In view of this situation, the University Council transmitted the following resolution to senior members of the Government:

The Monash University Council views with grave concern the intention of the Post-Secondary Education (Amendment) Bill to require that new courses of study in Victorian universities be approved by the Victorian Post-Secondary Education Commission. In stating their concern the Council reminds the State Government of recommendations to the contrary of both the Williams and Partridge Committees and, most importantly, of the adverse effects of such a requirement on the national and international standing of the Victorian universities.

Sadly, this action was to no avail. The Post-Secondary Education (Amendment) Bill passed all stages in the Victorian Parliament shortly afterwards without further significant amendment. I sincerely hope that its provisions are not the thin end of a wedge of further governmental intervention into the life and affairs of the universities in this State.

Two other issues during the year impinged on the role of universities. The first concerned the Federal Government's continued efforts to establish a Defence Force Academy in Canberra under the title of 'Casey University'. The use of the term 'University' for an institution restricted in its intake and curriculum was clearly inappropriate and attracted adverse comment from many quarters. I am pleased that the Government appears to have concurred with or at least accepted this view. The other issue concerned a Ministerial directive in January, following the Soviet occupation of Afghanistan, that 'non-official Soviet/Australian Exchanges such as academic exchanges or visits, direct institution to institution contacts, and other academic links should not receive official endorsement or administrative support'. Monash was directly concerned as one member of the University staff had been selected to receive an award under the Australia/U.S.S.R Academic Exchange Scheme. He was, however, subsequently advised that Australian Government funding and support for his official 1980 visit to Moscow was no longer available. I regret that decision, as I would regret any limitation on the free exchange of academic staff between countries. It is one of the roles of universities that must be staunchly defended.

I believe that consultation and understanding between the four Victorian Universities will be improved as a result of the establishment and constitution late in the year of the Victorian Vice-Chancellors' Committee. This basically formalised the procedures for meetings of the four Vice-Chancellors that had been taking place since the demise of the Victorian Universities and Colleges Committee a year or so ago. Although the V.V.C.C. has no executive or corporate responsibility and will not speak or determine policy for its constituent members, it will serve as a useful forum for discussion of matters of major significance or of common interest to the Victorian universities.

Let me turn now to consideration of some of the people who have helped shape events at Monash over the year. After all, it is people more than anything else that make a university what it is. As foreshadowed in my previous report, Sir Richard Eggleston commenced his third term as Chancellor in March and Dr J.E. Isaac assumed the Deputy Chancellorship in succession to Mr I. Langlands. It is good to know that the Council of the University is in such experienced and capable hands. Again I was ably supported during the year by Professor W.A.G. Scott as Deputy Vice-Chancellor and Professor B.O. West as Pro-Vice-Chancellor. Professor Scott attended the Seventh General Conference of the International Association of Universities in Manila during August and then continued on to Great Britain to gain a personal insight into funding, staffing, and administrative developments. Mr L.W. Candy, formerly the University's Finance Manager, took up his new appointment as Comptroller in February following the retirement of Monash's first Registrar and Comptroller, Mr F.H. Johnson. On the academic side, Professor P.G. Nash resigned as Dean of the Faculty of Law in order to return to practice at the Bar. Professor R. Baxt was appointed Dean for a one-year term pending the selection of a successor to Professor Nash. In all, four professors resigned or retired during the year and one new professor commenced duty. Two members of staff resigned during the year to take up Chairs in other universities. Professor A.W. Linnane of the Department of Biochemistry brought distinction to the University with his appointment as a Fellow of the Royal Society — Monash's first F.R.S. to be appointed while a member of staff. In addition, two other members of staff were elected to learned academies bringing the Monash total to a very respectable twenty-nine members of staff who are fellows of one of the four Australian learned academies. Finally, I should mention the appointment of Mr C.J. Bourke, Director of our Aboriginal Research Centre, as General Manager of the newly-established Abor-

iginal Development Commission in Canberra. He will be missed.

The Chancellor has already mentioned the report of the Monash Review Committee on Headship of Departments, the recommendations of which were approved by Council in June. This Committee was established by Council in 1978 to review various aspects of the University's government and administration. There is no certainty that those procedures which have served Monash well in its formative years of rapid growth are still in the best interests of a mature university which has grown to optimum size and faces the prospect of a steady-state situation into the foreseeable future. I was personally relieved that, in its first report, the Committee endorsed and reaffirmed the principle of firm academic leadership by the professoriate as being paramount to the maintenance of a high standard of teaching and research at Monash.

Other academic matters which attracted debate during the year were the demand for teaching of migrant languages at Monash, particularly Modern Greek and Italian, and the University's future policy with regard to the admission of overseas students. Both of these issues are complex and, as yet, unresolved. The former brings into question the complementary course arrangements between the several Victorian universities and the role of the Universities Council and V.P.S.E.C. in determining what new courses will be approved for funding and the latter is subject to consideration by the Australian Vice-Chancellors' Committee and ongoing consultation with the Government. I hope to comment further on both these matters in my next report.

In terms of physical development, a number of projects were completed during the year. Our long-awaited Microbiology Building was handed over to the Department of Microbiology in November and, beginning in 1981, microbiology courses leading to a science degree will be taught on campus. Also, three new championship standard squash

courts and the first eight of twelve new synthetic 'plexipave' flood-lit tennis courts were completed in the sports and recreation complex. These latter two projects were funded entirely from Union fees and have proved very popular additions to our sporting facilities. Planning commenced during the year for a further Union-funded development on campus — an indoor heated swimming pool/spa/sauna complex which is due for completion in early 1982. While on the subject of building development, I regret to report that no further progress had been made by the end of the year in plans to relocate the Queen Victoria Medical Centre at its Clayton site. In the meantime, overcrowding and out-moded facilities at all our major teaching hospitals are a daily reality for the staff and students in our clinical medicine departments. I am too much of an optimist to think that these problems have reached insurmountable proportions, but I do wonder whether the present Federal funding procedures for universities are capable of dealing with the massive capital requirements of university teaching hospitals.

Monash continued to forge links with other institutions in 1980 and entered into formal affiliation agreements with the National Museum of Victoria, the Western General Hospital, and the Box Hill and District Hospital (for obstetrics and gynaecology and paediatrics). These agreements, it is hoped, will be to the mutual benefit of both parties.

The dominant staffing matter dealt with during the year was the introduction in November of a new and greatly improved superannuation scheme for all members of staff. This matter has already been referred to by the Chancellor. The Monash University Superannuation Scheme ('M' Scheme) is a benefit-promise scheme which provides retirement benefits much superior to those of the inadequate endowment assurance F.S.S.U. Scheme ('A' Scheme) which it replaces. It also covers members of the general staff and this replaces the Monash University General Superannuation Scheme ('G'

Scheme). Although the Universities Council has acknowledged the very real need for universities to provide improved superannuation benefits, it has still to come to grips with the increased costs involved in moving to fully funded superannuation schemes of this nature.

As Monash matures and becomes further entrenched within the community, it naturally attracts more support from the community it serves. This is testified to by the very substantial listing of gifts and grants appended to this report. We are very grateful for this support which is all the more valuable in these times of reduced government funding. Of the many generous benefactors to the University, I should like to single out one for particular comment. In addition to Mrs Vera Moore's previous generosity to the University, including the establishment of the Vera Moore Fund for the Performing Arts, she presented the University with the first of two payments of \$50,000 to establish the Vera Moore Postgraduate Scholarship. This new scholarship will be offered to graduates seeking to obtain a Masters degree by research or a Doctorate of Philosophy in any of the University's seven faculties. In addition, Mrs Moore presented \$5,000 to the Religious Centre towards the cost of a new harpsichord as well as making generous donations to the Krongold Centre and Library Fund Appeal. We are most grateful to Mrs Moore, not only for her continued generosity, but also for her active interest and participation in the life and affairs of the University.

The lack of adequate access to the University by public transport has been one of Monash's most persistent problems since its establishment. As well as presenting difficulties for our existing students and staff and forcing more cars onto the campus each year, the poor transport services to the University diminish Monash's attractiveness to prospective students. In an attempt to remedy this problem, the Planning Committee of Council decided late in the year to establish a Transport Working Party to investigate the whole

Members of the Universities' Council visited Monash University for talks and inspections related to the Monash submission for the 1982-84 triennium. The high voltage laboratory in Engineering was one of the sites they inspected.



question of access to the University and to recommend realistic and costed proposals for improvement in a form suitable for submission to and consideration by the Government. At this early stage, I am pleased to report that the Victorian Minister of Transport has been most co-operative and has offered modest financial support to the working party as well as some of the resources and expertise of his department. I hope to report more fully on this project next year.

Let me turn now to some of the highlights of the year at Monash. A university is, of course, much more than an institution where students are taught and research is undertaken. It is also a vibrant, diverse community of ideas, activities, and cultural events. Certainly the most exciting occasion of the year was the inauguration by the Governor General on 22 April of the Louis Matheson Pipe

Organ in the Robert Blackwood Hall. In its early performances, this beautiful instrument built by the German builder, Jurgen Ahrend, proved beyond doubt that Monash had acquired an organ of remarkable quality. It is a fine addition to the musical life of Melbourne and a fitting tribute to the many people who, through public subscription, helped to bring this project to fruition. Above all, it will be a lasting memorial to the man who, more than anyone else, laid the foundation for the fine University that Monash is today. Earlier in the year, the Monash Library reached a milestone with the acquisition of its one millionth volume. This clearly places our Library among the major academic libraries in Australia. The fact that this feat has been achieved in something less than twenty years attests to the rapid growth of the University since it began teaching in 1961.

The actual millionth volume was presented by the Friends of the Library and is the Library's first incunabulum (a book produced before 1500 in the first 25 years of printing). It is *Mammotrectus Super Bibliam* by Johannes Marchesinus, printed in Venice by Franciscus Rennar in 1476. Another exciting project which is progressing well is the proposed publication of a limited edition of paintings and accompanying text on the genus *Banksia* by Academic Press in London. Mrs Celia Rosser, who is the University Artist — Special Projects, is currently engaged in painting all known *Banksia* species (more than seventy in all) for this work. The first volume containing 24 paintings will be published in the middle of next year. I believe that this set of publications, when complete, will rank among the finest examples of plant illustration known and take on a value comparable to the bird illustrations of Gould and Audubon. I am delighted that the University agreed to confer an honorary degree of Master of Science upon Mrs Rosser in 1981. Mr Hugh Stretton, Reader in History at the University of Adelaide delivered the Sixth Oscar Mendelsohn Lecture in March under the mischievous title of 'The Corruption of the Social Sciences'. This was a most thought-provoking and, at times, humorous lecture which maintained the high standard set by early speakers in the lecture series. Finally, I should mention the regrettable incidents which accompanied the visit to Monash in March of the Prime Minister. Mr Fraser, who was attending a private function in Robert Blackwood Hall sponsored by the Monash Liberal Club, was subjected to a hostile and undignified demonstration outside the Hall both before and after the function. While some people might regard the Prime Minister's visit to the campus as provocative and while many of the demonstrators had no association with Monash, the events of that evening were deplorable. I hope there will be no repetition

of this type of event which does so much harm to the University's reputation.

The year 1980 also saw the culmination of a remarkable research endeavour. On 23 June, after twelve years of intensive research into the problem of human infertility, and much innovative work in the field of *in vitro* fertilisation and embryo transfer, success was achieved with the birth of Australia's first 'test tube baby'. The work, undertaken by a team led by Professor E.C. Wood, Chairman of the Monash Department of Obstetrics and Gynaecology at the Queen Victoria Medical Centre, in collaboration with researchers and clinicians at Royal Women's Hospital and St. Andrews Hospital, East Melbourne, was, by the end of the year, to establish the group as the undisputed world leader in this important new field. An inescapable outcome of this work was a new awareness of the complex legal, ethical and moral problems that the new life-creating techniques have presented. These problems assumed greater urgency as the implications of the new discoveries gained wider public recognition and led Council to approve the establishment at Monash of Australia's first Centre for Human Bioethics. Headed by a steering committee representing scientists, doctors, philosophers, educators, lawyers and theologians, the Centre was ready by the end of the year to appoint two full time research Fellows to commence studies of the social, ethical and legal aspects of research in human biology, medicine and behavioural sciences.

In concluding my report, it is perhaps timely to point out that at the end of 1980 Monash completed twenty years of teaching. These two decades have been devoted to the immense task of creating a university of international standing. The current situation is testing the University's character and commitment to its objectives. I am confident that as we enter our third decade, Monash will continue to flourish in spite of the harsh economic climate.

DEVELOPMENT AND ADMINISTRATION

Site and Buildings

In 1980 the Microbiology Building was completed and taken into use. The alterations to Medical 'D' Block, for the Department of Biochemistry, which were commenced in 1979 were also completed. The Union's sporting complex was enlarged with the addition of eight plexipave tennis courts and three squash courts. All working drawings for the swimming pool were completed in 1980 and tenders will be called early next year.

Legislation

Fifteen amending Statutes and thirty-three new or amending Regulations were made by Council in 1980. Included in these were major revisions of the Discipline Statute and the degree of Bachelor of Science Regulations. Extensive amendments were also made to the Superannuation Statute, to the Faculty of Law Regulations, consequent on course alterations, and to the Faculties Regulations. Legislation was also passed altering the designation of the title of 'Academic Registrar' to that of 'Registrar'.

University Publishing

The Publications Committee met five times during the year although a smaller number of publishing projects came before the Committee than was usual.

The official publishing programme of the University was expanded by the publication of a new booklet for prospective students. To assist in achieving a sustained level of activity throughout the year, the Publications Section continued to explore avenues which promised to widen the Section's scope of activity and responsibility.

Safety

The general standard of safety has been maintained on campus notwithstanding the individual areas of concern that became apparent during the year. These areas of concern include certain balustrades and loading ramps, fume cupboard exhausts and the handling of radioactive substances. A major problem is the likelihood of accidents arising from the riding of bicycles around campus because this is very difficult to police.

In 1980 a thyroid radioiodine monitor was installed and of the 80 persons monitored, some 6 had detectable thyroid radioiodine levels which however were below the occupational dose limit. There were 7 radiation incidents during the year, 4 involving elevated thyroid radioiodine levels, 2 involving tritium contamination and one a temporarily displaced radioactive sealed source. In none of these was the occupational dose limit exceeded but in accordance with the principle of keeping radiation doses as low as readily achievable, improvements in working procedures and conditions have been implemented in each case.

The emergency vehicle has again been of considerable value in allowing the rapid administration of medical care to patients, and their transportation, where applicable, to nearby hospitals. Such hospitalisation was required in 1980 for eight of the sixty-six patients requiring the services of the emergency vehicle.

During the latter part of the year, the University's Safety Officer retired after ten years service. His replacement is dependent upon the consideration and recommendations of the Committee of Deans on its current enquiry into safety administration on campus. Those recommendations are anticipated early in the new year.

STAFF

The recruitment of academic staff in 1980 was at a low level similar to that which has existed since 1976. Under current conditions mobility of teaching staff remains restricted.

Over the years regular part time staff, referred to in this University as fractional staff, have become an established part of the university staffing pattern and figures in this

report are given in terms of full time equivalent staff i.e. including fractional staff rather than full time staff only.

The number of full time and fractional staff, expressed in terms of full time equivalents, as reported to the Tertiary Education Commission in the annual statistical return of April, 1980 was:

	Professor	Assoc. Professor, Reader	Senior Lecturer	Lecturer, Teaching Registrar	Principal Tutor	Senior Tutor	Tutor	Total
Arts	23	17	78	42	4	16	33	213
Economics & Politics	15	9	33	32	2	4	37	132
Education	6	5	29	16	2	5	2	65
Engineering	9	15	40	11	—	5	2	82
Law	7	6	27	13	—	11	4	68
Medicine	19	16	60	25	1	24	4	149
Science	22	30	75	19	1	9	14	170
Other	—	—	3	1	—	1	—	5
Totals	101	98	345	159	10	75	96	884

A comparison of the total teaching staff numbers in 1980 with those of the previous two years is given below:

1978	1979	1980
897	876	884

The pattern of teaching staff recruitment in 1980 was:

	Continuing Appointment	Fixed Term	Short Term or Temporary
Professors	1	—	4
Senior Lecturers	2	1	8
Lecturers	7	18	10

Twenty-five Senior Tutors and 27 Tutors appointed for one year with the possibility of renewal, the normal procedure for such grades, took up their first appointments in 1980. Those leaving the University in the year due to resignation, retirement or expiry of fixed or short term appointments were:

	Continuing Appointment	Fixed Term	Short Term or Temporary
Professors	3	1	6
Reader	1	—	—
Associate Professors	3	—	1
Senior Lecturers	17	—	10
Lecturers	5	6	10

Twenty-nine Senior Tutors and 47 Tutors also left during the year.

Those who resigned during 1980 included Professor P.G. Nash, Dean of the Faculty of Law and Professor R. Porter, Physiology.

Professor R. Baxt was appointed Dean of the Faculty of Law during 1980 for a term of one year. Professor M.C. Ricklefs, History, took up his appointment during 1980 and Professor G.D. Thorburn, Physiology was appointed during 1980 but will not take up duty until 1981.

Academic staff employed solely for research projects comprised 17 Junior Research Fellows, and 86 Research Assistants many of the last being employed on a fractional basis.

Full time equivalent staffing 1980

The overall full time equivalent staffing of the University has, with minor fluctuations, stabilised as shown by the following figures:

<u>1978</u>	<u>1979</u>	<u>1980</u>
2,972	2,915	2,994

The 1980 distribution of these over the various fields of activity was:

		Total
Teaching and Research:		
Teaching staff	992	
Support staff	749	1,741
Research:		
Academic staff	156	
Support staff	47	203
Library		192
Computing		51
Other Academic Services		59
Student Services		22
Central Administration		209

Buildings, Grounds, Cleaning and Central Services	249
Continuing Education	7
Independent Operations Student Union, Bookshop etc.	261

The University records with regret the deaths during 1980 of Mr P. Clarke and Mr J.C.S. Robertson.

At the end of 1980, Professor A.K. Collins was granted the status of Emeritus Professor and Professor C.H.B. Priestley retired at the end of his fixed-term appointment.

The University has now completed its first full year's operation under the new Outside Study Programme rules which resulted from the T.E.C.'s review of study leave. As predicted in last year's report, the University achieved the T.E.C.'s target figure of 7 per cent for the calendar year of 1980. It is expected that the University will meet the 7 per cent target for 1981. The new rules are not causing hardship to date and no applications have had to be rejected due to shortening periods of absence, in part resulting from the increasing cost of overseas trips. However, the administrative cost of the new rules, which require more detailed record keeping and reporting, is substantial.

ACADEMIC DEVELOPMENTS

Degrees and Diplomas conferred

The following degrees and diplomas were conferred by the University at graduation ceremonies in 1980, the final column indicating the total number of degrees and diplomas awarded since the foundation of the University:

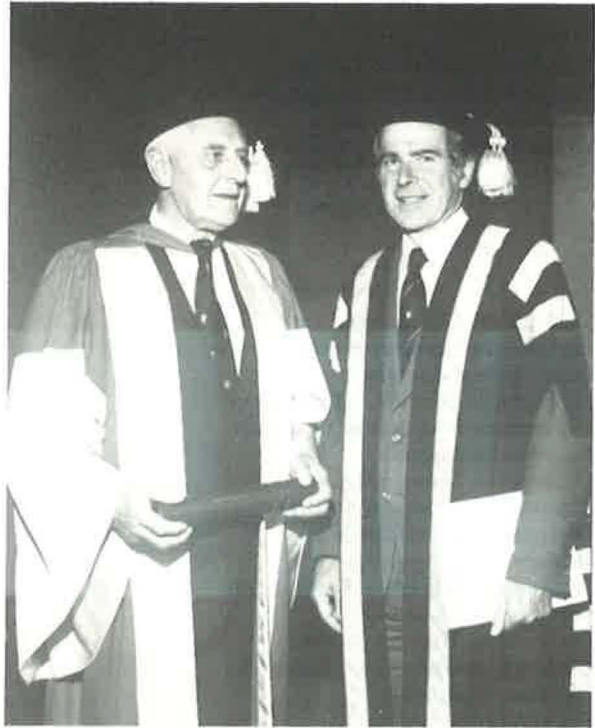
	Male	Female	1980 Total	1961-80 Total
Bachelor of Arts	168	364	532	7,256
Bachelor of Arts with Honours	42	60	102	1,212
Bachelor of Social Work	1	—	1	5
Bachelor of Social Work with Honours	14	24	38	130
Master of Arts	10	5	15	253
Master of Librarianship	—	3	3	7
Master of Social Work	—	1	1	1
Bachelor of Economics	275	89	364	4,126
Bachelor of Economics with Honours	31	7	38	452
Master of Administration	44	3	47	286
Master of Economics	9	3	12	128
Bachelor of Education	44	47	91	1,329
Bachelor of Special Education	14	14	28	159
Master of Education	31	21	52	258
Master of Educational Studies	6	7	13	14
Bachelor of Engineering	64	—	64	854
Bachelor of Engineering with Honours	90	2	92	1,046
Master of Engineering Science	16	—	16	163
Bachelor of Jurisprudence	41	13	54	955
Bachelor of Laws	176	55	231	1,601
Bachelor of Laws with Honours	9	1	10	131
Master of Laws	12	5	17	95
Bachelor of Medical Science	—	—	—	11
Bachelor of Medical Science with Honours	1	—	1	122
Bachelor of Medicine, Bachelor of Surgery	65	38	103	1,430
Bachelor of Medicine, Bachelor of Surgery with Honours	20	18	38	412
Bachelor of Science	154	114	268	3,005
Bachelor of Science with Honours	103	54	157	1,781
Master of Environmental Science	13	4	17	86
Master of Science	9	5	14	253
Doctor of Philosophy — Arts	14	5	19	136
— Economics	—	—	—	16
— Education	5	4	9	54
— Engineering	10	—	10	180
— Law	4	—	4	17
— Medicine	5	3	8	74
— Science	36	5	41	591
Doctor of Medicine	2	—	2	23
Doctor of Science	2	—	2	8
Honorary Master of Science	—	—	—	3

Honorary Doctor of Letters	—	—	—	10
Honorary Doctor of Engineering	—	—	—	7
Honorary Doctor of Laws	3	—	3	27
Honorary Doctor of Medicine	—	—	—	5
Honorary Doctor of Science	1	—	1	8
Total Degrees	<u>1,544</u>	<u>974</u>	<u>2,518</u>	<u>28,720</u>

			1980 Total	1961-80 Total
Diploma in Commercial Law	1	1	2	8
Diploma in Computer Science	7	—	7	10
Diploma in Education	94	176	270	5,541
Diploma in Education Psychology	9	27	36	112
Diploma in Engineering Geology	2	—	2	7
Diploma in English	2	4	6	6
Diploma in Immunology	1	2	3	6
Diploma in Japanese Studies	1	—	1	1
Diploma in Librarianship	1	2	3	3
Diploma in Linguistics	—	—	—	3
Diploma in Materials Engineering	—	—	—	1
Diploma in Microbiology	1	—	1	4
Diploma in Migrant Studies	—	2	2	20
Diploma in Operations Research	4	—	4	4
Diploma in Russian	—	—	—	1
Diploma in Taxation Law	1	—	1	1
Total Diplomas	<u>124</u>	<u>214</u>	<u>338</u>	<u>5,728</u>

The Governor of Victoria and Visitor of the University, Sir Henry Winneke (*left*) with the Vice-Chancellor, Professor

Ray Martin. Sir Henry was awarded an honorary Doctor of Laws degree at a graduation ceremony during the year.



	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Group (a)										
Arts	80	83	85	87	88	83	87	86	87	84
Economics & Politics	88	81	87	85	80	75	83	85	82	83
Law	82	79	88	92	94	91	90	93	97	92
Science	90	89	87	84	87	85	80	83	86	87
Group (b)										
Diploma in Education*	92	96	97	95	95	95	95	98	87	93
Engineering	88	83	76	64	64	67	71	73	74	75
Medicine	96	98	98	95	90	99	95	95	88	92

1980 annual examination pass rates

The percentage of first year full time students passing examinations continues to be at high levels. Fluctuations in the pass rates may occur from various factors including level of intake, changes in course content and structure and variations in assessment method.

For the purposes of this table, students are regarded as having passed in: **Group (a)** if

they have passed more than half the subjects or units taken, except that those taking three subjects are regarded as having passed the year only if they have passed all three subjects; and

Group (b) if they passed all subjects or failed in one or two subjects but were granted passes in the year as a whole and continued into the next year of the course.

*Calculated from enrolments in Diploma of Education and Diploma in Educational Psychology.

STUDENT ENROLMENT

The net total undergraduate population increased from 10,118 in the previous year to 10,298, an increase of 1.8 per cent. Graduate enrolments increased from 2,224 to 2,267 and total enrolments of all students from 13,910 to 14,096. Full details of enrolments are given in the table below.

Of the total of 14,096 students, 1,557 (11.05% of the total) were from overseas, as follows: *Oceania* — Papua New Guinea 4, Fiji 10, New Zealand 16, Western Samoa 1, Other Pacific Islands 1; *Africa* — Ghana 2, Kenya 2, Mauritius 3, South Africa 3, Tanzania 2,

Uganda 3, Zambia 1, Zimbabwe 4, Other Africa 1; *America* — Canada 4, U.S.A. 15, South America 1; *Asia* — Brunei 1, Hong Kong 59, India 21, Malaysia 1,168, Singapore 49, Sri Lanka 25, Other Commonwealth Asia 2, Bangladesh 7, Burma 3, Cambodia 1, China 1, Indonesia 27, Japan 33, Korea 2, Laos 1, Pakistan 6, Philippines 2, Taiwan 1, Thailand 25, Vietnam 7; *Europe* — U.K. and Ireland 9, France 3, Germany 6, Italy 1, Netherlands 3, U.S.S.R. 1, Nordic Lands 1, Other Europe 12; Israel 3, Other Middle East 4. A total of 935 males, 622 females.

Net Enrolments by Degree/Faculty 1980 (as at 30 April)

Faculty and year	Full time			Part time			Total		
	M	F	T	M	F	T	M	F	T
Higher degree									
Higher Doctorate	6	—	6	10	—	10	16	—	16
Ph.D.	269	95	364	123	37	160	392	132	524
Master	199	130	329	964	434	1,398	1,163	564	1,727
TOTAL	474	225	699	1,097	471	1,568	1,571	696	2,267
Master preliminary	14	20	34	62	49	111	76	69	145
Postgraduate diplomas									
Arts:									
Dip.Engl.	—	—	—	2	15	17	2	15	17
Dip.Jap.Stud.	—	1	1	2	5	7	2	6	8
Dip.Libr.	—	—	—	4	8	12	4	8	12
Dip.Ling.	—	—	—	1	1	2	1	1	2
Dip.Mig.Stud.	—	—	—	1	2	3	1	2	3
Economics & Politics:									
Dip.Ops.Res.	7	1	8	7	1	8	14	2	16
Education:									
Dip.Ed.	108	159	267	37	37	74	145	196	341
Dip.Ed.Psych.	7	11	18	14	38	52	21	49	70
Engineering:									
Dip.Mat.Eng.	—	—	—	—	—	—	—	—	—

Net Enrolments by Degree/Faculty 1980 (as at 30 April) (continued)

Faculty and year	Full time			Part time			Total		
	M	F	T	M	F	T	M	F	T
Law:									
Dip.Com.Law	2	—	2	8	1	9	10	1	11
Dip.Int.&Comp.Law	1	—	1	8	—	8	9	—	9
Dip.Tax.Law	9	—	9	36	1	37	45	1	46
Dip.Fam.Law	—	—	—	7	5	12	7	5	12
Medicine:									
Dip.Imm.	1	1	2	1	1	2	2	2	4
Dip.Micro.	—	—	—	—	—	—	—	—	—
Science:									
Dip.Comp.Sc.	—	—	—	21	2	23	21	2	23
Dip.Eng.Geol.	—	—	—	—	—	—	—	—	—
TOTAL	135	173	308	149	117	266	284	290	574

Postgraduate

Bachelor degree

Education: B.Ed.	8	7	15	146	167	313	154	174	328
B.Sp.Ed.	3	10	13	14	86	100	17	96	113
TOTAL	11	17	28	160	253	413	171	270	441

Bachelor degree

Arts: B.A.	I	277	554	831	102	353	455	379	907	1,286
	II	161	398	559	62	216	278	223	614	837
	III	182	382	564	96	230	326	278	612	890
	IV	24	46	70	6	12	18	30	58	88
	Sub-Total	644	1,380	2,024	266	811	1,077	910	2,191	3,101
Arts: B.Soc.Wk.	III	11	33	44	—	—	—	11	33	44
	IV	13	24	37	—	—	—	13	24	37
	Sub-Total	24	57	81	—	—	—	24	57	81
Economics & Politics:										
	I	302	165	467	45	31	76	347	196	543
	II	273	148	421	57	15	72	330	163	493
	III	250	130	380	201	57	258	451	187	638
	IV	10	10	20	—	—	—	10	10	20
	Sub-Total	835	453	1,288	303	103	406	1,138	556	1,694
Engineering:										
	I	263	19	282	—	—	—	263	19	282
	II	197	12	209	3	1	4	201	13	214
	III	164	9	173	3	—	3	167	9	176
	IV	143	3	146	—	—	—	143	3	146
	Sub-Total	767	43	810	6	1	7	774	44	818

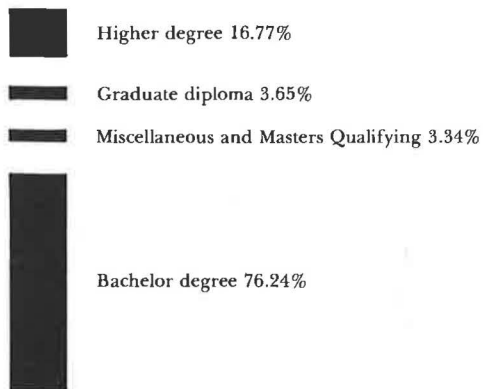
Net Enrolments by Degree/Faculty 1980 (as at 30 April) (continued)

Faculty and year	Full time			Part time			Total			
	M	F	T	M	F	T	M	F	T	
Law: LL.B.	I	—	—	—	3	3	—	3	3	
	II	3	4	7	15	10	25	18	14	32
	III	24	12	36	15	12	27	39	24	63
	IV/V	49	23	72	38	8	46	87	31	118
	Sub-Total	76	39	115	68	33	101	144	72	216
Law: B.Juris./LL.B.	I	11	12	23	7	—	7	18	12	30
	II	14	5	19	4	2	6	18	7	25
	III	29	14	43	5	3	8	34	17	51
	IV/V	68	30	98	17	6	23	85	36	121
	Sub-Total	122	61	183	33	11	44	155	72	227
Law/Arts:	I	23	33	56	—	1	1	23	34	57
	II	53	62	115	5	4	9	58	66	124
	III	37	57	94	3	8	11	40	65	105
	IV/V	65	65	130	17	13	30	82	78	160
	Sub-Total	172	217	395	25	26	51	203	243	446
Law/Economics and Politics:	I	63	25	88	2	1	3	65	26	91
	II	101	34	135	5	—	5	106	34	140
	III	87	12	99	5	2	7	92	14	106
	IV/V	136	20	156	22	4	26	158	24	182
	Sub-Total	387	91	478	34	7	41	421	98	519
Law/Science	I	12	5	17	—	1	1	12	6	18
	II	14	5	19	—	1	1	14	6	20
	III	23	6	29	—	—	—	23	6	29
	IV/V	24	8	32	2	1	3	26	9	35
	Sub-Total	73	24	97	2	3	5	75	27	102
Law/B.Juris.	I	—	—	—	—	—	—	—	—	—
	II	—	—	—	—	—	—	—	—	—
	III	2	—	2	2	1	3	4	1	5
	Sub-Total	2	—	2	2	1	3	4	1	5
Medicine	I	99	69	168	—	—	—	99	69	168
	II	96	68	164	—	—	—	96	68	164
	III	100	63	163	—	—	—	100	63	163
	IV	106	53	159	—	—	—	106	53	159
	V	100	53	153	—	—	—	100	53	153
	VI	84	55	139	—	—	—	84	55	139
B/Med.Sc.		2	—	2	—	—	—	2	—	2
	Sub-Total	587	361	948	—	—	—	587	361	948

Net Enrolments by Degree/Faculty 1980 (as at 30 April) (continued)

Faculty and year	Full time			Part time			Total			
	M	F	T	M	F	T	M	F	T	
Science										
	I	401	289	690	17	13	30	418	302	720
	II	341	217	558	52	40	92	393	257	650
	III	307	177	484	66	34	100	373	211	584
	IV	117	70	187	—	—	—	117	70	187
	Sub-Total	1,166	753	1,919	135	87	222	1,301	840	2,141
	TOTAL	4,872	3,496	8,368	1,035	1,336	2,371	5,907	4,832	10,739
Not for degree		15	8	23	277	171	348	192	179	371
Total other than higher degree		5,036	3,697	8,733	1,423	1,673	3,096	6,459	5,370	11,829
Total net enrolments		5,510	3,922	9,432	2,520	2,144	4,664	8,030	6,066	14,096

Total Net Enrolments at 30 April 1980: 14,096



Faculty of Arts

Dean: Professor J.D. Legge, M.A. (Melb.), D.Phil. (Oxon.), F.A.S.S.A.

Students

Total enrolments in the faculty exceeded 4,400 in 1980 and reached a total of 3,030 equivalent full time students (E.F.T.S.). This figure was only slightly below the target allocated by the University to the faculty (3,040). More important was the fact that it was achieved by slightly raising the cut-off point for normal H.S.C. entrance from 229 to 235.

Staff

At the beginning of the year Professor M.C. Ricklefs took up the Chair of History to which he had been appointed in 1979. Professor W.C. Clarke, Professor of Geography, resigned to take up a readership in the University of the South Pacific. The faculty has decided not to fill the chair immediately but to review the situation in two years' time. No appointment has yet been made to the Chair of English left vacant by the death of Professor Arthur Brown in 1979.

Dr F.W. Kent, of the Department of History, was promoted to a readership at the beginning of the year and Dr L.W. Eastop, Dr P.C. Hiller, Dr P.T. O'Malley (all of the Department of Anthropology and Sociology), Dr A. Romano (Classical Studies), Mr P. Fitzpatrick (English), Mrs M.U. Maclean (French) and Mr I.T. Cummins (History) were promoted to senior lectureships. The death, after a short illness, of Mr Prescott Clarke, Senior Lecturer in History, came as a shock to the faculty. A memorial fund established to subsidise publication of a book completed by him shortly before his death (in collaboration with Professor J.S. Gregory of La Trobe University) has received contributions from friends, relations and former students.

Associate Professor W. Kirsop received the honour of a visiting appointment as Sandars

Reader in Bibliography at Cambridge. Professor Garagnon, of the Department of French, has been awarded a visiting fellowship at the Humanities Research Centre in Canberra for 1981. Fifteen projects received A.R.G.C. grants for 1981 as against 22 in 1980.

Undergraduate Studies

The honours regulations of the faculty were changed during the course of the year to enable honours students in the future to be identified by the faculty at the beginning of the second or third year of their courses, rather than at the beginning of fourth year as was prescribed by the former regulations. It is provided also that some advanced course work should be prescribed for honours students in second and third years. In recent years considerable diversity has crept into the honours requirements of different departments, and the new provisions will ensure a greater degree of uniformity — in particular, a return to the concept of an honours course as a continuing operation spread over two or three years rather than as a single 'end-on' year following the completion of the pass course.

As an experiment in interdepartmental co-operation, a third year course in *Quattrocento Art and Society* was offered jointly by the Departments of History and Visual Arts. The course was planned as an integrated whole, and both departments felt that it had been a success.

Five students of French participated in the Study Abroad Program in Noumea, organised in conjunction with the French Departments of La Trobe and Adelaide Universities. The course was offered on a trial basis in 1980; a similar course will be offered for credit in 1981.

Changes are pending in the complementary course arrangements obtaining between the three metropolitan universities in Victoria — Melbourne, Monash and La Trobe. Whereas in the past the host university received credit for the weighted student units (W.S.U.s) from other universities enrolled in its courses, in future the home university will retain the W.S.U.s but will pay a charge to the receiving university for all students enrolled in courses elsewhere if more than seven are enrolled in an individual course. This change is likely to affect particularly the enrolment of Monash students in Modern Greek and Italian at the University of Melbourne. The faculty had planned to introduce Modern Greek at Monash in 1981 but was unable to secure the consent of the Universities Council to this proposal. The possibility of making joint appointments in Modern Greek with the University of Melbourne is still under consideration. In the meantime, Monash has guaranteed that students who have already embarked on a major sequence in Modern Greek at the University of Melbourne will be able to complete that major, and up to 16 students (as many as in 1980) will be allowed to enrol in first year Modern Greek at the University of Melbourne in 1981.

Graduate Studies

During the year 18 students completed the requirements for the degree of M.A. and 24 students, enrolled in Arts departments, completed the requirements for the Doctorate of Philosophy.

The Graduate School of Librarianship offered an M.A. in Librarianship for the first time in 1980. Fourteen students enrolled for this two-year course. The department has received a Tertiary Education Commission (T.E.C.) research grant for a study of alternatives to open access storage of printed library material. 1980 also saw the completion of the first Master of Social Work by course work and minor thesis.

The Centre for Migrant Studies and the Centre of Southeast Asian Studies continued their series of interdisciplinary work-in-progress seminars. For the first time in the history of the Centre of Southeast Asian Studies, graduate students affiliated with it were conducting research on every country of the region except Brunei. The Centre for Migrant Studies began work on a research project on English language learning needs in the western suburbs of Melbourne.

Conferences

In May the Department of German organised a conference — the first in Australia — on Austrian culture and society. It attracted some 40 participants representing almost all Australian universities and a wide variety of disciplines. The Centre for Migrant Studies organised a special seminar on the future of multi-cultural broadcasting and, together with the Faculty of Law, a conference on migrants and the law.

The Creative and Performing Arts

The Departments of English and Visual Arts joined to sponsor two series of lunch hour programs on 'Women and the Arts: Into the '80s' and 'Women and Writing: Into the '80s'. The Visual Arts Department mounted a series of exhibitions in the exhibition gallery. These included a photographic exhibition of Art Nouveau Architecture in Melbourne (with the aid of the Vera Moore Fund), Michelangelo and the Florentine Revolution (also a photographic exhibition) and exhibitions of the works of Erica McGilchrist, Ann Thomson and Noel Counihan. Also of note was a Melbourne/Monash exchange exhibition involving significant works from the collections of both universities.

Three productions of Indonesian music and dance, arranged by the Music Department in Robert Blackwood Hall, attracted over 2,000 people. The Music department again presented a series of free lunch hour

concerts in its auditorium in second and third terms. The faculty conducted an interesting experiment in appointing Mr Roger Pulvers of Hoopla to the part-time position of Drama Director in Residence. The idea of a Drama Director had been advanced by the Language and Literature departments, which were anxious that students should study dramatic works not merely as literature but also as pieces to be performed. Mr Pulvers visited the University for one day a week and conducted workshops.

Visitors

Visitors to the faculty included Professor R.F.

Durden of Duke (History), Professor Edward Tayler of Columbia and Professor Alan Sandison of Strathclyde (English), Dr N.M. Horsfall of London and Professor N.G.L. Hammond of Cambridge (Classical Studies), Professor Albert Soboul of the Sorbonne and Professor Robert Shackleton of the Bodleian Library (French), Dr Kamal Salih of the Universiti Sains Malaysia (Geography), Professor Charles A. Ferguson and Professor Shirley Brice Heath, both of Stanford, and Professor Claude Tchekhoff of Paris and Strasbourg (Linguistics), the Indian musician Ashok Roy (Music), Professor P. Parsloe of Bristol and Professor F. Cox of Wisconsin (Social Work).

Faculty of Economics and Politics

Dean: Professor D. Cochrane, C.B.E., B.Com. (Melb.), Ph.D. (Cantab.), F.A.S.S.A.

Student Enrolment

The total E.F.T.S. for the faculty in 1980 was 2,379 compared with 2,374 in 1979. Graduate E.F.T.S. fell marginally from 374 in 1979 to 362 in 1980, whilst undergraduate E.F.T.S. increased slightly from 2,000 to 2,017. The increase in undergraduate E.F.T.S. occurred despite a slight decrease in the number of offers to first year candidates. The increased demand for places in the Bachelor of Economics degree is illustrated by the fact that the cut-off score required for admission rose from 258 to 265. In 1980, 402 students graduated with the degree of Bachelor of Economics compared to 428 in 1979 including 38 with honours degrees (22 in 1979). In addition, 47 students graduated with the degree of Master of Administration (39) and 12 with Master of Economics (13).

Prize for Accounting

During the year the trustees of the Coopers and Lybrand Foundation offered to award

a \$200 prize to the best student completing AF319 Accounting and Finance (Honours).

Faculty Library and Technical Facilities

In support of its aim to provide a wide and useful service to the teaching staff of the faculty, the library continued to prepare the weekly 'Current Contents' file during the period February to November. To assist graduate students and honours students in improving their ability to retrieve required information from library holdings, seminars were again provided on the use of indexing and abstracting services. During the year the library slowly continued to increase its holdings generally, and in particular, to build up its collection of Australian historical statistics and also its collection of Public Company Reports.

The faculty's laboratories were expanded to accommodate additional computer terminals and to provide a separate room for video equipment. The main memory capacity of the VAX computer was increased to 3

megabytes and the disc capacity to 200 megabytes. A second word processor was installed.

Staff

After 18 years of service, first as a Senior Lecturer and later as Foundation Professor of Administration, Professor A.K. Collins retired from Monash University in December 1980.

Several staff members continued their appointments on tribunals and committees advising industry and government during 1980 while other staff members had editorial roles on journals and other publications.

Conferences and Seminars

Many staff members took part in conferences and seminars held both in Australia and overseas. These included a Management Educator's Conference held at Monash and hosted by the Department of Administrative Studies on behalf of the Committee of Australian Graduate Schools of Management. The Department of Economics held a series

of lectures for H.S.C. Economics students and the Department of Economic History conducted a conference for H.S.C. teachers on recent developments in Australian History.

Professor Officer gave a seminar on Company Tax Systems and Dividend/Financing Decisions at Queen's University, Kingston, and made a presentation at a public hearing on work commissioned by the Committee of Inquiry into the Australian Financial System (Campbell Inquiry).

Visitors

As in previous years a number of distinguished visitors contributed to the work of the faculty. Academic visitors included Professor Schein (Massachusetts Institute of Technology), Professor D. Yerbury (Australian Graduate School of Management), Professor J.M. Hulbert and Professor C.S. Shoup (Columbia), Professor G. Brennan (Durham), Professor L. Flanders (Tel Aviv), Professor D. Laidler (Western Ontario), Professor H. Bull (Oxford) and Professor A. Flew (Reading).

Faculty of Education

Dean: Professor P.W. Musgrave, M.A., Cert.Ed. (Cantab.), Ph.D. (Lond.), F.A.S.S.A.

Students

There were 1,560 students, who counted as 1,238 E.F.T.S. enrolled in the faculty on 30 April 1980.

Since 1975 the faculty has pursued a policy of increasing the proportion of students in higher degree work. During 1980 this policy was continued, but at a much slower rate. The number of students at present undertaking the Diploma in Education has almost reached the planned lower level and unless there is pressure because of views taken elsewhere about the supply of secondary teachers, the faculty sees a quarter of its E.F.T.S.

as representing the appropriate proportion of its resources to be devoted to pre-service education.

Staff

During the year a number of staff left the faculty. Amongst these was Associate Professor L.D. Mackay, who was appointed Executive Secretary of the Victorian Institute of Secondary Education. In addition, the first two academic staff to retire did so at the end of the year — Associate Professor R.W. McCulloch and the Reverend N.H. Dobson. Despite the more stringent financial circum-

Solar energy teaching and research programs are being conducted in the faculties of Science, Engineering, Education and Law. Peter Golding, physics Ph.D. student, has written a report on solar energy research at Monash University. His primary study is on how heat is lost from a thermal store such as a pool. Peter Golding is pictured here, with his supervisor Dr Logan Francey (Physics), taking measurements at a pool site.



stances the flow to the faculty of academic visitors on short appointments has been well maintained and the following spent periods of between six weeks and four months working with us: the late Dr H. Freeman (formerly University of London); Professor J. Novak (Cornell University); Mr C. Ormell (University of Reading); Professor P. Robinson (University of Bristol); and Mr R. Walker

(University of East Anglia). These visitors add to the teaching available for students, and play a major role in keeping staff in touch with contemporary work overseas and help to enlarge and maintain the network of our academic contacts throughout the world.

Because of T.E.C. policy, continuing appointments are now hard to make in Education and this is particularly regrettable in

a faculty in which much effort is being put into higher degree teaching and the supervision of theses. Whilst not making any criticism of the work done by the growing numbers of fixed-term lecturers in the faculty, it is hard for them to supervise, and possibly harder for their students, most of whom are part-timers, to be supervised for research degrees under such short term arrangements.

Evaluation

During the year an attempt has been made to inaugurate a more formal approach to the evaluation of certain activities. A committee has been set up to examine the adequacy of the mechanisms for the governance of the faculty. In addition, each committee responsible for an academic course has examined its own methods of evaluating its courses and the committee responsible for the summer courses for the B.Ed. degree also evaluated each course mounted, thereby putting in motion attempts to monitor these courses.

Research

Much research is under way and some of this has been, as in former years, financed by the Education Research and Development Committee and the Curriculum Development Committee and other grant giving bodies. However, one project this year, outside the usual range, has been financed by the Australia-China Council, which funded a travelling exhibition of photographs of China by

the faculty photographer, Mr C. Sironi. The photographs were taken on a trip to China, led by Mr J.A. Fyfield, which was made for educational purposes in 1978. This exhibition will travel among public libraries in Victoria for some fifteen months.

Centres

The faculty, together with the Faculty of Arts, has continued to support the Centre for Migrant Studies. Within the faculty the work of the Krongold Centre has continued. In 1979 the decision was taken to attempt to undertake relevant activities on contract and Professor Neale attracted the first such activity in November when she organised a three week workshop for special educators from the Pacific region on behalf of the Australian Development Assistance Bureau. This workshop was based in the Krongold Centre. Finally, an unofficial Centre for Evaluation Studies has been established within the faculty. In addition to advising the B.Ed. Committee, members of this Centre have already undertaken work in educational institutions in north-west Tasmania and have been approached to do similar work in Victoria.

In this connection it should be reported that the Educational Development Centre at Monash, a teachers' centre located in the faculty but organised by the Education Department, has run courses in 1980 which have been attended by over 2,000 practising teachers. Since faculty staff are involved with many of these activities, our contacts with the schools have been greatly increased.

Faculty of Engineering

Dean: Professor L.A. Endersbee, B.C.E., M.E. (Melb.), Hon. M.E.I.C., F.I.E.Aust., F.A.S.C.E., M.Aust.I.M.M.

Student Entrance

The number of students entering first year (282) in 1980 was slightly higher than the previous year (263). In addition, the entry standard was higher.

The preferred entry subjects for the Faculty of Engineering are English, Physics, Chemistry and Pure and Applied Mathematics, and a large proportion (70 per cent) of our incoming students have taken these 5 subjects. A small proportion (15 per cent) are entering the faculty with H.S.C. General Mathematics and again this year a special mathematics course was offered for these students. To a certain extent the faculty has been able to maintain a high proportion of students with these subject preferences by virtue of the large number of Asian students taking Physics, Chemistry and two mathematics at Victorian H.S.C. examinations in Kuala Lumpur and preparing to enter engineering courses in Victoria. However it is

hoped that there will be increased interest in engineering by Victorian students, and more will select H.S.C. subjects appropriate for Engineering entry: On the other hand there is great pressure in the schools to 'liberalise' the curricula, but students without mathematics and science subjects at H.S.C. require at least an extra year of study before entering first year engineering.

Undergraduate Studies

The total number of undergraduate students in the faculty in 1980 was 819, a slight increase of 14 on the previous year, but still close to the lowest number of students in the faculty for over a decade. However, there are strong signs of a major increase in interest in prospective entry to engineering careers in 1981.

The distribution of students in the various departments in the faculty is shown in table I.

Table I: Undergraduate Enrolments as at 30 April 1980 (1979 figures in brackets)

	1st Year	2nd Year	3rd Year	4th Year	Total
First Year	282 (263)				282 (263)
Chemical		26 (17)	15 (15)	11 (20)	52 (52)
Civil		55 (57)	54 (64)	55 (54)	164 (175)
Electrical		82 (63)	45 (50)	36 (28)	164 (141)
Materials		10 (22)	19 (13)	13 (8)	42 (43)
Mechanical		41 (49)	43 (43)	31 (47)	115 (131)
Total	282 (263)	214 (208)	176 (177)	146 (157)	818 (805)

Graduate Studies

The Masters Coursework program developed further in 1980 in number of subjects available from time to time and in number of students. The first degrees from the program were awarded at the end of the year.

Over the past few years there has been a

drop in the number of postgraduate scholarships available to the Engineering faculty and also a serious decline in the number of applications for postgraduate study. The present scholarship stipends are too low, the awards being only about 25 per cent of the starting salary for a graduate engineer.

The Vice-Chancellor, Professor Ray Martin, (*left*) and Professor Ian Polnear (Materials Engineering) watch research student Russell Coade fatigue crack a sample of aluminium casting alloy. Early in the year the Vice-Chancellor visited many departments throughout the University to familiarise himself with their work and to meet staff members.

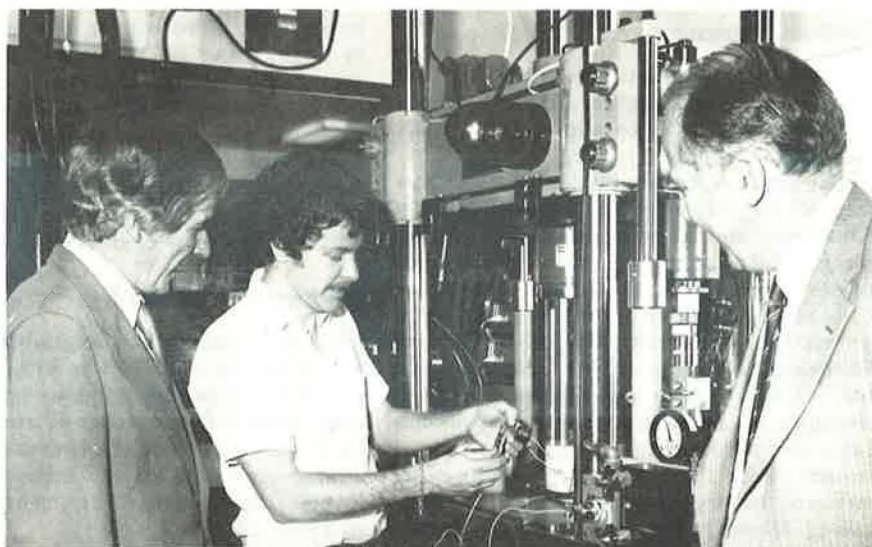


Table II: Graduate Enrolments as at 30 April 1980 (Actual, including staff enrolments)

Department	M.Eng.Sc.			Ph.D.	Total
	Prelim.	Research	Coursework		
Chemical	— (1)	7 (9)	13 (11)	6 (7)	26 (28)
Civil	8 (10)	10 (13)	75 (65)	13 (13)	106 (101)
Electrical	2 (3)	5 (9)	17 (22)	6 (9)	30 (43)
Materials	1 (2)	16 (17)	6 (5)	12 (11)	35 (35)
Mechanical	2 (9)	3 (3)	34 (30)	12 (14)	51 (56)
Total	13 (25)	41 (51)	145 (133)	49 (54)	248 (263)

Research and Publications

Despite all the pressures on staff, research activity continued at a high level, and many members of the faculty attracted research grants and research support from national and state research associations and private industry.

The year has been exceptional in the number of publications by members of the faculty: some 210 papers and 2 books were published during the year, quite a significant effort from 82 full-time academic staff, who, it must be noted, also have major teaching commitments for undergraduate and graduate courses.

Professional Societies and Advisory and Consulting Activities

Many members of the faculty are actively involved in the work of professional societies, and several serve as editors of learned journals. There also continues to be a call on members of the faculty to advise and assist governments and industry, both as committee members and by conducting research.

Staff Movements, Honours and Awards

The faculty was proud to see Ian Langlands receive the degree of Doctor of Laws *Honoris Causa* for his services to the University and the faculty.

Associate Professor T.A. McMahon of the Department of Civil Engineering was appointed to the Chair of Agricultural Engineering at the University of Melbourne. Dr David Boger of the Department of Chemical Engineering was promoted to Reader; he has also recently received two prestigious research awards, both involving collaborative research in the United States. Dr K.W. Ogden, Head of the Transport Group in the Department of Civil Engineering has been seconded to the Australian Railways Research and Development Association for two years, and Dr P. Gipps of C.S.I.R.O. has been seconded to take his place.

Faculty of Law

Dean: Professor R. Baxt, B.A., LL.B. (Hons.) (Syd.), LL.M. (Harv.)

Students

As at 30 April 1980, there were 1,803 students enrolled in the faculty giving a faculty E.F.T.S. figure of 1,240.07. The breakdown of actual enrolments as at 30 April 1980 is as follows:

	Full time	Part time	Total
B.Juris/LL.B.	183	44	227
B.A./LL.B.	395	51	446
B.Ec.LL/B.	478	41	519
B.Sc./LL.B.	97	5	102
LL.B.	115	101	216
Not for degree	2	75	77
	<u>1,270</u>	<u>317</u>	<u>1,587</u>
Diplomas	12	66	78
LL.M. by thesis (Prelim.)	—	3	3
LL.M. by thesis	—	12	12
LL.M. by coursework and minor thesis	18	90	108
Ph.D.	4	6	10
	<u>34</u>	<u>177</u>	<u>211</u>
Total			<u>1,803</u>

The notional equivalent academic staff (E.A.S.) of the Law School in 1980 was 78.61 (including casual staff). Actual appointments, other than casual staff, as at 30 December 1980 totalled 62.

Visitors

The Law School entertained a number of distinguished visitors from all branches of the profession. Many of these came to the Law School for short periods and gave lectures or conducted seminars for students or staff. Visitors to the Law School for a substantial period included:

Professor D.F. Henderson (University of Washington), Professor J. Herschfield (University of Manitoba), Associate Professor Hisao Ishikawa (Chukyo University), Professor W. Pedrick (Arizona State University), Professors Sidney and Jane Picker (Case Western Reserve University and Cleveland State University), Professor Dr W. Freiherr von Marschall (Institute of Comparative Law, University of Bonn), Professor G. Dworkin

(Southampton University), Professor Mitsuo Matsushita (Vice-Chancellors' Committee Visiting Fellowship 1980 nominee), Professor J. Haley, (University of Washington).

Undergraduate Program: Curriculum Review

The faculty has completed an extensive review of the curriculum which was commenced in 1978. This has resulted in a complete revamping of the B.Juris. program. As well, some important changes were made to the LL.B. program.

Clinical Legal Education

The faculty's Clinical Legal Education program, which has had the benefit of the advice of Mr Henry von Bibra, Visiting Fellow to the faculty in 1980, has been under severe pressure in 1980 and will again be under pressure in 1981 because of funding difficulties. It had been hoped that the Victorian Legal Aid Commission would have been fully operational by 1981 and that it would have been able to assist the clinical program both financially and otherwise. Regrettably this is not so. However, the Victorian Law Foundation has provided generous bridging finance for 1981 which will alleviate the difficulties although the grant is not adequate to cover the shortfall. The students undertaking Clinical Legal Education are involved in three legal aid centres/clinics — Springvale, Monash Legal Aid Service, and Devon Legal Aid Service. The faculty has also established a Standing Committee on Professional Practice.

During the absence on Outside Studies leave of Dr Guy Powles, the co-ordinator of Clinical Legal Education, Mrs Carol Bartlett, a senior tutor in the faculty, has undertaken the position as acting co-ordinator of Clinical Legal Education.

Summer Teaching

Teaching over summer semester 1979/80 once again proved successful. The subjects taught were: (i) Half-year subjects, Accounting for Lawyers, Consumer Protection, Current Problems in Criminal Law, Employment Law, Environmental Law, the Lawyer, Maritime Law, Patents for Inventions, and Professional Practice; (ii) Year-long subjects, Civil Procedure, Constitutional Law, Contract, Property II and Torts; (iii) LL.M. subjects, Banking Law, the Law of Liquidations, Patents.

The total student numbers involved were 387 (including 62 LL.M. students) giving a total subject enrolment of 699. A total of 15 subjects is being taught during the 1980/81 summer semester.

Graduate Studies

The graduate program developed in several important respects in 1980. The Ph.D. program saw an increasing number of graduates. Four overseas candidates enrolled in the Ph.D. program, having successfully completed the Masters program.

The Masters degree by coursework and minor thesis maintained its central position in the graduate program. The program operated in all three semesters and enrolments reached 163.91 E.F.T.S. as at 30 April 1980. During the year twelve candidates graduated from the program.

The most exciting development in the graduate program in 1980 was the introduction of three new Diplomas. The faculty expanded on the groundwork laid in the successful Diploma in Commercial Law (which commenced in 1978) and introduced the Diploma in Family Law, the Diploma in International and Comparative Law, and the Diploma in Taxation Law. These three Diplomas have encouraged the addition of several important new subjects to the graduate curriculum and has introduced the first extensive enrolment of non-law graduates in the graduate program.

Professor C.G. Weeramantry (Law) (*right*) talking with the Chancellor, Sir Richard Eggleston and Mr Bob Hawke at the launching of Professor Weeramantry's book *Apartheid: The Closing Stages?* which was published in May.



Leo Cussen Institute for Continuing Legal Education

The faculty has continued to play a prominent role in assisting this institution in its work.

Student Activities

The 'Godfather Scheme' (a scheme under which a final year student has access to a barrister or solicitor on an informal basis over a period of time) involved some 75 students on a 1-1 contact between student and legal practitioner during 1980. Mr Henry von Bibra, Visiting Fellow to the Faculty, has been primarily responsible for the program in 1980.

A new publication *Law School News* was inaugurated late in 1980. This will be a means of communicating information to students on a regular basis.

Continuing Legal Education

Eighteen seminars, conferences and lecture series were conducted in 1980 by the faculty. Publications consisting of papers delivered at these events have been or are in the process of being produced. Attendance at the seminars and the sale of publications indicates a high level of interest in the programs by the legal and accounting professions.

A wide range of topics and areas of the law were covered. Speakers at the seminars consisted of visiting professors, staff members, and members of the legal and accounting professions and others.

The Law Faculty is continuing to coordinate its continuing legal education activities with the Law Institute of Victoria and the Leo Cussen Institute. Joint four monthly planners were produced in 1980 setting out the programs planned by the three organisations.

During 1980, six bodies decided to co-ordinate their educational activities in the field of taxation, these bodies being the Law Faculty, Law Institute of Victoria, Leo Cussen Institute, the Institute of Chartered Accountants, Australian Society of Accountants, and the Taxation Institute. The co-ordination will prevent clashes of programs, will organise country seminars and the bodies will work together to run city seminars on topical issues such as new legislation.

Law Library

During the year, the Law Library was linked to the computerised loans system which serves the four Monash campus libraries. The system reduces the workload of the Library circulation staff, and considerably expedites stocktaking procedures. Any easing of pressure on the staff is welcome, especially as the Law Library is the only Monash library which serves a faculty engaged in year-round teaching, and consequently cannot fully exploit the summer vacation period to perform the house-keeping tasks traditionally reserved for that time.

The Library completed the first stocktake of the monograph collection since the electronic alarm system was installed at the exit door of the library. The results of that stocktake were not available at the time of writing, but it is the impression of the Library staff that there has been a substantial reduction in book thefts since the detection system was introduced.

The Library distributed to a variety of Australian Libraries a new microfiche edition of its *Case-Notes Index* (1968 to date) and the *Union List of Legal Periodicals in Australian Libraries*, and sold some 130 copies of the *Union List of Law Reports held in Australian Libraries*. The latter publication was compiled by the deputy to the Law Librarian. A weekly subject index to current periodicals is now produced for faculty staff and students.

Research and Professional Activities

As in the past, research in the faculty covered a fairly broad spectrum. The emphasis on research highlighted the faculty's strength in a number of areas: Business Law, Comparative Law, Contracts, Criminal Law, Economic Regulation, Evidence, Family Law, Industrial Law and Industrial Relations, International Law, International Trade Law, Procedure, Public Law, Taxation and Torts.

During 1980 members of the faculty published, either alone or in collaboration with others, a total of 16 books. In addition, members of the faculty are directly responsible for editing a number of journals and annual surveys.

As in 1979, most of the faculty's research and publication during the year has been of direct relevance to community needs and to professional activities. Grants have been obtained from the A.R.G.C. and from Monash University, as well as from other outside bodies.

The faculty continued to be strongly represented on professional bodies both at national and state level.

The 1980 Wilfred Fullagar Memorial Lecture was delivered by Lord Scarman of the House of Lords on 'The Common Law Judge and the Twentieth Century — Happy Marriage or Irretrievable Breakdown'.

Monash Law Review

The *Law Review*, which has established itself as one of the leading Law Reviews in Australia, is now being edited and managed by the students. Mr A. Freiberg, Lecturer in Law, has been the faculty adviser to the Monash Law Review Committee for the last two years and will be replaced in 1981 by Dr Michael Pyles, Senior Lecturer in Law.

The Year as a Whole

Early in the year the faculty was required to make adjustment following the resignation

of the Dean, Professor P.G. Nash, and the uncertainty which is always associated with the appointment of an interim dean. The faculty also suffered significantly by a cut in budget funds which placed great pressure on certain areas, and in particular on the clinical program. Uncertainty accompanying the introduction of changes to the Rules of the

Council of Legal Education put further pressure on staff involved in professional admission subjects.

In 1980 despite a number of difficulties, the faculty has maintained its position as a leader in the Australian scene. It is hoped in 1981 to further develop excellence in research both at staff and student level.

Faculty of Medicine

Dean: Professor G.C. Schofield, O.B.E., M.D., Ch.B. (N.Z.), D.Phil. (Oxon.), F.R.A.C.P., F.R.A.C.M.A.

Students

The total number of E.F.T.S. in the faculty in 1980 was 1,585. There were 948 medical undergraduates distributed as follows: year I: 168; year II: 164; year III: 163; year IV: 159; year V: 153; year VI: 139; B.Med.Sc.: 2. Female entrants comprised 41 per cent, as against 40 per cent in 1979.

Staff

Academic staff comprised 126 full time and 42 part time members. Clinical teachers included some 250 visiting medical staff and 60 full time hospital medical staff in affiliated hospitals and approximately 250 general practitioners.

Honours and Distinctions

Professor A.L.A. Boura was awarded the degree of Doctor of Science by London University as a result of his published work in the fields of hypertension and pain. Professor D.M. de Kretser was appointed as a member of the Advisory Group to the Special Programme of Research, Development, and Research Training in Human Reproduction of the World Health Organization for the period of three years from September, 1980. Dr Bryan Hudson was appointed President

of the International Society of Endocrinology for the period 1980 to 1984. Professor C.I. Johnston was appointed Roche Visiting Professor for 1980 in the Department of Medicine, University of Auckland. Professor A.W. Linnane was elected a Fellow of the Royal Society for his pioneering work in the field of molecular genetics. Dr J. Maloney, Director of the Centre for Early Human Development at the Queen Victoria Medical Centre, won the 1980 Melbourne Rotary Club vocational service award for outstanding service to the community. Dr I.R. McDonald was awarded the degree of Doctor of Science by Monash University. Professor R.C. Nairn was reappointed Consultant to the Office of the President (Cancer Research) at the University of Texas System Cancer Centre, M.D. Anderson Hospital and Tumor Institute, Houston, Texas, U.S.A. Dr V.D. Plueckhahn was made an Officer of the Order of the British Empire (O.B.E.) for service to pathology. Dr U. Proske was awarded the degree of Doctor of Science by Monash University. Miss Lorna V. Sisely, Dean of the Clinical School at the Queen Victoria Medical Centre, was made an Officer of the Order of the British Empire (O.B.E.) for service to medicine. Dr E.H. Taft was made a Member, General Division of the Order of Australia (A.M.) for service to medicine, particularly

in the field of dermatology. Dr P.J. Tutton, was elected President of the Anatomical Society of Australia and New Zealand. Dr R.C. Webb, a member of the Faculty Board and Commonwealth Director of Health for Victoria, was made a Member, General Division, of the Order of Australia (A.M.) for service to the community.

Visitors

On 18 June 1980, a delegation of education officials from the Malaysian Government visited the faculty and matters relating to assistance to the new medical school in Penang, and the provision of medical training for Malaysian students were discussed.

During the year other visitors who spent longer periods at the University included Professor V. Chernick (Paediatrics) from the University of Manitoba; Professor M.A. Epstein (Pathology and Immunology) from the University of Bristol; Professor A.R. Frydman (Obstetrics and Gynaecology) from the Université Paris-Sud; Emeritus Professor L.E. Glynn (Pathology and Immunology) from the Canadian Red Cross Hospital, England; Dr D. Goodenough (Anatomy) from Harvard Medical School; Professor B. Jansson (Pathology and Immunology) from the University of Texas System Cancer Centre; Professor H. Margolius (Medicine) from the University of South Carolina; Professor A. Mines (Physiology) from the University of California; Professor P.J. Morris (Surgery) from the University of Oxford; Professor B. Nurcombe (Psychological Medicine) from the University of Vermont College of Medicine; Professor P. Quilliam (Pharmacology) from St Bartholomew's Hospital Medical School, London; Professor L. Roden (Biochemistry) from the University of Alabama; Professor A.M. Rudolph (Visiting Professor in the Faculty of Medicine for 1980) from the University of California; Emeritus Professor R.S.F. Schilling (Social and Preventive Medicine) from the University of London; Professor T.A. Sinnathuray (Obstetrics and Gynaecol-

ogy) from the University of Malaya; Professor R. Swerdloff (Anatomy) from the University of California; Dr M.L. Thong (Microbiology) from the University of Malaya; Dr D. Whittington (Obstetrics and Gynaecology) from the Medical Research Council, London; Professor Margaret Williams (Paediatrics) from the State University of New York; and Professor W.J. Williams (Medicine) from the State University of New York.

Curriculum

Following the most recent review of the content of the medical course chairmen of departments in the Faculty of Medicine have agreed that the possibility of commencing the present fourth year program in the final term of the third year of the course should now be examined in detail. Such a change provides an opportunity for expansion of existing programs of clinical teaching and also for clinical pharmacology, geriatric medicine, occupational health, rheumatology and rehabilitation, and forensic sciences, should the faculty determine that greater emphasis is needed in these areas.

It is recognised that, with the increasing specialisation found in a teaching hospital concerned with maintenance of the highest standards of clinical practice, many senior and experienced clinicians may be reluctant to involve themselves in the teaching of general medicine at the introductory level which characterises the fourth year of the medical course. However, it is at this stage that the foundations of future competency are laid and students should be encouraged to master important skills on which a capacity for clinical judgement depends under the guidance of teachers who will also supervise their studies at more advanced stages of the course and also at a postgraduate level.

It has already been agreed that students should, where possible, carry out both fifth year and sixth year studies at the same teaching hospital. It is understood that groups of

Associate Professor John Leeton (Obstetrics and Gynaecology) (*left*) assisted by Dr Graeme Atchison, prepares to collect an egg for fertilisation outside the womb. Monash University scientists and clinicians from the Queen Victoria Medical Centre and Royal Women's Hospital achieved Australia's first successful pregnancy by in vitro fertilisation.



students will be absent from a base hospital for quite long periods during studies in Obstetrics and Gynaecology and Paediatrics, while attending Fairfield, Royal Park and Larundel Hospitals, during elective studies and while gaining experience in Community Practice. Further absences from the base hospital are necessary if students are to gain experience of the sort that can be obtained in peripheral hospitals. Nevertheless, it is expected that the fifth and sixth years will be

part of a continuing experience for students and based importantly on a familiarity with the personalities, resources, routines and standards of excellence to be found at the one teaching hospital with which each student is mainly associated. It is not feasible to enable students to gain their clinical experience at the same teaching hospital for each of the three clinical years because of logistic reasons associated with teaching of Microbiology and Pathology in the fourth year. It

is necessary, therefore, to ensure that clinical teaching in the fourth year, wherever it occurs, follows the same general pattern.

It is generally agreed that at least part of the final year program for each student should contain a component which approximates as closely as possible to the pre-registration year which follows graduation and should provide an opportunity for assuming under close supervision the type of responsibilities to be met during the pre-registration year. The work load will be less than that assumed by a resident, for the less experienced student requires more time for assessment of patients and their disorders and requires still more time to become familiar with management procedures and to engage in private study. It is appreciated that the final stages of a long and demanding course of study ought also to provide an opportunity for students to identify and strengthen areas of weakness, to survey present and previous studies in the light of present and future obligations, and to prepare for professional responsibilities to be assumed shortly after graduation.

Vocational Training and Continuing Medical Education

One possible mechanism for developing co-ordinated programs of residency training is to establish a regional consortium of hospitals, possibly served by a Regional Director of Graduate Training with links to whatever organisations can provide vocational training outside the hospital system. A model for a development of this sort exists in the epicentre concept of teaching hospitals adopted by Monash University. Here a group of peripheral hospitals, each affiliated with the University in its own right, is associated with either Alfred or Prince Henry's Hospitals for the purpose of undergraduate teaching, an arrangement which provides opportunities for rotation of students. While the University does not seek to establish academic departments in the peripheral hospitals the Faculty

of Medicine has a responsibility to ensure that clinical teachers in these hospitals are involved in faculty decisions, that University support is given to developments directed towards better standards of patient care, and that the identity of the institution as perceived by the Board of Management and medical staff is maintained.

It is recognised that senior medical staff in hospitals may make their contribution to continuing education under the aegis of many different organisations and that the venue of programs offered will often be outside the teaching hospital. Nevertheless the Faculty of Medicine sees a need for a Centre for Postgraduate Activities and Continuing Education comprising lecture theatre, seminar and conference rooms, library and union type facilities.

Teaching Hospitals

All affiliated hospitals are affected by economy measures introduced by the Commonwealth and State Governments and at both Alfred and Prince Henry's Hospitals comprehensive surveys directed towards future roles have been carried out with these measures in mind. Options open to these and other affiliated hospitals will be influenced significantly by the responses of government to the recently published recommendations of the Commission of Enquiry into the Efficiency and Administration of Hospitals.

At the Annual General Meeting of the Queen Victoria Medical Centre held on 26 August 1980, the Minister of Health, the Honourable Mr W.A. Borthwick, reaffirmed the State Government's intention to relocate Queen Victoria Medical Centre at Clayton by the construction of a hospital of approximately 350 beds. Methods of funding this development are now under consideration by representatives of the Health Commission, the Queen Victoria Medical Centre and the University.

At Western General Hospital the possibility of establishing an Occupational Health

Monash professor of Biochemistry, Professor A.W. Linnane was elected a Fellow of the Royal Society during the year for his work in the field of molecular genetics research. Professor Linnane came to Monash University as a Reader in 1962. He has been a Fellow of the

Australian Academy of Science since 1972 and has published about 200 major papers. Membership of the Royal Society is restricted to scientists of eminence in their fields; there are about 500 members from Britain and the British Commonwealth and about 70 foreign members.



Unit is being examined. A conference on occupational health and safety services for industry, organised by the Department of Social and Preventive Medicine and held at the hospital on 6 November 1980 proved to be highly successful.

By agreement with the respective Boards of Management, students from Monash University attend the Dandenong, Frankston and Moorabbin Hospitals for clinical instruction. Negotiations directed towards formal affiliation between the University and these hospitals have continued during 1980. It is expected that an agreement with Moorabbin Hospital will be completed early in 1981.

Microbiology Building

The completion of the new Microbiology Building on campus in 1980 was an important development for both the Faculty of

Medicine and the Faculty of Science. The greatly improved facilities for teaching science students is welcomed and while academic staff in the Microbiology Department have the dual responsibility of teaching on campus (science students) and at Alfred Hospital (medical students), the department now has the advantage of better facilities in making its important contribution to teaching and research.

Research

The faculty continues to attract a significant proportion of funds allocated in 1980 for new and continuing projects by the National Health and Medical Research Council (\$707,608), and the Australian Research Grants Council (\$289,159) although both organisations were unable in 1980 to fund many grant applications from throughout Australia which would have gained support

in previous years. Research funds from other sources were \$1,025,988 and total outside support for the faculty was \$2,022,755. Research productivity as evidenced by publications in international journals of high standing gives cause for satisfaction, but the increasing costs of maintaining the present momentum in research and the fact that approximately 19 per cent of the income for the faculty now comes from outside sources emphasises the need for the faculty to maintain the highest standards of research activity if this support is to continue.

Program grants, a new system of grants introduced by National Health and Medical Research Council in 1979 and providing substantial support for five year periods, are held by Professors Burger and de Kretser, Professors Korner and Johnston, and Professor Thorburn. Of the first eight program grants awarded by N.H. & M.R.C., four were

obtained by academic staff at Monash University.

Ordinarily it would be invidious to refer specifically to any one of the many outstanding scientific contributions by academic staff in the Faculty of Medicine but during 1980 world attention was focused on pregnancies induced in teaching hospitals at Monash and Melbourne Universities following the process of *in vitro* fertilisation. The attention given in the media to more dramatic aspects of these developments has overshadowed the basic work and the scientific advances achieved by academic staff in the Department of Obstetrics and Gynaecology at the Queen Victoria Medical Centre. This work is highly important and is in the best tradition of medical science. It provides the scientific basis of future routine and relatively inexpensive procedures which are likely to overcome reproductive defects in a high proportion of cases of infertility.

Faculty of Science

Dean: Professor J.M. Swan, Ph.D. (Lond.), D.Sc. (Melb.), F.R.A.C.I., F.A.A.

Student and Staff Numbers

At 30 April 1980 the faculty had a total enrolment of 1,378 men and 867 women students in its undergraduate courses, and over 89 per cent of these were full time students. Some 53 students were enrolled in subjects 'not for degree' and the possibility of doing single subjects in this way seems to be increasing in popularity. Students can also enrol in subjects 'not for degree' at Monash in order to complete the requirements (with permission) of degrees in other universities. About 360 men and 122 women students were enrolled in M.Sc. and Ph.D. programs. Students enrolled for the M.Env.Sc. degree are no longer counted within the Science Faculty; during 1980 the Graduate School

of Environmental Science was given independent status.

The undergraduate and graduate teaching load of the faculty, expressed as equivalent full time students, has remained fairly constant over the last five years, the figures for the years 1976 to 1980 inclusive being 2,797, 2,562, 2,545, 2,575 and 2,630. Due to financial constraints the number of full time academic staff decreased from 191 in 1976 to 170 in 1977, and stands now (1980) at 173, a reduction of 9.4 per cent over four years. The numbers of part time academic staff (33 in 1980) have remained reasonably constant, as have the numbers of technical staff (136) and clerical staff (55).

Admission to Courses

The proportion of overseas students in the faculty has continued to rise, the numbers admitted to first year over each of the previous four years being 21 in 1977, 40 in 1978, 54 in 1979, and 97 in 1980. These numbers include both Science and Science/Law students. The faculty decided in 1980 not to impose a quota for overseas student admission in 1981 and meanwhile the University Council has received a petition urging that the legislative provisions for the imposition of faculty quotas for overseas students be abolished (with the exception of the quota of up to six places set by the Faculty of Medicine). The matter is still under debate within the University and while the government is encouraging a wider range of overseas students to seek undergraduate and graduate training in Australia, the individual universities differ markedly in their readiness to participate in this form of foreign aid. Many of the older universities have imposed extremely tight quotas on the admission of overseas students, while some of the newest universities seemingly get very few applications from such students, despite the willingness of these universities to accommodate them. It is hoped that the Australian Vice-Chancellors' Committee will address this problem.

Science Preparation and Employment Opportunities

The faculty continues to be concerned about the related problems of science preparation in the secondary schools, admission of the most deserving (and best prepared) students to our first year courses, and the balance of interest amongst those admitted between the physical-mathematical disciplines and the biological disciplines. The swing towards the biological subjects may now have peaked, and the imminent large-scale development of 'resources' projects in Australia, such as coal mining, aluminium smelting, coal-to-oil conversion and oil shale refining must mean an

increasing need for engineers, physicists, chemists, and mathematicians. A very high demand is already evident for geologists and computer scientists. The faculty can only hope that a greater proportion of secondary students who wish to be considered for admission to a science course at this University will study physics, chemistry, and mathematics through year 12. A 'science preparation' consisting only of biology and general mathematics in the final school year inevitably means a very restricted (and difficult) choice of university science subjects and an even more restricted choice of subsequent career opportunities.

Demand for biological scientists will, of course, continue and indeed in the special field of biotechnology (which includes recombinant DNA technology or 'genetic engineering') there is likely to be a shortage of suitably trained microbiologists, geneticists, and biochemists. Graduates in these disciplines will undoubtedly need a strong foundation in chemistry, physics, and mathematics if they are to master the new science of molecular biology and contribute to its further development and extension within biotechnology.

Staff

Professor H.C. Bolton completed his term as Associate Dean of the faculty and also a three-year period of service as Chairman of the Department of Physics. Dr Stella Crossley continued her joint appointment as Sub-Dean of the faculty and Senior Lecturer in Psychology; Professor B.O. West continued his joint appointment as Professor of Inorganic Chemistry and Pro-Vice-Chancellor. Professor J.M. Swan was elected President of the Council of the Victorian Institute of Marine Sciences, he was appointed to the Council of the Australian Academy of Science, and continued as a member of the Meteorology Policy Committee of the Department of Science and Technology, the Australian Research Grants Committee, and the Victoria Conservation

Professor Bruce Holloway (Genetics) and research assistant Mandy Moore examine a variant of the bacterium *Pseudomonas aeruginosa*, the isolation of which has made possible the transfer of genetic material between unrelated bacteria.



Trust. Mr R.B. Osborn retired from the position of Faculty Secretary; he gave long and valued service to the University and his wise counsel and administrative skills will be greatly missed. His post within Science has been filled by the appointment of Mr K.A.I. Huss, Pol.Mag., Fil.Kand (Uppsala), formerly Registrar at the Bendigo Institute of Advanced Education.

Other staff matters are recorded in detail in separate departmental reports. Particular mention should however be made of the very considerable involvement of staff in both educational and professional activities outside the University. These activities include participation in the affairs of societies such as the Australian Academy of Science, the Australian Academy for Social Sciences in Australia, Australian Society of Plant Phys-

iologists, the Australian Ecological Society, the Victorian Microbiological Association, the Chemistry Education Association, the Royal Australian Chemical Institute, the Society of Crystallographers in Australia, the Australian and New Zealand Society for Mass Spectroscopy, the Consortium for Ocean Geosciences of Australian Universities, the Royal Society of Victoria, the Geological Society of Australia, the Genetics Society of Australia, the Australian Computing Society, the Australian Mathematical Society, the Australian Institute of Marine Sciences, the Victorian Institute of Marine Sciences, the Astronomical Society of Australia, the Biometric Society, the School Mathematics Research Foundation, the Australian Psychological Society, the Australian Physiological and Pharmacological Society, the

Australian Society for Neurosciences, the Australian Institute of Physics, the Australian Institute of Energy, the Australian Society for Limnology, the International Theriological Council, the Australian Society for the Study of Animal Behaviour, the Royal Australian Ornithologists Union, and the National Museum of Victoria.

In addition, many staff have continued to be involved in the affairs of several Colleges of Advanced Education, and especially, the specialist subject panels and examination boards and other committees of the Victorian Institute of Secondary Education, and as members of editorial panels of numerous scientific journals. Staff members from all departments of the faculty read papers at local, national, and international meetings of scientific and professional societies.

Research

Research has continued at a high level; during 1980 the collective output of published work from the nine departments was 6 books, 361 articles in research or review journals, 27 Ph.D. theses and 12 M.Sc. theses. Staff continued to be very successful in attracting outside support for their research. The grants from outside bodies made possible the purchase of many essential items of research equipment and maintenance, and also the employment on a part or full time basis of an additional 57 professional staff, mostly

graduate research assistants and professional officers, but including 14 post-doctoral fellows.

More than 60 scientists from a wide range of overseas universities and research institutes visited the faculty for periods ranging from a few weeks to 12 months to take part in research and teaching programs. In addition numerous short term visitors from local institutions, from interstate, and from overseas contributed to vigorous seminar and lecture programs within each of the nine departments of Botany, Chemistry, Earth Sciences, Genetics, Computer Science, Mathematics, Psychology, Physics, and Zoology.

Faculty of Science Lectures

For several years the faculty has conducted a series of *ad hoc* lunchtime lectures on topical issues in science and technology, addressed to a non-specialist audience. The program continued in 1980 with lectures on population changes in animals, spectroscopy, *in vitro* fertilisation, and the future of world food supplies.

Degrees Conferred

In 1980 the University awarded the degree of Doctor of Science *honoris causa* to Emeritus Professor A.K. McIntyre, foundation chairman of the Department of Physiology in the Faculty of Medicine.

Library

Librarian: Mr T.B. Southwell, B.A. (Syd.), A.L.A.A.

Nineteen eighty was the year in which Monash University Library took into stock its millionth book. We try to be blasé about such a figure, insisting (rightly), that it is the quality, not the quantity of a library's stock that counts, but we are conscious that a small collection, no matter how well tailored to the needs of current research, can never have the width of interest to support on-going work. The challenge is before us; we can clearly no longer plead that we are an immature library in an immature university.

The book selected as the millionth was a fine incunabulum, *Mammotrectus Super Bibliam* by Johannes Marchesinus (Venice, 1476), presented by the Friends of Monash University Library at an informal evening in March. On the same occasion Blackwells of Oxford (friends and major suppliers to libraries world-wide), Monash's own bookshop, and the Monash Ex-Committee Club, who had, as committee members of the Monash Parents' Group become used to donating to the Library, all presented books of rarity, value, and visual delight. The occasion was a reminder, if a reminder was needed, of how much the Library owes to its many donors, as well as to its friends in the book trade.

Other indicators of health were less encouraging, though even here the Library seemed to be suffering less than many other institutions. Costs of books and periodicals continued to climb, with available funds rising more slowly. The previous year's cancellation program released enough funds to maintain the intake of books at a workable level; in areas where the cuts really threatened the viability of research work, most of the departments concerned made clear their concern by providing funds to back up their strong words. The position was difficult, but not impossible. There remains a serious problem, for now and the future. New periodicals are almost always sacrificed in

favour of existing subscriptions to known titles — in the name of continuity we encourage this. But so do other libraries, and already we are finding that some already reputable, though recent titles, are simply not held in Australia.

Rationalisation of resources is a glib phrase we use to explain away shortages. Such a situation now exists in Australia, and our inter-library loan figures begin to point up its effects. In 1979 Monash was, second only to the University of Adelaide, the largest lender, with 26,671 transactions; in 1980 the figure rose to 29,723. We borrowed 6,672, slightly more than in the previous year.

Loans within the University itself continued to increase, even though the user population remained almost static. The total was 640,358 as against 598,671 in 1979. Problems of overload and engineering failure at the Computer Centre at times made stressful what should have otherwise been fairly easy handling of the extra traffic. The loans system was extended during the year to the Law Library and, on a contract basis, to the State College at Burwood. An extension of the program allowed the system to be used as a stock-taking tool without the heavy labour cost usually required for the operation.

Use of on-line data bases, the Australian AUSINET; MEDLINE, mounted in Australia, though of U.S. origin; and the American DIALOG and ORBIT; continues to expand, though less quickly than had been hoped or feared. Library staff were involved as tutors in search techniques, not only for Monash staff, post-graduate and honours students, but also at a workshop conducted by the National Library. Extension of teaching to Honours students, at the beginning of their research life, is seen as particularly fruitful, and has been welcomed by the students themselves.

Reader education, for new students and

for those commencing research work has been an important part of the Monash Library year for some time now. In 1980 guided tours were conducted, particularly at the Main Library, and demonstrations given in an atmosphere rather like that of a product launching; 'Expo 80' was fun and attracted many more new students than was usual. In conjunction with this, audio visual package tutorials were prepared for many subjects, and presented either by Library staff or by subject lecturers briefed by the Library. The operation was generally rated highly successful, and our thanks must go to H.E.A.R.U. for their share in the design and production of the packages, and their help in evaluative studies of their effect. It is thought that some 4,000 students were exposed to formal instruction of this kind or by more traditional methods.

The intake of new books was reduced though, as mentioned above, this was not to a dangerous level. The raw figures are alarming: total intake fell from 53,859 volumes in 1979 to 39,533 in 1980. These were made up as follows:

	Books	Periodicals	Microforms	Total
1979	32,088	13,285	8,486	53,859
1980	22,237	10,116	7,180	39,533

The dramatic reduction in the figure for books represents an unfortunate fall of cataloguing throughput as much as of intake. The introduction of computer-assisted cataloguing through the CAVAL agency has been more stressful, and the learning period longer, than was expected; the attempt to maintain our card catalogue during the change-over period turned out to require virtual double cataloguing of many items, and machine produced cards themselves

needed vastly more editing than was expected. Further, the department suffered heavily from accidents, sickness and turnover of staff.

The card catalogue was closed toward the end of the year, and the first microfiche catalogues arrived. A considerable typing backlog was cleared, the new Anglo-American Cataloguing Rules are being absorbed, and the hope is that the period of frustration and worry is mainly over, and the staff can expect a time of consolidation. Development will, of course, continue, and experiments in on-line operation with the National Library of Australia are scheduled for the second half of 1981.

Development work of this kind has kept the E.D.P. unit busy throughout the year. The further expansion of the circulation system has been mentioned; first thoughts towards its updating or more likely replacement are now due. An improved budget procedure, to replace the version in use since the early seventies, is being developed, and re-specification of the acquisitions system is beginning. Present systems are run on the Computer Centre's Burroughs 6700, which is soon to be phased out, and re-writing is necessary to a VAX 11/740.

To maintain purchasing of books and periodicals at a viable level it was necessary to reduce staff by some nine persons, which was achieved by natural attrition; further, many permanent officers were replaced, on leaving, by temporaries or casuals, in order to maintain flexibility. All areas were affected, and it is a tribute to the staff as a whole, and to the supervisory staff in particular, that the Library remained a friendly place, intent on service. There were problems in 1980, but there is a confidence that they can be overcome.

UNIVERSITY FACILITIES

Alexander Theatre

The Alexander Theatre once again had a busy and varied year. A total of 331 performances, screenings or sessions took place in the theatre, and these presentations ranged from conferences and lectures to plays, musicals and concerts. Professional stage productions sponsored or negotiated included Chekhov's *The Seagull*, a season of the Aboriginal Islander Dance Theatre, Max Gillies in Barry Oakley's *Scanlan, Lions of Sand* by the Theatre des Jeunes Années, and the Marionette Theatre's version of *The Magic Pudding*. Amateur theatrical groups added works by Gilbert and Sullivan and Offenbach, and a stylish production of *Lock Up Your Daughters* headed by professional performers of the calibre of Frederick Parslow and Monica Maugham. The Monash University Musical Company contributed its own specially devised entertainment, *Coward on Coward*. In all, the theatre has offered diverse and stimulating fare, and the standard of production has generally been high.

There have, however, been some areas for concern. Children's theatre has always been a significant part of the theatre's contribution to the local community, but neither the summer pantomime, *Beauty and the Beast*, nor the May holiday's venture, *The Coles Funny Picture Book Show*, commanded the support of earlier productions, and the Saturday Club, whilst still popular, has been flagging slightly. It is possible that this is partly due to an ageing of the surrounding community providing fewer children of the appropriate age group. However, visiting productions such as the touring French production, *Lions of Sand*, and the marionette *Magic Pudding* added interest and variety to the program of children's theatre. In any case the theatre is committed to maintaining and improving the standards of its productions for children, and also to devising more efficient publicity designed to reach new audiences.

The theatre received a grant of \$10,000 from the Victorian Ministry for the Arts which was primarily devoted to a production of

Chekhov's *The Seagull* — thought to be the first professional production of this classic in Melbourne — directed by Malcolm Robertson. This was a considerable artistic success, and certainly of a standard comparable with the heavily subsidised Melbourne Theatre Company. The production attracted satisfactory audiences, but it seems likely that, given the continuing fragmentation of school English syllabuses, it is going to be more difficult to countenance full scale professional productions of such syllabus plays in the future.

It was disappointing that only one student production was staged in the theatre in 1980, the Monash University Musical Company's *Coward on Coward*. The flagging fortunes of student theatre are currently occupying the attention of the Committee which hopes to promote a revival in the future, and, in particular, greater student use of the Alexander.

The theatre has continued to improve its technical facilities, particularly in the area of lighting. Such patient upgrading of facilities over the years means that the University and the community have gained a theatre which is a valuable and reasonably flexible asset. It is also well served by its staff. The Alexander ended the year in a financially secure position and is well placed to meet the challenges ahead.

Robert Blackwood Hall

For the Robert Blackwood Hall, 1980 was the year of the Louis Matheson Pipe Organ. The organ, the builder Herr Ahrend, and his foreman Herr Schmidt arrived at the Hall on 3 January. The organ was completely re-assembled in 12½ working days and the voicing and tuning completed by mid-February, two weeks ahead of contract date. The inauguration ceremony was held on Tuesday 22 April in the presence of His Excellency, the Governor-General, Sir Zelman Cowen. The organ has added a new dimension to an already superb hall. Its presence is noted especially at graduation ceremonies, but it has not dominated the use of the hall.

The hall was in operation on 274 days to cope with 372 functions attended by 121,875 persons. Of this number, the majority were off-campus patrons. Of particular interest was a marked increase in school concerts.

The principal 'outside hirer' was again the Australian Broadcasting Commission with the Gold Series Concerts, schools concerts, 19 recording sessions and the State Final of the Instrumental and Vocal Competition. The City of Waverley continued its support of the Hall's free Sunday Afternoon Family Concerts and, in collaboration with the A.B.C., seven of these concerts were presented. One of the features of these concerts was the opportunity which they gave for young musicians to perform.

The hall continues to serve the campus and the community in important ways despite heavy burdens on its limited and loyal staff.

Monash University Bookshop

Gross sales in 1980 of \$1,524,720 were well ahead both of budget and of 1979 levels (\$1,484,560 and \$1,353,893 respectively). While this upward trend in sales is in itself pleasing, it offers no reason for complacency as, despite a containment of costs to less than the budgeted figure, a net profit of only \$1,952 (0.1 per cent) resulted from the year's operations. The bookshop operated at the Prahran College of Advanced Education continued to contribute to overall profitability.

Increases of approximately 15 per cent per annum in the general replacement cost of books are making it impossible to maintain a constant number of books in stock and still operate at break-even, or slightly better, levels.

Staff rationalisation continued, several positions being reorganised towards the end of the year to enable internal replacement of the Liaison Officer, Mr Theo Sambell, who retired after many years in that post.

Departments are to be congratulated for their co-operation in 1980 in returning well prepared booklists, often ahead of schedule, and this greatly assisted the smooth processing of orders for text books for 1981.

Two successful book launchings were held during the year; the first was for Sir Louis Matheson's *Still Learning* and the second for Professor Peter Boss' study of child abuse, *On the Side of the Child*, the latter coinciding with the opening of a Fontana Fortnight promotion.

Religious Centre

The establishment of chaplains for 1980 included the Reverend Father P. Knowles, O.P., Roman Catholic chaplain; Reverend D. Evans, Protestant chaplain, and Rabbi L. Wolf, chaplain to Jewish students, and Reverend V. Kleinig, Lutheran chaplain, both of whom were on campus two days per week.

During the year regular services continued to be held, including the daily celebration (except Saturdays) of Catholic Mass, daily Islamic prayers and weekly Lutheran and Protestant services. The weekly celebration of Anglican Eucharist was discontinued during second term.

Use of the Religious Centre by student societies was maintained at a high level, regular bookings being made for weekdays, evenings and weekends. In 1980 as many of these groups as possible were allocated a particular room (or a share therein) in the Religious Centre, and this proved a most successful arrangement. Bookings for weddings to be held in the Centre fell from 118 in 1979 to 109 in 1980. Most of these ceremonies were held in the Large Chapel, 89 of them incorporating the use of the organ in their services. The Centre was also the venue for several baptisms, a funeral and two memorial services. Many outside organisations continued to use the Centre for meetings or services.

The lunchtime Organ Recital Series was again held during second term, but was less well attended than in the past owing to the cold weather and the poor heating in the Large Chapel. (These will be scheduled during first term in 1981.) A most successful concert, in which the Chapel Singers and the Wednesday Consort participated, was held

in December, and the Autumn Festival of Organ and Harpsichord again included recitals by distinguished artists on the Centre's organ in its program.

Towards the middle of the year Mrs Vera Moore donated \$5,000 towards the purchase of a harpsichord for use in either chapel. It is pleasing to note that since then negotiations have been completed for the construction of an instrument at an estimated total cost of \$10,600 of which all but \$1,200 is already in hand. It is not expected that the harpsichord will be installed until 1983.

The writing of the history of the Religious Centre progressed well, the majority of it being completed by late in the year. It is hoped that 1981 will see its publication.

Careers and Appointments Service

The difficulties experienced by new graduates in obtaining employment during recent years eased markedly during 1980. The most recent figures available, those for 1979 graduates as at the 30 April 1980, show that unemployment amongst Monash graduates was exactly half that of the previous year. Much of the improvement in graduate employment can be attributed to a steadily increasing uptake by the private sector, and it is pleasing to note this increase applies fairly generally to graduates in all disciplines. Employment of graduates within the government sector has remained steady despite reports of tight expenditure controls.

The outlook for graduates is as follows:

Arts — Further training has been the likely outcome of an arts degree for many years. Over the last few years there has been a gradual decline in this activity due to uncertainty about the employment outlook for teachers. Unemployment amongst arts graduates is approximately equivalent to that for Monash graduates as a whole, i.e. about 4 per cent.

An increase in the number of mature age persons completing arts degrees may influence customary destination patterns in future years, although our experience of

employment of mature age graduates is not sufficient to indicate the likely nature of these changes.

Economics — Economics is regarded by employers as the qualification most appropriate to a career in business or management. The demand for economics graduates in the private sector has increased, and it is expected that some organisations will be disappointed with the results of their recruiting activities in 1981.

Engineering — Demand for engineering graduates has been very competitive with many employers expressing concern that their need for engineers will not be satisfied. Overseas companies maintained their enthusiastic efforts to recruit Australian graduates for employment in the United Kingdom, South Africa, Malaysia and Singapore.

Law — Destination statistics for law graduates reflect negligible unemployment. Chartered accounting firms have continued to show strong interest in graduates with the combined B.Ec./LL.B. and graduates seeking employment outside the legal profession find a solid demand particularly in banking and elsewhere in the private sector.

Science — Demand for graduates in physical sciences, which was strong in 1979, has strengthened throughout 1980. The decrease in the number of science graduates continuing to teacher training raises concern that there will be a shortfall of science teachers during the next few years.

Education — Conflicting public statements continue to confuse the outlook for those completing teacher training. A significant shift has occurred in the distribution of those employed as teachers. In 1980 non-government schools just shaded government schools as the largest employing group. In certain teaching method areas, such as mathematics, physics, chemistry, accounting, commercial and legal studies, and economics, an acute shortage of trained teachers can be expected.

In line with the improved outlook for graduates, casual and part time employment availability increased. Many employers now

Monash University held its first Careers and Counselling Day in August. 'C. and C. Day' will alternate each year with the traditional Open Day and will emphasise academic counselling and career information.



see vacation employment as an integral part of a successful graduate recruitment program.

The demand from prospective students for information made heavy demands on the staff, and the service undertook responsibility for the conduct of the University's first Careers and Counselling Day.

The service continued to produce a number of publications. The news-sheet *Careers Weekly* increased circulation to a high of 1,300 copies in one week during the year. Over 6,000 copies of other publications on law graduates, diplomates in education, graduate starting salaries, and aspects of job hunting were distributed during the year. These special publications were supported financially by employers.

Members of staff participated in short training programs during the year, as time permitted, and every effort will be made to ensure that staff members retain and develop their skills.

University Counselling Service

During 1980 there was an increase of 4 per cent in the number of clients seen, and also an 8 per cent increase in the number of hours spent in one-to-one counselling. The number of hours spent in group work declined significantly, due, on the one hand, to the fact that orientation programs for mature-age, part time, and overseas students were not conducted in 1980; on the other hand, a

staffing shortage for the first five months of the year greatly restricted the amount of counsellor time available for groups. Nevertheless, 12 Study Skills and Relaxation/Exam Anxiety Groups were conducted effectively. In addition, the staff of the unit provided a training program for the Careers and Appointments Service, and for the Student Contact workers. Staff were also called upon to teach within the Education, and Medicine Faculties.

Three significant problems have come to our attention. First, over the past four years there has been a significant increase in the number of students seeking help with study difficulties. Many students find the transition from secondary to tertiary education difficult, and have greatest difficulty in organising their time effectively. Secondly, a greater number of students are showing disillusionment at the prospect of not finding appropriate employment at the completion of their course, and in many cases this disillusionment is affecting their ability to study effectively. Thirdly, there was a 58 per cent increase in the number of overseas students using the Counselling Service in 1980. This, to some extent, is attributable to such students being more aware that our service is available, but, more particularly, recent changes in education and immigration policies have placed greater restrictions and pressures on overseas students. The Counselling Service intends to research this problem area in 1981.

The staffing deficiencies have been overcome, and the present staff have entered upon a time of review of the services currently offered to students and staff, evaluating their effectiveness and setting clear goals and aims for the next three years. We have already reviewed publicity of our services to students and produced a brochure which will be available to all first year students in 1981. We have attempted to broaden our contact with academic staff by inviting them to meet with us in small numbers, and these meetings have proved beneficial to both ourselves and the academic staff, and, indirectly, to students.

Students' Grants and Loans Committee

Of a total of 74 applications for assistance considered, 64 were approved in the form of loans or non repayable grants, compared with 75 approvals in 1979.

During the latter part of the year the Students' Loan Fund suffered a serious depletion of available funds due to a majority of applications being approvable only from that fund. As a consequence, some students who may have qualified for assistance from that source were referred to commercial lenders.

Council modified some restrictions of the Special Grants and Loans Scheme in October, thereby affording greater access to that scheme, and allowing most subsequent approvals of applications for assistance to be allocated to either of the two funds.

The aggregate amount of approved applications was \$74,498, compared with \$74,285 in 1979. \$77,116 was received in repayment of principal loans and \$15,826 was received in interest. Interest was received from borrowers and from investment of unutilised funds. Expressions of appreciation of past assistance continue.

Student Housing

The number of requests for assistance through the Student Housing Office, for housing and for advice, has remained about the same for the last five years (3,800-4,000).

Although requests for private home accommodation continued to decrease, the majority of the 14 per cent who still ask for this are first year students. The almost total lack of offers of this type of accommodation within reasonable distance forces these students to seek rooms in student groups. Not only do most of them lack the practical and psychological experience to cope with this type of living, but they are forced to compete on a very tight market with older students who are considered by agents and owners to be more desirable tenants.

In the matter of advice sought there has

been a distinct decrease in the number of legal queries since the students have become familiar with the existence of the Monash Legal Service.

The South-East Flats have become an accepted way of life among the student body. Occupancy for 1980 has been about 90 per cent and a large number of applications has already been received for 1981.

Halls of Residence

The Halls of Residence experienced a satisfactory year during 1980 retaining full occupancy throughout the academic year and a higher than average occupancy for the two short vacations.

The following trends are emerging, however, and are giving cause for concern. Student finances are becoming increasingly strained because of lack of casual employment, student allowances not keeping abreast of rising living costs and, for overseas students (approximately 40 per cent of residents), the impact of the annual visa fee which adds about \$30 per week to their expenses. One effect of this is a significant reduction in the number of meals served in Halls (11 per cent less than in 1979). Employment within the metropolitan area is very difficult to obtain during the long vacation, so more students are returning home to live during this period, and this has significantly reduced the number of residents in the Halls.

The number of conferences and those attending have declined because of increased competition from other centres and the decrease in funds, particularly in the educational field.

The cost of gas and electricity is absorbing an ever increasing percentage of the budget, 9 per cent in 1978, 11 per cent in 1979 and 12 per cent in 1980. Employees' award conditions outside of national wage case decisions are producing additional pressures which could increase the cost of labour in a highly labour intensive area.

The cost to the Halls of these emerging

trends and their effect on the fee structure is undoubtedly creating a significant management challenge for the future operation of the Halls.

Dr Stafford Kay, Warden of Deakin Hall was Chairman of the Committee of Wardens. At the close of the year, Dr Stafford Kay and Dr Bruce Allender resigned as Wardens of Deakin Hall and Roberts Hall respectively. Dr Logan Francey, a member of the Physics Department was appointed as Dr Kay's successor.

Health Service

Inspection of the consultations made in 1980 and the number of individuals who used the Health Service shows very little change in overall numbers from the preceding few years.

For many years there had been a decline in the numbers seen with psychological problems: 1980 showed the first significant rise since 1972. There does not appear to be any simple explanation for this, however the Health Service is still analysing the figures in the hope of isolating some of the factors involved in this rise.

Dr John Lanyon joined the Health Service in March, filling the vacancy created by the retirement of Dr C.E. Sawrey. In August Mrs Beryl Taylor resigned after nine and a half years as our receptionist.

Statistics for 1980 (1979 figures in brackets) were as follows: total attendances 21,669 (21,535) visits by 7,411 (7,124) persons. 4,169 (4,302) visits were made by 1,606 (1,556) staff members, 17,093 (16,795) visits were made by 5,562 (5,351) students, i.e. 39.5 per cent of the 14,096 total enrolments. 408 (438) attendances were made by 243 (217) visitors. In the psychological area 603 (490) students made 1,059 (921) consultations.

Aboriginal Research Centre

In keeping with its objectives to stimulate and undertake research into Aboriginal demography, legal status, health, education, em-

ployment, vocational training, housing and social change, the Aboriginal Research Centre continued to expand its activities in 1980.

The Elizabeth Eggleston Memorial Aboriginal Resource Centre increased its holdings to over 800 monograph titles, 150 periodical titles and some 2,000 pamphlet items. The collection of seminar papers, research and annual reports, as well as audio/video tapes and slides also increased. Use of the Resource Centre by staff, students and the general public rose sharply, particularly during the latter part of the year. Most noticeable was the increased use of the Centre by teachers from other institutions.

The Aboriginal Studies course once again attracted a full quota of students. Contrary to expectations, the lectures (which are also open to the public) continued to attract large numbers of the public, ranging from 60 to 200.

Requests for staff to lecture at other institutions, particularly teachers' colleges, other universities (including some interstate), schools and service clubs, became so numerous that it was necessary to redirect many of them to other departments or organisations.

The results of the following projects which involved Centre staff were published during the year: 'Aboriginal Bilingual Education: A Case Study of Schools in the Northern Territory and Several States', 'Evaluation of the Adelaide Aboriginal Community College', 'Before the Invasion', C.J. Bourke, C. Johnson and I. White.

The following projects were undertaken or expanded during the year. Aboriginal Studies: research into programs and needs of teachers conducting courses for Aboriginal and/or non-Aboriginal students in primary schools. Victorian Land Rights: A study of past and present land rights legislation and needs in Victoria. Aboriginal Language: The Bandjalang language program was reviewed and will be extended into more schools in Victoria. Adult Literacy: Research into the particular literacy needs of Aboriginal people

for their personal development. This is being conducted in three communities, including one interstate.

Ms B. Moore and Ms J. Bell attended the Three Nations Conference and Workshop — 'Development and Underdevelopment in Canada, Australia and New Zealand' organised by the Sociology Department, University of Canterbury, Christchurch, New Zealand.

Ms E. Fesi attended the inaugural Congress of the Société Françaises d'Aide aux Aborigènes Australiens in Perpignan, France, and became the Australian Secretary of the Société. It aims to assist Aboriginal people to take control of their culture by providing academic facilities for them to study in France. The first three students selected will work in 1982 with French archaeologist, Professor M. Lorblanchet, on the painted caves at Pech Merle.

In November, the Director of the Centre since 1977, Mr Colin Bourke, resigned to take up an appointment as the first General Manager of the newly established Aboriginal Development Commission in Canberra.

Computer Centre

Computer usage continued to increase during 1980 mainly due to the introduction of computer related topics in a wider range of undergraduate courses, and the provision of computing laboratories for undergraduates in Science, Economics and Engineering. The undergraduate laboratories provide access to the low cost MONECS computers used for running student assignments during introductory programming courses, and to interactive terminals connected to the University's larger computers for more advanced computing applications.

The Burroughs B6700, which has been operating in the Centre for the past seven years continued to carry a significant part of the University's computing load. It accounted for 63 per cent of the expenditure of departments, compared to 85 per cent in 1979, reflecting the substantial growth in load

on the VAX computers which was about three times that for 1979. As new programs are developed for the VAX computers and new data processing systems for the Administration and Library come into use, the significance of the B6700 will continue to decrease. It should be noted that generally the VAX computers do more per dollar than the B6700 and the percentage of expenditure on the two types of machine is not a reliable indicator of the amount of work. The VAX computers at the end of December, for example, supported about 300 terminals while the B6700 supported 128 terminals.

Additional computing facilities were planned for 1980. Towards the end of 1978, the University installed three VAX-11/780 computers, one in Economics and two in the Computer Centre. These are relatively low cost terminal-oriented systems which were used to provide computing facilities for teaching undergraduates in Economics, Engineering and Science (particularly Computer Science and Mathematics), as well as providing overnight turn-around for large research jobs on campus. Two additional VAX computers were installed during 1979; one to meet the work load of the Computer Systems Engineering stream to be introduced in 1980 and the other to be used to provide terminal access to Administration and Library data bases from departments around campus. A sixth VAX was installed early in 1980 for use as a research tool for Computer Science and for Computer Centre software development and maintenance.

A node to the CSIRO CYBER 76 was established towards the end of 1978 and used during 1980 to run large computer jobs for researchers on campus. The second-hand

Burroughs B6700 purchased by the University from the Gas and Fuel Corporation of Victoria has been sold to the Health Computing Service of Victoria as part of their move to new premises.

The locally developed MONECS (Monash Educational Computer Systems) were used extensively by undergraduates to run assignments during introductory programming courses and by postgraduates and senior undergraduates to provide remote batch entry of jobs to the B6700 computer. Twelve MONECS computers were available during 1980, four in the Computer Centre, three in Economics, one in Computer Science and four in Mathematics.

At the beginning of 1980 a total computing budget of \$1,059,963 (non-discretionary funds) was distributed to departments to purchase computing resources from the Computer Centre. In general, allocations were based on established usage patterns, with consideration given to new and significantly expanded projects. The charging scheme aims at recovering an average of \$100 per hour for B6700 time but introduces different rates based on priority of access to computing resources.

The following table shows the allocation of computing funds to faculties and actual usage during 1980. The total Fund Source I budget for the Centre in 1980 was \$1,047,427. Of this it is estimated that \$150,000 was spent on teaching and support services for which no charge is made. In 1980 a total of \$897,427 should be recovered which will lead to a rebate of 25.825 per cent and actual costs at 74.175 of those reported. Both actual usage and the adjusted values are listed in the following table.

1980 Computing Budget, Allocation and Expenditure
(Charging rates, \$100/hr for B6700, \$50/hr for VAX)

Faculty	Initial Budget	Final Budget	Actual Usage	Adjusted Value
Arts	20,475	22,635	19,318	14,329
Economics	117,450	117,450	144,677	107,314
Education	12,000	12,000	13,186	9,781
Engineering	250,395	294,255	244,277	181,192
Law	2,400	2,400	1,087	806
Medicine	36,397	42,446	37,993	28,181
Science	442,893	543,170	531,529	394,262
Administration	100,500	100,500	134,165	99,517
Library	71,093	71,093	80,207	59,494
Others	6,360	6,360	3,440	2,551
	1,059,963	1,212,309	1,209,879	897,427

Increased use of the B6700 and VAX computers together with reduced operating costs in the Computer Centre will allow the recovery rates to be reduced in 1981 to \$60-105 per hour for the B6700 and \$40 per hour for the VAX computers.

The above table does not include work run on the MONECS computers which were used during 1980 to run an estimated 200,000 jobs for undergraduates. In addition, the MONECS computers were used by staff and postgraduates as remote job entry terminals to submit approximately 25,000 jobs to run on the B6700.

Making a comparison at 1980 rates of \$100 per hour for B6700 and \$50 per hour for VAX, an expenditure of \$1,209,879 for computing resources during 1980 represents an increase of \$122,541 on the 1979 figure of \$1,087,338 (11.3 per cent). This level of increase, about half of the 33 per cent increase in 1978 and the 30.2 per cent increase in 1979, is the result of a change towards terminal and interactive use of the computers on campus, and the introduction of computing topics into a wider range of undergraduate courses.

Total expenditure for the year, including contract work but excluding Health Computing Services, amounted to \$1,491,939 of

which \$1,315,713 came from University recurrent funds and \$176,226 from the Centre's revenue earning activities. Revenue earning work accounted for 6.5 per cent of computing resources used on campus during 1980.

Centre for Continuing Education

During the year, the programs of the Centre became mainly concentrated in three fields: seminars for health care and welfare personnel, special short courses in engineering and adult language classes. The health care and welfare seminars continued to be successful; every one was fully booked and the program has gathered a significant reputation for its success in bringing together people such as social workers, clergy, psychologists, nurses, lawyers and police officers, to discuss topics of common interest. The program was designed by the Centre and has attracted a range of expert speakers from relevant fields of practice as well as from within the University.

The engineering short courses were designed by departments of the Faculty of Engineering. Again, these achieved a consistently high reputation and were always well supported. The range of language courses increased to 17 classes though, at the same time,

the number of community agencies which offered language courses also increased. The courses offered by the Centre differ from most others in that they make extensive use of the laboratory facilities of the Language Centre in the Arts Faculty. This means, however, that the Centre's fees are higher; despite this, the demand for such courses, both at beginners' and more advanced levels, continued to be strong.

Planning of two new program areas commenced. One is concerned with the establishment of a university-based Reading and Learning Centre, which could develop activities for a wide range of community audiences — both general and specialist. The other is a program of activities designed to meet the needs of small businesses. Monash University is surrounded by such enterprises and all the indicators of need for educational activities in this field strongly suggest that both the University and the business community would be well served by the introduction of a program attuned to these needs.

There have been many demands on the staff of the Centre for participation in conferences, in teaching activities and in consultancies concerning continuing education. This is a gratifying acknowledgement of the reputation which the Centre has achieved both for the nature of its work and as a Centre in which discussion and study of theory and process in continuing education accompany its practice.

Graduate School of Environmental Science

1980 was the eighth year in which the degree of Master of Environmental Science was offered. By including additional graduate level units from the Master of Engineering Science and the Master of Business Administration programs and others taught by staff of the

School, the number of units available for selection by candidates was increased to 91.

The School also mounted a course on Applied Ecology and Conservation for undergraduates of the Faculty of Engineering and one on Soils and Land Capability for Geography students.

Thirteen candidates (10 full time, 3 part time) have been involved in project work for which the research reports and minor theses will be submitted early in 1981. Topics studied were: Draft management plan for the Werribee Shire coastline; Nutrition education in Victorian High Schools; Impact of Hiritano Highway; Aspects of the administration of the Environment Protection Act; Low energy transport; and Environmental study of Heard Island.

As well as being involved in supervision of the above research teams, staff members have undertaken research into Materialism and the quality of personal life, Non technical constraints on energy conservation, and Uptake of metal cations by plants and their relevance to animal nutrition.

Two Monash Graduate Scholarships and two Commonwealth Postgraduate Course Award scholarships were awarded.

Dr E. Ealey, Director, presented a paper to the Environmental Section at ANZAAS on Environmental Education and Policy Formulation and attended the Conference. He also visited Papua New Guinea to negotiate a contract with the Government and to undertake research with one of the teams from the School. Dr Ealey continued to serve in a number of appointments outside the University as did other members of the staff.

Dr Nart Tuntawiroon, Dean of the Faculty of Environmental and Resource Studies at Mahidol University, Bangkok visited the School to arrange staff/student links with his faculty and to organise training of his staff at Monash.

Enrolment Information	Full time	Part time	Total
Enrolled at end of 1979	20	64	84
Number of applicants for 1980	35	54	89
Offers made	29	50	79
Acceptances	16	39	55
Total enrolled April 1980	22	94	116
Withdrew or deferred during 1980	3	15	18
Graduated	6	11	17
Total enrolled at end of 1980	21	93	114

Higher Education Advisory and Research Unit

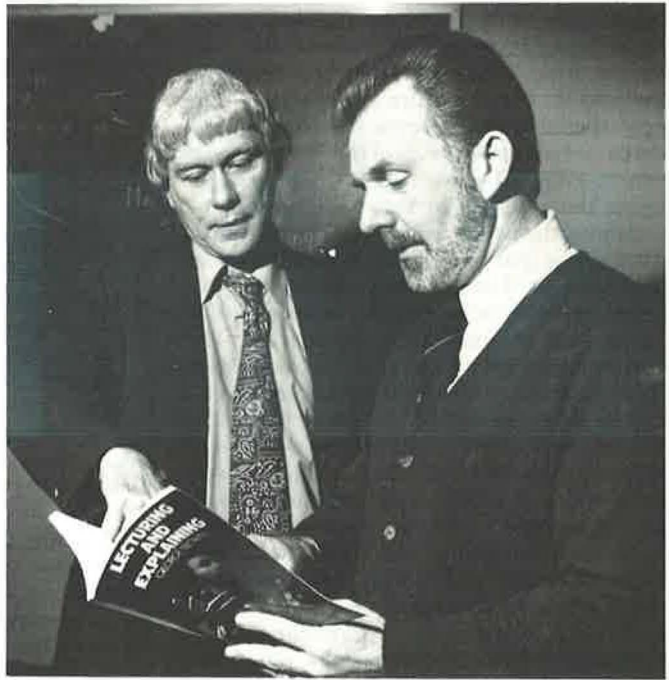
During 1979 and 1980 the Higher Education Advisory and Research Unit (HEARU) was the subject of an internal review, which recommended that a number of changes be made in the nature and emphasis of its activities and in its relationship to the University administration. Subsequently a HEARU Committee was established with the Deputy Vice-Chancellor as Chairman to advise the Director in carrying out the four principal functions of HEARU which were the giving of specific advice on the conduct of tertiary teaching; the counselling of individual staff members on problems they encounter in tertiary teaching; the provision to the University of general information and advice on tertiary education; and, the conduct of research into aspects of tertiary education.

HEARU is a centre independent of all faculties. The Director is responsible to the Chairman of the HEARU Committee, through whom he reports annually to the Professorial Board.

There was an increase in the number of projects involving departments or groups of staff; the tasks ranged from course evaluations to seminars on communication, to survey design and analysis and the analysis of multiple choice test data. Approximately 10 per cent of academic staff attended the in-service workshops conducted throughout the year. Two books, nine articles, eight conference papers and twenty-four internal reports were published during 1980.

The Thai Universities Lecturers' Scheme, funded by the Australian Development Assistance Bureau, brought thirteen academic staff from Khon Kaen University to Monash. For four months the Thais spent two days each week in HEARU taking a formal course on teaching and learning in higher education and they spent three days each week in the department of their discipline. HEARU staff also taught in the Faculties of Arts and Law, and in the Department of Anthropology and Sociology. Remedial English classes were conducted in several faculties and individual help was given to referred students.

Dr George Brown, Reader at the University of Nottingham and Director of Nottingham University's Teaching Service was one of the many visiting academics who lectured at Monash University during the year. Dr Brown (*left*) discusses a point with Dr Terry Hore (Higher Education Advisory and Research Unit).



STUDENT ACTIVITIES

Orientation 1980

Despite the problems created by the general financial stringency, Orientation 1980 proceeded along lines similar to those of previous years, with the traditional wide range of activities involving all parts of the University, from 5-7 March, with extra functions for part time and mature age students. The new special arrangements for country students proved effective, and the Host Scheme continued to grow, with about 1,000 new students being helped by some 120 hosts.

Among the new activities in 1980 were those directed by John Lane for M.A.S. Activities and Student Theatre throughout the program (and even beforehand), and the 'Friday Fiesta' built around the Friday market. The University Library Expo and the Oscar Mendelsohn Lecture were welcome additions on the academic side. On the other hand, the Joint Orientation Committee was relieved of responsibility for producing the diary/directory, which seems to have established itself throughout the University and even beyond.

Though budgeting was tight, fast-rising costs, especially in printing, left nothing to spare from the allocation. Nevertheless, the continued high level of participation in Orientation 1980 reaffirmed its value, not simply to new students, but to the University as a whole.

The Union — administration and general

In 1980 the Union operated on an expenditure budget of \$1,398,570 derived mainly from a Union fee of \$148 for full time students and \$92 or \$64 for part time students. As in the past, 25 per cent of the fee income was allocated to the Union Development Fund.

The liquidity of the Union Development Fund was improved by revenue from the sale of approximately 9.6 hectares of the Union's property at Bodley Street and from increased rentals on Union properties on campus. As a result, the Union was able to finance several

building projects in the sports and recreation area, as detailed in the report from the Sports and Recreation Association.

Expenditures on minor works and maintenance, in the central Union building, included replacement of a steam generator, replacement of dining chairs, purchase of a second-hand set of 35mm projection equipment, and the initial stage of development of a computer-applied costing system for the catering operation. On the recommendation of the University Energy Conservation Committee, the Union adopted a policy of outlaying capital expenditure on energy conservation in areas where the cost will be recouped within two years. This will involve expenditure in 1981 on mechanical and electrical services in the central Union building to effect economies in power consumption.

In the catering area, a computer-applied costing system was introduced to enable a quick response by management to fluctuations in materials and production costs. Special attention was given to food quality control in an effort to boost sales. While there was an improvement in food quality, it was not matched by an increase in custom, the inference being that many students cannot afford to buy prepared foods at today's prices. Faced with a catering deficit equivalent to 12.5 per cent of turnover in 1980, the Union Board has authorised economies in the catering operation in 1981 which may involve curtailment of some services. The Board is not prepared to continue subsidising the catering operation as this can only be done at the expense of other Union activities; it hopes to reduce the trading deficit to nil over a three-year period and, to this end, is relying heavily on the initiative of the Catering Manager. The alternative food operations, the Pantry and the Wholefood Restaurant, also returned deficit results although both continued to be well patronised.

The Union again produced a diary/directory but without the financial assistance which the University has provided in the past. Copies of the 1981 diary/directory are to be issued

to all students on enrolment, free of charge, and are to be available for purchase by staff and others at the bookshops.

The only significant change in the staffing establishment during the year was the appointment of a research assistant for the Monash Association of Students.

Following the development of student dental health services by La Trobe and Melbourne University Unions, the Monash Union is exploring the options for a dental health scheme for Monash students. In this investigation it will be guided by the experience of the other two university unions — especially in financial commitment.

The Union Board has followed with interest the course of the Liquor Control (Amendment) Bill — Tertiary Institution Licence, through the Victorian Parliament, as the resultant legislation will enable the Union to apply for a liquor trading licence during specified hours if it so wishes.

The Community Research Action Centre completed an Alpine Education project, aimed at furthering awareness of the need for a large alpine national park, and was concerned with the abortion, aboriginal and aluminium industry issues.

The new structure for Student Theatre, which now includes a committee, a co-ordinator and a director-in-residence, has proved to be very successful; the theatre groups have reported an exciting year of activities, including a variety of stage performances, street theatre performances, workshops and guest performances.

Monash Association of Students

In 1980, the Monash Association of Students operated effectively and with the continued support of students. Reduced government funding for education and welfare helped to make M.A.S. campaigns successful as students realised that student organisations were the only political grouping that was defending their right to education and adequate funding. The government increased the

T.E.A.S. allowance by 10 per cent in the 1980-81 budget. Later in the year, students again supported M.A.S. when a Students General Meeting denounced as racist the sub-quotas on overseas students used by some faculties. *Lot's Wife* provided much needed support for these initiatives as well as many other informative and provoking articles of interest to students.

The Activities Committee showed its usual enthusiasm by organising as many and as varied functions as its limited funding allowed. These were extremely popular with students and were well attended.

This was the first year in which M.A.S. had the benefit of a research assistant and it was possible to organise surveys of student income and expenditure and on the Health Service.

M.A.S. consolidated its base of student support in 1980 and can now look forward to an even better 1981.

Monash Association of Graduate Students

The Monash Association of Graduate Students (M.A.G.S.) continued to experience a significant increase in its activities. M.A.G.S. has been instrumental in building a cohesive, viable national organisation — the Council of Australian Postgraduates' Association, C.A.P.A. — to represent postgraduate interests. In January 1980 M.A.G.S. not only organised but also hosted the first National Conference of Postgraduates, at Monash University. The proceedings of the Conference were published by M.A.G.S. in a booklet entitled *A Record of the National Conference of Postgraduates and C.A.P.A. Annual General Meeting*. On the economic front M.A.G.S. has taken a leading role in campaigns against cutbacks in the numbers of scholarships and the sustained erosion in the value of scholarship awards.

Locally, major reorganisation of the committee structure of M.A.G.S. was effected. Instead of the structured 'executive' hier-

archy, M.A.G.S. now functions as a collective. Greater efforts were made to involve the postgraduate membership in the affairs of the association so as to make it more representative of their needs.

Two research officers were employed, sharing between them 25 hours of work per week. These changes in the association's structure resulted in greater efficiency and enabled the organisation to cope adequately with its widening activities.

Two main research projects were conducted, one on facilities available to postgraduates in the Arts Faculty and the other on the Graduate Student Grants (G.S.G.) Scheme. M.A.G.S. intends to consult the Science Faculty on ways to improve the facilities' provision for postgraduates in that faculty in 1981.

Clubs and Societies Council

Each year representatives of over 150 student clubs and societies elect eight to ten Council Executive members to administer a budget of more than \$100,000. This money is part of the Union funds raised from student fees and is used to subsidise functions and activities of all the affiliated clubs and societies. Weekly meetings of the executive apportion various fund allocations depending upon the projects desired to be undertaken by the various clubs. Further assistance to clubs is given through the employment of a part time Club Liaison Officer with experience in club organisation.

Reproduction of printed material is available to clubs through the Clubs and Societies Office which provides copiers, duplicators, typewriters and screen printing equipment. Social event assistance is given through the loan of urns, mugs, games, etc. and also video equipment.

Union Tuition and Summer School

Fourteen years ago the student Fine Arts Club began offering a few arts and craft sub-

jects to students. The venture soon became too large for the club to handle so the Union took over the administration of the courses. Later the annual Summer School program was added and all courses were opened to the public. With the opening of the Monash Arts and Crafts Centre in 1979 the program was greatly expanded to almost 200 short courses throughout 1980 plus another 150 courses in the Summer School. Further expansion is planned for 1981.

The objective of the department is to provide a range of activities for students, staff and the community within an environment which is conducive to teaching more than just hobby courses. The high quality of tuition thus required is achieved by engaging practising professional artists and crafts people for each of the specialist subjects.

Sports and Recreation Association

The level of use of the Sports and Recreation Centre continued to increase during 1980. The growth in interest in physical activity as noted in previous reports shows no sign of diminishing. This extra participation in physical recreation has not been confined to specific activities but has affected most of the competitive sport teams as well as both organised and casual recreational programs.

Since the centre was extended in 1977 to include a coffee lounge and meeting rooms it has become a social centre for members of the University and overseas students in particular.

Eight artificial surface tennis courts, complete with floodlighting for evening play, were completed late in the year. These are in such constant use from early morning until late evening that consideration will have to be given to providing additional courts in the near future. The association was heavily involved in planning further development of the sports and recreation complex and contracts for three new squash courts and three sets of changing rooms were let during the

A picture framing class at one of the courses conducted in the Arts and Crafts Centre.



year. Detailed planning of the proposed indoor heated twenty-five metre swimming pool was also completed and tenders will be called early in 1981.

Local community and school groups continued to use the facilities. This demand is becoming increasingly difficult to satisfy within the limited times where such use does not unduly interfere with student requirements.

It is an indication of the extent of this community service (which is often provided free), that an average of one hundred members of the general public use the facilities each day

of the year. The complex is now an established focal point for coaching classes and seminars conducted by many of the State governing sports bodies. Accommodation for these groups is often provided in the Halls of Residence.

Monash teams were represented in the usual wide range of local and intervarsity competitions but without the same success rate as it has been customary to report. The high cost of maintaining their activity, over and above the grants available from the association, is proving a real difficulty for individuals and clubs.

GIFTS AND GRANTS

The following gifts and grants were received by the University:

Alcoa of Australia Limited		
1980 instalment of 2-year grant, research student scholarship for the project: The flow characteristics of highly concentrated red mud suspensions, awarded to Mr Quoc Dzuy Nguyen, Honours IIA Engineering graduate, under the supervision of Dr D.V. Boger and Dr P.H.T. Uhlherr (Chemical Engineering)		6,075
Alexander Foundation, The George		
in support of research project: Development of a treatment for viral diseases and cancers by cloning of human interferon genes, being conducted by Professor A.W. Linnane (Biochemistry)		5,000
Alexander, Mrs Ruth D.		
final payment, cost of furnishings, Artists' Rooms, Robert Blackwood Hall	1,000	
first instalment against \$10,000 Geoffrey Alexander Postgraduate Research Scholarship in Hydrology (named after her late husband) to be supervised by Professor Eric Laurenson (Civil Engineering)	2,000	3,000
Alfred Hospital		
grant-in-aid for the purchase of a calculator/printer for attachment to the Nuclear Chicago Counter, Dr M. Howard (Medicine, Alfred Hospital)	2,200	
towards the cost of computer programming for the colo-rectal project being conducted by Professor Sir Edward Hughes, Associate Professors McDermott and Pihl (Surgery)	1,000	3,200
Angliss William (Victoria) Charitable Fund, The		
to be used solely for the benefit, objects and purposes of Orthopaedic and Traumatic Surgery Research being conducted by Associate Professor J. Clark McNeur (Surgery, Alfred Hospital)	4,000	
to fund the Angliss Enrichment Program (Krongold Centre)	500	4,500
Anti-Cancer Council of Victoria, 1980 research grants		
Doctors P.J.M. Tutton and D.H. Barkla (Anatomy)	20,000	
Dr M.B. van der Weyden and Mr I. Jack (Medicine — Alfred Hospital)	23,382	
Professor C.I. Johnston (Medicine — Prince Henry's Hospital)	7,859	
Associate Professor H.K. Muller and Dr B.H. Toh (Pathology and Immunology)	13,000	
Professor R.C. Nairn and colleagues (Pathology and Immunology)	40,626	
Professor Sir Edward Hughes, Associate Professor F.T. McDermott and E.A.V. Pihl	13,500	
Dr A.L. Polglase and Professor Sir Edward Hughes (Surgery — Alfred Hospital)	4,150	
Supplementary grant for 1979 to cover unavoidable pay rises (Pathology and Immunology)	480	122,997
Aspendale Technical School		
to assist the Spina Bifida research project being conducted by Associate Professor MacMahon (Paediatrics)		100
Asthma Foundation of Victoria, The		
student Vacation Scholarship awarded to Mr Mark Tuck, medical student, working on research project concerning Sense of Effort		

in Breathing, under the supervision of Dr R. Westerman (Physiology)	480	
1980 research grant to Dr R.A. Westerman (Physiology)	1,230	1,710
Astra Chemicals Pty Ltd		
for use in research activities and to appoint part time research fellows, Professor N.E. Carson (Community Practice)		11,707
Australia-China Council		
for travelling exhibition of photographs of China (Education)		6,500
Australia-Japan Foundation, The		
travel expenses Professor Takeshi Abe, Tokyo-Melbourne and return (Medicine, Alfred Hospital)	2,600	
in support of student travel to Monash Japanese Centre in Tokyo (Japanese)	4,000	6,600
Australian Asian Association of Victoria		
1979 prize in Japanese to Miss E.A. Sayce	50	
1979 prize in Indonesian to Mrs L.J. Fish	50	100
Australian Associated Breweries, The		
grant-in-aid for research project: Is alcohol a neurotoxin? conducted by Dr B.G. Cragg (Physiology)		10,544
Australian Engineering and Building Industries Research Association for Wind Engineering Research being conducted by Professor W.H. Melbourne (Mechanical Engineering)		5,000
Australian Humane Research Foundation, The		
first grant awarded by the Foundation; for the building of diffusion apparatus, Dr W.D. Comper (Biochemistry)		1,500
Australian Institute of Nuclear Science and Engineering		
supplementation for July 1980 National Wage Increase, Dr E.M. Gray (Physics)	172	
AINSE Studentship payments to Mr P.I. MacKinnon (Chemistry)	2,340	
AINSE Fellowship, Dr E.M. Gray (Physics)	4,261	6,773
Australian Kidney Foundation, The, 1980 grant projects:		
role of vasopressin in hypertension, Professor C.I. Johnston	7,000	
study of the renal, haemodynamic and hormonal effects of dopamine, Dr B.P. McGrath	4,500	
Kallikrein-kinin system in human renal disease, Dr P.G. Matthews (Medicine, Prince Henry's Hospital)	5,000	16,500
Australian Liliun Society, The		
for the purchase of a Volpi fibre optic lamp to assist with the project: Research on liliun chromosomes, being conducted by Dr D.R. Smyth (Genetics)		528
Australian Neurological Foundation		
for purchase of Hewlett Packard Preamplifier to be used to assist with the project: Development of respiratory control before and after birth, being conducted by Dr J.E. Maloney and Associate Professor T.M. Adamson (Research Centre for Early Human Development)		1,243
Australian Mutual Provident Society		
share collection costs of the 1980 STEP data project conducted by Associate Professor Frank Lawson (Chemical Engineering)		661

Australian Road Research Board		
1979/80 project: Delineating the way ahead at night, Dr T.J. Triggs (Psychology)	15,938	
for project No. 301: Transport investment and residential location choice, Dr K.W. Ogden (Civil Engineering)	3,804	
reimbursement of expenses for the project: Signalised intersection survey method, Mr A.J. Richardson (Civil Engineering)	14,214	
final payment for project: Car pooling and geographic structure, conducted by Mr A.J. Richardson (Civil Engineering)	150	
project No. 302: Analysis and appraisal of freight generation characteristics, Dr K.W. Ogden (Civil Engineering)	2,141	36,247
Australian Synthetic Rubber Co. Ltd		
first instalment of Mr K.W. Lee's 2-year postgraduate scholarship and research grant for the project: The flow properties of polybutadienne cements, under the supervision of Dr D.V. Boger (Chemical Engineering)		7,700
Australian Tobacco Research Foundation		
for the project: A study of the effects of cigarette smoke and its constituents on the removal and release of prostaglandins and thromboxanes by the lungs, being conducted by Professor A.L.A. Boura (Pharmacology)		16,823
Australian Vice-Chancellors' Committee		
visiting Fellowship to enable Professor Matsushita to visit Australia to teach Japanese Law (Japanese)	3,000	
incentive grants to departments in recognition of their roles as consultants under the Australian-Asian Universities Co-operation Scheme, Professor W.A. Rachinger (Physics)	1,600	
Associate Professor A. Williams (Mechanical Engineering)	1,600	6,200
Australian Welding Research Association		
for projects: Long term properties of adhesive joints in PVC pipes, Associate Professor B.W. Cherry (Materials Engineering)	2,525	
micro structure of welds in polyethylene pipes, Mr S.J. Barton (Materials Engineering)	1,750	4,275
Baker, Thomas (Kodak), Alice Baker and Eleanor Shaw, Benefactions to help purchase computer for use with the Fluorescence Activated Cell Sorter, Professor R.C. Nairn (Pathology and Immunology)		10,000
Baxter Charitable Trust, Percy		
towards the cost of equipment and building alterations for In Vitro Fertilisation project under the direction of Professor C. Wood (Obstetrics and Gynaecology, Queen Victoria Medical Centre)		3,000
Behrend, Mrs D.		
for the work of the Krongold Centre		100
Berg, Mrs I.		
for Colo-rectal research, Sir Edward Hughes (Surgery)		60
Bertha Bennett Estate		
legacy bequeathed to Monash for general purposes		2,000
Boehringer Ingelheim Pty Ltd		
part payment of \$41,000 grant, for project: Studying the influence		

of compound NA872 on the development of the respiratory system, being conducted by Dr J.E. Maloney (Research Centre for Early Human Development, Queen Victoria Medical Centre)		31,000
Boura, Professor A.L.A. personal contribution to department funds (Pharmacology)		400
Brockhoff Foundation, The Jack to fund the Jack Brockhoff Experimental Visual Training Program (Krongold Centre)		2,500
Broken Hill Proprietary Company Limited contribution towards attendance at the Fourth International Conference on Titanium Alloys held in Japan, May 1980, Professor I.J. Polmear (Materials Engineering)		650
1980 grant for Mr B. Bolton's Research Fellowship work on Dr L.A. Frakes' project: Genesis of Groote Eylandt Manganese Ores (Earth Sciences)	21,577	
half stipend support, research scholar Mr Barburamani, project: Microstructural control of mechanical properties of dual phase steels, being conducted by Dr R.A. Jago (Materials Engineering)	2,310	
contribution towards the visit of Professor H.C. Rogers, from Drexel University, Philadelphia, U.S.A. to Materials Engineering	4,000	
BHP Prize for Proficiency — 2nd Year Materials Engineering, shared between Miss S.M. Choo and Mr B.M. Jenkins	100	28,637
Buckland Foundation, The William to fund the William Buckland Enhancement of Life Program (Krongold Centre)		10,000
Carlton and United Breweries to Sun Dial Project, University Union		100
Carnation Company Pty Ltd 1979 Carnation Company's award in Paediatrics to Mr D.J. Mutimer		50
Cato Charitable Fund, Fred J. to assist the work of the Krongold Centre		100
Certus Club, The (A.M.P.) towards the purchase of a sight saving typewriter for the Krongold Centre		250
City of Waverley contribution to cost of Pavilion in Jock Marshall Zoological Reserve, Professor J.W. Warren (Zoology)		500
Coles and Coy Limited, G.J. towards the cost of purchasing an item of equipment for cancer research project, Doctors D.H. Barkla and P.J. Tutton (Anatomy)		500
Collier Charitable Fund for the purchase of a micro-balance (Paediatrics)		6,000
Comalco Limited second instalment postgraduate scholarship commenced 1979, research project: To investigate the mechanical behaviour of aluminium alloys under conditions typical of industrial forming processes, with a view to understanding and exploiting the effects of strain rate sensitivity, Dr B.A. Parker (Materials Engineering)	5,350	

supplementary payment to cover extension of scholarship, project: Post-yield deformation behaviour of aluminium alloy, conducted by Mr P.W. Beaver under the joint supervision of Dr B.A. Parker and Dr J.R. Griffiths (Materials Engineering)	1,050	
to continue research into fatigue crack propagation of cast aluminium alloys under the supervision of Dr J.R. Griffiths (Materials Engineering)	5,300	
for continuation of project: Mossbauer spectroscopy of Bauxites, Dr P.E. Clark (Physics)	5,000	
shared collection costs of the 1980 STEP data project, conducted by Associate Professor Frank Lawson (Chemical Engineering)	661	
renewal of research grant relating to: Studies into high strength, high conductivity aluminium alloys, conducted by Mr G. Thomson under the supervision of Dr P.L. Rossiter (Materials Engineering)	5,500	22,861
Commercial Bank of Australia Limited		
1979 Prize in Psychology, awarded to Miss B.J. Macreadie		50
Commonwealth Development Bank of Australia		
for project: Automatic sprinkler system, conducted by Dr R. de Laine and Mr W. Geary (Mechanical Engineering)		4,500
Commonwealth Government		
Aboriginal Affairs, Department of		
for the research project: Aboriginals & The Prison System, Mr C. Bourke and Mr R.J. Merritt (Aboriginal Research Centre)	10,724	
for operational costs 1979/80 (Aboriginal Research Centre)	48,400	
additional grant for Kevin Gilbert Community Development Re- search Program (Aboriginal Research Centre)	4,865	
first instalment for 1980/81 for operational costs of Aboriginal Research Centre	11,000	74,989
Australian Chicken Meat Research Committee (Department of Pri- mary Industry)		
balance 1979/80 research project: Tibial Dyschondroplasia, Pro- fessor D.A. Lowther (Biochemistry)		5,000
Australian Wool Corporation (Department of Primary Industry)		
second half-yearly instalment 1979/80 grant: Macrocyclic metal complexes based on amino acids — possible new dyes for wool, Dr D.StC. Black (Chemistry)		11,757
Curriculum Development Centre		
supplementary grant towards cost of publications: Bibliography on English Teaching, Dr D. Davis (Education)		394
Hospitals and Health Services (Department of Health)		
second half of research grant for project: The clinical, social and psychological needs of cancer sufferers in Australia (Social and Preventive Medicine)		8,000
Minerals and Energy, Department of		
payment Queen Elizabeth II Fellowship, Dr E. Cartwright (Biochemistry)	20,289	
payment Queen Elizabeth II Fellowship, Dr J. Rostas (Biochemistry)	14,127	
contribution to expenses of visit to U.S., U.S./Australia Co-operative		

Science Program, to undertake research with Professor M.M. Denn at the University of Delaware, Dr D.V. Boger (Chemical Engineering)	2,767	
research grants for project: Wave prediction in the Southern Ocean and Bass Strait, 1979/80 — \$8,380; first half 1980/81 — \$24,662; being conducted by Doctors J.B. Hinwood, D. Blackman and G. Leonart (Mechanical Engineering)	33,042	78,225
Social Security, Department of salary subsidy 1980 (Krongold Centre)	9,222	
for Mental Retardation Project: Work preparation for the mentally retarded, 1979/80, 1980/81, being conducted by Dr R.C. King and Mr S.C. Sykes (Education)	48,000	
final payment of subsidy on Krongold Centre Building	10,583	
building maintenance subsidy (Krongold Centre)	4,223	
equipment subsidy (Krongold Centre)	1,263	73,291
Tertiary Education Commission instalment, research project: Evaluative study open-access storage of printed library materials in University libraries, being conducted by Professor J. Whyte (Graduate School of Librarianship)	6,920	
for the project: An evaluation of college-based courses in Nursing, being conducted by Dr J.T. McArthur 1979/80 (Education)	64,789	71,709
Transport, Department of to cover extensions to research project: Legal implications of frangible poles (electric & power) being conducted by Mr J.A. Epstein (Law)		5,528
Wheat Industry Research Council, Australian (Department of Primary Industry) 1980/81 research grant for the project: Plant armour plate: Polysaccharide-phenol complexes in the cell wall and their involvement in resistance to attack in the wheat root and wheat grain, being conducted by Dr T.P. O'Brien (Botany)		14,365
Country Women's Association of Victoria towards Spina Bifida Research, Associate Professor R.A. MacMahon (Paediatrics)		200
C.R.A. Limited shared collection costs of the 1980 STEP data project, being conducted by Associate Professor Frank Lawson (Chemical Engineering)		661
Criminology Research Council second payment, research grant for the project: Victorian sentencing law, being conducted by Messrs R.G. Fox and A. Freiberg (Law)		1,500
C.S.R. Chemicals Pty Ltd 1980 C.S.R. Chemicals Prize	200	
shared collection costs of the 1980 STEP data project, conducted by Associate Professor Frank Lawson (Chemical Engineering)	661	861
Daly, Mrs V. to Human Behaviour project, Dr E.S. Wertheim (Paediatrics)		125
Davidson, Dr Elizabeth W. grant-in-aid for research, Dr E.W. Davidson, Arizona State University		

(Zoology)		899
Dehnert, Estate of the late Mr P.E. in support of the work of the Krongold Centre		1,000
Dimet Cathodic Protection and Technical Services to facilitate the attendance of Mr A.S. Kashmirian at the Adelaide Conference of the Australian Corrosion Association (Materials Engineering)		150
Education Development Centre at Monash part payment of research grant for 1980/81: Evaluation of E.D.C.M. Development and Activities, under the supervision of Mr L. Ingvar- son (Education)		200
Eggleston, Lady to the Aboriginal Research Centre		500
Electricity Supply Association of Australia, Electrical Research Board second half, 1979 grant, project: Control and optimization of large power systems, being conducted by Professor K. Morsztyn (Elec- trical Engineering)		3,500
Elizabeth Eggleston Trust for Aboriginal Natives of Australia to the Aboriginal Research Centre		4,770
English Setter Association for leukaemia research, Professor A.C.L. Clark (Paediatrics)		40
Equity Trustees Executors and Agency Company Limited, The further disbursement from the Estate of the late Lady Edith Eliza Moore		5,000
Esso Australia Limited for the advancement of Earth Sciences in the fields of Geology and/ or Geophysics, Professor B. Hobbs (Earth Sciences)	2,600	
1980 Esso Student Scholarships of \$500 each awarded to Mr C. Bon- wick and Mr J. Long (Earth Sciences)	1,000	
for the work of the Department of Chemical Engineering	4,000	
for the work of the Faculty of Engineering	1,000	
travel grant to Professor I. Polmear (Materials Engineering)	250	8,850
Farrell, Mr B.W. to Special Education Fund (Education)		20
Farrell, Dr and Mrs T. Belinda Farrell Community Practice Prize — an amount of \$100 is to be awarded annually to the Fifth Year student who completes the best project in Community Practice (Social and Preventive Medicine)		1,500
Fensham, Professor P. for the project: Curriculum Studies: Theory and Practice of specific studies, to be investigated by staff of the Faculty of Education		500
Ford Foundation per Howard Florey Institute instalments for the project: Embryogenesis, Professor E.C. Wood (Obstetrics and Gynaecology)		3,964
Ford Motor Company of Australia Limited 1979 Ford Prize for Third Year Mechanical Engineering, awarded to Mr E.J. Ward		50

Forelanders Trust			
towards student travel to Japan (Japanese)			1,250
Fuller, Mr N.L. and Mrs P.T.			
to Muscular Dystrophy research, Dr L. Austin (Biochemistry)			70
French Embassy — Canberra			
to the <i>Australian Journal of French Studies</i> (French)			649
Game, Mr and Mrs S.P. and Family			
to Department of Medicine, Alfred Hospital, for Dermatological Research in memory of the late Mr A.F. Vickers			25
Glaxo Australia Pty Ltd			
for gastrointestinal research project, Dr J. Hansky (Medicine)			7,500
Grange, The Estate of the late Paul			
final distribution of the Estate to be used to fund the Paul Grange Visiting Fellowship (Medicine)			2,034
Gutteridge, Haskins and Davey Pty Ltd.			
in recognition of the use of the study area, Monash Zoology field station at Lake Coragulac (Zoology)			500
Hallenstein Charitable Fund, Rose			
to the In Vitro Fertilisation project being conducted by Professor C. Wood (Obstetrics and Gynaecology)			5,000
Harcourt Brace Jovanovich Group (Australia) Pty Ltd			
for biomedical research, Professor A.W. Linnane (Biochemistry)			9,400
Hecht Trust, H. and L.			
for project: Development of a treatment for viral diseases and cancers by cloning of human interferon genes, Professor A.W. Linnane (Biochemistry)		10,000	
to underwrite the H. and L. Hecht Motor Skills Program being conducted by the Krongold Centre (being the second of two such grants)		12,000	
towards cost of equipment and building alterations for In Vitro Fertilisation project under the direction of Professor C. Wood (Obstetrics and Gynaecology, Queen Victoria Medical Centre)		2,000	24,000
Herald-Sun TV Pty Ltd			
first of three annual payments for project: Research on children and television, being conducted by Dr M. Nixon and Mr A. Mackenzie (Education)			20,000
Herald, The			
contribution to the Louis Matheson Pipe Organ Fund, used to help defray the cost of the commemorative booklet produced for the inauguration.			1,000
Herdwise Limited			
for the project: Sexing of Semen, Dr A.O. Trounsen (Obstetrics and Gynaecology)			1,000
Hoechst Australia Limited			
towards diabetes research, Professor J. Bornstein (Biochemistry)			2,000
Holland, Sir John			
to the Krongold Centre, to assist one child in the H. and L. Hecht Motor Skills Program			250

Hughesdale Art Group to centre for Continuing Education			10
I.B.M. Australia Ltd in support of the work of the Krongold Centre			3,750
I.C.I. Australia Operations Pty Ltd I.C.I. Pseudomonas project, Professor B.W. Holloway (Genetics)	16,593		
in support of work performed in conjunction with consultancy work by Dr R.F.C. Brown for I.C.I. Australia Operations Pty Ltd (Chemistry)		400	
travel grant towards attending International Conference on Titanium in Japan, Professor I.J. Polmear (Materials Engineering)		200	
shared collection costs of the 1980 STEP data project, conducted by Associate Professor Frank Lawson (Chemical Engineering)	661		17,854
I.C.I. Limited (U.K.) towards travel expenses to Third International Symposium on the metabolism of CI compounds, Professor B. Holloway (Genetics)			1,872
I.M.I. Titanium Pty Ltd towards costs relating to attending Titanium Conference, Japan, Pro- fessor I.J. Polmear (Materials Engineering)			200
Ingram Trust, The M.A. travel grant, towards the costs involved in collecting specimens of Nyctophilus (Chiroptera) — Bats — in various areas of Victoria, Dr J.N. Nelson (Zoology)		600	
additional grant for the project: Aspects of the population ecology of small native mammals, conducted by Associate Professor A.K. Lee (Zoology)	2,032		2,632
Institution of Chemical Engineers in appreciation of the co-operation with the 'Chemeca 80' Conference held at Monash (Chemical Engineering)			400
International Planned Parenthood Federation part payment of \$14,737 research grant for: Studies on Antibodies to the Zona Pellucida of Human Eggs in relation to Infertility and Contraception, conducted by Dr A. Trounson (Obstetrics and Gynaecology)			7,474
Japanese Chamber of Commerce and Industry 21 cheques received through the Japanese Chamber of Commerce, Melbourne, as a contribution by Japanese companies to the 1980 operation of the Monash Japanese Centre in Tokyo covering stu- dent travel to Japan; includes Japanese Chamber of Commerce and Industry's cheque for \$2,000, Professor J. V. Neustupný (Japanese)			4,100
Kellogg Foundation, W.K. in support of the Biomedical Library/Australian Hospital Association Reference Centre			53,243
Kelp Harvester's Association further contribution for the project: The growth, reproduction and natural resources of Durvillia Potatorum, Dr G.A. Scott (Botany)			2,000
Komon, Mr R. towards research, Professor P. McCaughey (Visual Arts)			850

Krongold Parents and Friends Association for the purchase of curtains for the Creativity Program (Krongold Centre)		2,136
Latrobe University to assist with the publication of <i>Australian Journal of French Studies</i> (French)		100
Leahey, Mr D.B. for the work of the Krongold Centre		500
Life Insurance Medical Research Fund of Australia and New Zealand, The reimbursement of first 100 reprints of Dr Adrian Walker's article: Age-dependent pattern of autonomic heart rate control during hypoxia in fetal and newborn lambs (Research Centre for Early Human Development)	119	
second instalment grant-in-aid for 1980, research projects: Platelet function and coagulation in patients with thrombotic disorders, Professor B.G. Firkin (Medicine, Alfred Hospital)	15,777	
the role of Kallikrein-kinin in sodium and water homeostasis and blood pressure control: an approach to identifying renal kinin receptors, Doctor P.G. Matthews (Medicine, Prince Henry's Hospital)	10,376	
myocardial beta receptors, Professor C.I. Johnston, Dr E.A. Woodcock (Medicine, Prince Henry's Hospital)	12,500	
first instalment of two-year grant-in-aid, for research on: Factors influencing the formation of extracellular products by smooth muscle cells in tissue culture, Dr B.W. Oakes (Anatomy)	12,000	50,772
Lioness Club of Kew towards cost of equipment, for the Sudden Infant Death Research project being conducted by Dr J.E. Maloney and Associate Professor T.M. Adamson (Research Centre for Early Human Development)		1,200
Marshall, Professor V.C. for the work of the Department (Surgery, Prince Henry's Hospital)		1,300
May and Baker (Australia) Pty Ltd to assist with fares and accommodation for departmental members who attended surgical conference in Wodonga, March 1980 (Surgery, Prince Henry's Hospital)		200
Medical Specialists' Management Fund to the work of the Department (Medicine, Prince Henry's Hospital)		6,643
Melbourne Family Care Organisation part payment of grant for the socio-economic/demographic study of the local government areas of Pakenham, Berwick, Cranbourne and Sherbrooke, conducted by Professor P. Boss (Social Work)	1,200	
for the Dandenong-Oakleigh-Springvale, Needs Survey, Professor P. Boss (Social Work)	1,717	2,917
M.I.M. Holdings Ltd to Careers and Appointments Service		100
Mobil Oil Australia Limited to Careers and Appointments Service		100

Monash Ex Committee Club		
to the Library, for the purchase of a limited edition of a selection of works by Russell Drysdale, on the occasion of the one millionth book having been acquired		250
Monash Medical Mothers' Auxiliary		
for purchase of audio visual monitor and trolley (Medicine)		1,000
Monash University Parents Group		
to the Library for purchase of books	3,000	
department of History — overhead projector	548	
Robert Blackwood Hall — 2 microphone stands with boom arms	340	
department of Genetics — Horizontal Gel Electrophoresis System	390	
department of Materials Engineering — cabinet for Metallographic Specimens	494	
department of Electrical Engineering — half contribution towards cost of voltage monitoring equipment	500	
Alexander Theatre — cassette deck for replay of music for film screenings	500	5,772
Moore, Mrs Vera		
to the Religious Centre towards purchase of a harpsichord	5,000	
to the Krongold Centre	300	
to the Library Fund Appeal	200	
to fund The Vera Moore Junior Research Fellowship — to be offered to graduates seeking to obtain a Masters Degree by research work, or Doctorate of Philosophy by research work in any of Monash University's Faculties, being the first of two payments totalling \$100,000	50,000	55,500
Murdoch, Dame Elisabeth		
to Library Fund Appeal		1,000
Muscular Dystrophy Association of America Inc.		
research grant for 1980/81 project: The effect of nerve supply on membrane proteins and glycoproteins of skeletal muscle, being conducted by Dr P.L. Jeffrey (Biochemistry)		17,085
Myer Charity Trust, The Sidney		
to fund the Sidney Myer Social-Emotional Therapy Program (Krongold Centre)		2,000
towards cost of alterations to the buildings at Queen Victoria Medical Centre, In Vitro Fertilisation project under the direction of Professor C. Wood (Obstetrics and Gynaecology)	5,000	7,000
National Heart Foundation of Australia, The		
1980 Fellowships: Dr T.O. Neild (Physiology)	25,186	
Dr T. Loiselle (Physiology)	22,336	
1980 grants-in-aid: Professor A.L.A. Boura (Pharmacology)	13,072	
Dr C.L. Gibbs, Dr D.S. Loiselle (Physiology)	14,242	
Dr G.D. Hirst, Dr T.O. Neild (Physiology)	11,815	
Professor C.I. Johnston, Dr P.G. Matthews (Medicine, Prince Henry's Hospital)	12,000	
Supplementary grants for 1979: (Physiology) \$3,536; (Biochemistry) \$444	3,980	

for equipment, project: Metabolism and energetics of cardiac muscle, being conducted by Doctors C.L. Gibbs and D.S. Loisselle (Physiology)	1,500	102,631
Nettleton, Mr N. general donation to assist Dr P.P. Gorman's research (Education)		350
Nicholas Pty Ltd first half yearly payment of grant for project: The effect of hydro- quinone on malanocytes in pig skin, being conducted by Associate Professor H.K. Muller (Pathology and Immunology)		6,500
Niro Atomizer (A'asia) Pty Ltd donation in acknowledgement of work conducted in differential scan- ning calorimetry (Chemical Engineering)		150
Numurkah Comprehensive High School to the Spina Bifida Research Project conducted by Professor R.A. MacMahon (Paediatrics)		37
Peat, Marwick, Mitchell and Co. to Careers and Appointments Service		300
Penington, Dr G.R. and Mrs P.P. for the Headroom Program, Krongold Centre		200
Petroleum Refineries (Aust.) Pty Ltd to Careers and Appointments Service		100
Philip Trust (William), per Alfred Hospital Trustees to support research being conducted by Dr J. Koutts (Medicine, Alfred Hospital)		6,600
Polish-Australian Cultural Society in support of the Polish language course to be offered for the first time by Monash in 1981 (Russian)		3,000
Porter, Dr Una B. on behalf of the James and Una Porter Fund for the study of human development and behaviour, Dr R. Wertheim (Paediatrics, Queen Victoria Medical Centre)		15,000
Potter Foundation, The Ian towards cost of project: Development of a treatment for viral diseases and cancers by cloning of human interferon genes, being conducted by Professor A.W. Linnane (Biochemistry)	10,000	
travel grant to assist attendance at an international colloquium, May 1980, Dr A.J. Prentice (Mathematics)	700	
to fund the Ian Potter Creativity Program (Krongold Centre)	10,000	20,700
Queen Victoria Medical Centre towards payment of honoraria to lecturers at workshop on High Frequency Ventilation, arranged by Research Centre for Early Human Development at Queen Victoria Medical Centre, October 1980		150
Radio Research Board investigations of FET low noise amplifiers and ancillary circuitry, suitable for operation in the 3.7-4.2 GHZ band, Dr L. Gruner (Electrical Engineering)		750
a ray tracing program for the evaluation of variations of ionospheric rays, Dr J.A. Bennett (Electrical Engineering)		600

low-distortion amplifiers, Associate Professor E.M. Cherry (Electrical Engineering)	1,250	
electrical conductivity in thin polymer films studied via thermally stimulated conductivity, thermoluminescence and dielectric measurements, Dr R.J. Fleming (Physics)	750	3,350
Reckitt and Colman towards travel expenses to International Conference on Prostaglandins and Thromboxanes, Salle, East Germany, Mr Alan Sandford (Pharmacology)		250
Repco Ltd 1979/80 research grant, for the project: Noise control, power presses and industrial machinery, conducted by Dr L.L. Koss (Mechanical Engineering)		11,563
Reserve Bank of Australia for the project: Energy and resources in Australia — an assessment of regulatory and taxation strategies, conducted by Professor M.G. Porter (Centre of Policy Studies)	13,000	
1979 instalment for the project: Structural changes in wage-price behaviour in Australia, conducted by Doctors A. Fels and Tran Van Hoa (Economics)	6,100	
for the project: The underground economy, Professor M.G. Porter (Centre of Policy Studies)	7,729	26,829
Robins, A.H. Pty Ltd A.H. Robins Pty Ltd award to Mr David Joy (Medicine)		500
Ross Trust, The R.E. for the production of a manual on Farm Dams and Wildlife, Dr E.H.M. Ealey (Environmental Science)	2,000	
to fund the R.E. Ross School Support Program (Krongold Centre)	2,000	4,000
Royal Australian College of General Practitioners, The funding for Country Week and other activities (Community Practice)		4,600
Royal Automobile Club of Victoria (R.A.C.V.) Ltd towards cost of Master of Engineering Science Course (Civil Engineering)		1,000
Rural Credits Development Fund — Reserve Bank of Australia research grants: An investigation of factors affecting the economic performance of the Victorian rural local government in constructing and maintaining roads, Dr I.R. Wills (Economics)	5,459	
plant armour plate (Polysaccharide-phenol complexes and the resistance of cell walls to attack in the wheat root and wheat grain) Dr T.P. O'Brien (Botany)	6,637	
supplementary grant for Automatic Sprinkler Systems project, Dr R.J. de Laine and Mr W.C. Geary (Mechanical Engineering)	4,500	16,596
Savage River Mines 1980 research grant for the project: Wall stability in open pit mines, being conducted by Mr P.M. Dight (Civil Engineering)		10,000
Sawrey Fund, Cliff for the purchase of a wheelchair (Health Service)		1,297

Schutt, Estate of the late Helen McPherson towards cost of large scale culture and fermentation equipment, Professor S. Faine (Microbiology)	10,000	
towards the cost of building alterations for In Vitro Fertilisation project under the direction of Professor C. Wood (Obstetrics and Gynaecology, Queen Victoria Medical Centre)	1,000	11,000
Shell Company of Australia Limited, The Shell Scholarship 1980, to Mr G. Chappell (Mathematics)	3,500	
for electronic equipment required for Koala Research Program, Mr R.W. Martin (Zoology)	2,422	
shared collection cost of the 1980 STEP data project conducted by Associate Professor Frank Lawson (Chemical Engineering)	661	6,583
Shepherd Foundation to cover cost of pilot 'follow-up' study conducted by the department of Social Work for the Shepherd Foundation, Professor P. Boss (Social Work)	537	
in support of the research project: Investigation into the processes and content of general practice, Professor N.E. Carson (Community Practice)	2,790	
for the project: Patients' responses to a health testing program, conducted by Professor P. Boss (Social Work). Total grant \$6,207	5,000	8,327
Shire of Sherbrooke to the Krongold Centre		40
Spina Bifida Association of Victoria towards the Spina Bifida research project conducted by Associate Professor MacMahon (Paediatrics)		500
Stuart Simson Educational Trust income from Stuart Simson Educational Trust to be allocated to the Stuart Simson Scholarship		1,400
Stayner, Mr R.A. to the work of the Graduate School of Librarianship		200
Sudden Infant Death Research Foundation first quarterly payment of \$15,265 grant, project: The effect of Hypoxia on the development of the cardio-respiratory system in the fetus and newborn, Doctors J.E. Maloney, and T.M. Adamson (Paediatrics)	3,816	
for the project: Changes in small pulmonary arteries of infants dying as a result of sudden infant death syndrome (S.I.D.S.) Mr N.G. Wreford, Dr C.R. Hunter (Anatomy)	16,349	20,165
Syme Charitable Trust, The David to assist the work of the Krongold Centre		150
Tileman (A/asia) Pty Ltd for research into the full scale response of tall chimney stacks, being conducted by Professor W.H. Melbourne (Mechanical Engineering)		5,000
Toyota Manufacturing Australia Limited in support of student travel to Japan (Japanese)		4,500
Trewin, Mr R.C. for research in surgery being conducted by Sir Edward Hughes and		

Mr Adrian Polglase (Surgery, Alfred Hospital)		5,000
University of Melbourne		
subsidy to <i>The Australian Journal of French Studies</i> (French)		400
University of Newcastle-upon-Tyne		
grant-in-aid to assist research, Dr A.C. Panche, visiting lecturer for 8 months (Zoology)		1,123
Van Cleef Foundation		
research grant for continuing scientific work, Emeritus Professor A.K. McIntyre (Physiology)		2,500
Victorian Children's Aid Society, The		
for research project: Children in non-Government institutions in Australia, conducted by Dr N.J. Smith (Social Work)		500
Victorian Government		
Conservation, Ministry for		
second progress payment for research grant, project: Hydrological effects of land use charges, Professor E.M. Laurenson (Civil Engineering)		10,000
Education — Department of — Victoria		
Bandjalang language project, Mr C. Bourke (Aboriginal Research Centre)	13,788	
project: Reference and teaching materials in Aboriginal Studies, Mr C. Bourke (Aboriginal Research Centre)	4,820	
for the Spina Bifida Research Program undertaken in collaboration with the Queen Victoria Medical Centre, directed by Associate Professor R.A. MacMahon (Paediatrics)	11,740	30,348
State Electricity Commission of Victoria		
1980 payment for the project: La Trobe Valley Water Resources Study, being conducted by Dr L.A. Frakes (Earth Sciences)	12,540	
first half yearly payment for the project: Pollen analysis of the brown coal deposits of the Latrobe Valley, being conducted by Dr A.P. Kershaw (Geography)	10,973	23,513
Victorian Brown Coal Council (Department of Minerals and Energy)		
for the project: Catalytic effects of inorganic constituents on the direct hydrogenation of brown coal; research studentship of Mr P. Cassidy, under the supervision of Professor W.R. Jackson and Dr F.P. Larkins (Chemistry)		36,750
Victorian State Schools Horticultural Society (Primary and Secondary Schools' 'My Own Special Tree' Plant a Tree Program)		
to the Spina Bifida research program, conducted by Associate Professor MacMahon (Paediatrics)		14,000
Victorian Institute of Marine Sciences		
to support study of the Kelp <i>Durvillea Potatorum</i> , being conducted by Doctors B. Allender, G. Scott, M. Clayton (Botany)		2,000
Walters, Professor W.A.W.		
to cardiovascular research (Obstetrics and Gynaecology)		3,500
Water Research Foundation of Australia		
balance of 1979 grant for project: The Chemical Evolution of Ground-water in Basalt Aquifers, being conducted by Mrs P. Komarower		

(Earth Sciences)	688	
in support of project: Exploration for desiccation to tolerant 'resurrection' grasses in South America, Dr D.F. Gaff (Botany)	400	1,088
Western Mining Corporation Limited, Exploration Division		
Western Mining Corporation Prizes, Third and Fourth Year awarded to Messrs C.N. Alexiou and A.J. Mibus respectively (Chemical Engineering)	300	
untied grant for general departmental support (Earth Sciences)	400	
specific grant aimed at helping improve the quality of tuition at the final Honours year level (Earth Sciences)	1,100	
towards travel expenses 4th International Conference on Titanium held in Japan, Professor I.J. Polmear (Materials Engineering)	600	2,400
White, The Joe White Bequest to Library Fund appeal		1,000
Williams, Professor W.D.		
1979 A.R. Wallace Prize for Zoology, awarded to Mr R.D. Gianello		50
Windermere Hospital Foundation Ltd		
for the Research Centre for Early Human Development, Queen Victoria Medical Centre		10,000
Zimmer-Hassett Orthopaedics and Associates Zimmer U.S.A. (Australia) Pty Ltd		
to support specifically, a study on Fractured Shaft of the Femur, under the supervision of Professor Sir Edward Hughes (Department of Surgery, Alfred Hospital)		700

Commonwealth Government Research Grants

The following research grants, recommended by the Australian Research Grants Committee, were approved by the Commonwealth Government:

Investigator	Project Title	Grant \$
ARTS		
Professor J.D. Legge	Western educated intellectuals in Indonesia in the later stages of Dutch rule, during the occupation and revolution and in the early years of independence	6,591
English		
Miss B.M. Niall	Australian children's literature 1841-1980	9,823
Associate Professor W.B. Steele	Bibliographical and textual studies in the works of D.H. Lawrence	4,501
French		
Professor J.R. Garagnon	Two French Utopian Fictions of the 17th and 18th centuries located in Australia	5,318

Investigator	Project Title	Grant \$
Geography		
Dr D.L. Dunkerley	Field measurement of rates of limestone solution and precipitation	4,150
Dr A.P. Kershaw	The vegetation history of North-East Queensland	4,720
Dr C.A. Maher	Alteration of inner city environments	8,930
Dr K. O'Connor	Spatial organisation within Australian metropolitan areas	8,164
History		
Dr L. Li	Whampoa and K'angta: Nationalist and Communist Experiences in Cadre training 1925-1945	5,450
Associate Professor E.D. Potts	Australian-American contacts during World War Two	3,872
Dr A.G. Serle	Biography of General Sir John Monash	5,174
Librarianship		
Dr B.J. McMullin	Australian and New Zealand early imprints project (Victoria)	9,060
Linguistics		
Associate Professor J.T. Platt	A crosscultural investigation of some basic communicative strategies	7,923
Music		
Dr M.J. Kartomi	The traditional music of Sumatra	9,198
Russian		
Professor G.J. Marvan	Slavic context of Polish inflection	5,000
ECONOMICS AND POLITICS		
Centre of Policy Studies		
Professor M.G. Porter	Pricing policies of gas and electricity utilities	10,500
Professor M.G. Porter	A study of the overall impact on Australia of increasing international economic interdependence	16,221
Econometrics and Operations Research		
Mr M.E. Burns	The distributional effects of Australia's recent inflationary experience 1966-1978	14,494
Dr R.J. Cooper	Estimation of interrelated factor demand and investment functions	5,000
Economics		
Professor M. Brunt, Dr A.H.M. Fels	Economic analysis of law with special reference to class actions	10,000
Dr B.A. Goss, Professor D.E.A. Giles	Price determination in international commodity markets with forward trading	15,629

Investigator	Project Title	Grant \$
Dr B.A. Goss	Adam Smith on risk and uncertainty	712
Politics Professor D.A. Kemp, Dr C.L. Rubenstein	Values, policy attitudes and political partisanship	16,260
ENGINEERING		
Chemical Engineering Dr D.V. Boger	Accelerating and de-accelerating flows of visco-elastic fluids	19,950
Dr C. Fryer	Uptake of heavy metals by micro-organisms	23,640
Associate Professor F. Lawson, Dr K.N. Han	Leaching mechanism of metal oxides	9,500
Associate Professor F. Lawson	Removal of trace amounts of copper from liquid metals using elemental sulphur	2,500
Professor O.E. Potter	Liquid-phase organic oxidations — chemical engineering aspects	16,500
Professor O.E. Potter	Fluidization for reaction and other applications	18,200
Civil Engineering Dr G.I.N. Rozvany	Optimization of structural layouts by analytical methods	16,070
Electrical Engineering Dr J.A. Bennett, Dr P.L. Dyson	Development of new ray tracing techniques and their application to spacelab and ground-based radio experiments	5,300
Dr S.J. Redman	The application of electrical circuit models of neurones to the analysis of synaptic potentials	27,005
Materials Engineering Associate Professor R. McPherson	Metastable phases in ceramic systems	9,000
Dr B.A. Parker	The effect of microstructure on the strain rate sensitivity of alloys	15,050
Mechanical Engineering Dr L.L. Koss	The measurement of sound energy radiated by transient noise sources using radiation ratio concepts	5,600
Professor W.H. Melbourne	Aerodynamic instabilities, loading and response of bluff bodies in a turbulent flow	23,150
LAW		
Professor R. Baxt	Reforming the law relating to unincorporated associations	19,121

Investigator	Project Title	Grant \$
MEDICINE		
Anatomy		
Dr J.B. Kerr	Studies on testicular function of a dasyurid marsupial (<i>antechinus</i>)	9,900
Biochemistry		
Dr J.M. Armstrong, Professor J. Bornstein	Structure activity relationships in peptide hormones	11,000
Dr L. Austin, Dr C.J. Langford	The role of the cell body in the renewal of axonal and synaptic components	9,800
Dr P.L. Jeffrey, Dr L. Austin	The supply, turnover and role of synaptic and cell surface components	11,800
Professor A.W. Linnane, Associate Professor H.B. Lukins	Biogenesis of mitochondria	29,000
Professor D.A. Lowther, Dr C.J. Handley	Regulation of matrix formation as an expression of the differentiated state of chondrocytes cultured in vitro	12,000
Professor D.A. Lowther	The secretion and activation of chondrocyte and Polymorph neutral proteinases and the effect of anti-inflammatory drugs on these processes	24,171
Dr S. Marzuki, Professor A.W. Linnane	The effect of altered biochemical function on the structure and functions of mitochondrial membranes	41,404
Dr P. Nagley, Professor A.W. Linnane	Informational macromolecules in nucleocytoplasmic interactions	23,350
Associate Professor B.N. Preston, Dr W.H. Murphy	Macromolecular diffusion through porous membranes	31,676
Dr H.C. Robinson	Structural studies on connective tissues: factors involved in the maintenance of cartilage	10,000
Microbiology (Alfred Hospital)		
Dr R.C. Bayly, Dr R.A. Skurray	Biochemical and genetic analysis of aromatic degradative pathways	9,500
Dr C.F. Cross	Characterisation of the biophysical and biochemical properties of boolarra virus	5,300
Dr R.A. Skurray	Molecular and genetic analysis of the conjugative plasmid F	11,000
Pharmacology		
Professor A.L.A. Boura	Learning retardation produced by the action of antibiotics and amino acid neurotransmitters on the developing brain	12,500
Physiology		
Dr G.D. Hirst	Quantitative aspects of neuromuscular transmission in arterioles	7,800

Investigator	Project Title	Grant \$
Professor M.E. Holman	Innervation of smooth muscle	37,055
Dr I.R. McDonald	Endocrine functions in Australian monotremes and marsupials	20,800
Dr E.M. McLachlan	Synaptic mechanisms at peripheral synapses	9,100
Dr U. Proske	The stiffness of mammalian slow and fast muscle	6,750
Dr M. Weiss	Biogenesis of steroids by the adrenal and gonadal tissue of the Australian monotremes and marsupials	8,800
Dr R.A. Westerman	Mammalian nerve-muscle interactions	12,750
SCIENCE		
Botany		
Dr M.N. Clayton	Studies on the reproductive biology and genetics of some brown algae, together with related taxonomic investigations	8,770
Dr D.F. Gaff	Desiccation tolerant plants, particularly grasses	9,200
Dr N.D. Hallam	The fine structure of plants adapted to desiccation	19,800
Dr A.C. Lawrie	Nodulation studies in native Australian legumes	8,060
Dr T.P. O'Brien	Plant armour plate. Polysaccharide-phenol complexes and the resistance of cell walls to fungal attack	9,700
Chemistry		
Dr D.St.C. Black, Dr G.B. Deacon	New organothallium chelate systems	1,000
Dr D.St.C. Black	New ligand systems containing indole rings	19,107
Dr D.St.C. Black	Synthetic utility of nitrones and oxaziridines	1,500
Professor R.D. Brown, Dr P.D. Godfrey, Dr D.C. McGilvery	Rotational spectra of ions	30,370
Professor R.D. Brown, Dr P.D. Godfrey	Molecules in space — phase 2	56,660
Dr R.F.C. Brown, Dr F.W. Eastwood	High temperature pyrolysis of organic compounds: generation of cumulenones	19,271
Dr R.F.C. Brown, Dr F.W. Eastwood	The rearrangement of benzyne	500
Dr G.B. Deacon	Elimination reactions in organo-metallic synthesis	1,200
Dr G.B. Deacon	Lanthanoid and actinoid organo-metallics	14,000
Associate Professor R.S. Dickson	Organometallic intermediates in the transition metal assisted reactions of substituted alkynes	1,250
Associate Professor R.S. Dickson	The activation of metal carbonyl and related complexes	17,559
Dr B.M. Gatehouse	Crystal chemistry of the solid state	22,250
Professor W.R. Jackson	Transition metal complexes with chiral ligands as catalysts for asymmetric synthesis	9,150

Investigator	Project Title	Grant \$
Dr J.E. Kent, Dr M.F. O'Dwyer	Energy transfer mechanisms in small polyatomic molecules	16,900
Dr F.P. Larkins	Auger electron spectra of atoms and molecules	20,257
Dr F.P. Larkins	Photoelectron studies of adsorbates on catalyst surfaces	19,200
Dr K.S. Murray	Single crystal magnetic studies of inorganic and bio-inorganic compounds	3,700
Dr I.D. Rae	A rational search for nuclear overhauser effects on the hydrogens of methyl groups	5,250
Professor J.M. Swan	Monomeric metaphosphate derivatives	15,470
Professor B.O. West	Alkyl group exchange between transition metal compounds	17,782
Dr J.K. Yandell	Electron transfer in heme and copper proteins	1,800
Dr J. Youatt	Ultrastructure and chemical changes in the developing sporangia of allomyces	4,500
Computer Science		
Dr J.L. Keedy, Dr J. Rosenberg, Mr D.M. Rowe	Monads Series III central processor	24,650
Dr J.L. Keedy, Dr J. Rosenberg	Monads: Software methods for complex systems	23,920
Earth Sciences		
Dr M.S. Bloom, Mr V.J. Wall	Experimental investigations on the hydrothermal mobilisation, transport and deposition of tin	12,870
Dr R.A. Cas	The stratigraphy, sedimentology, palaeogeography and tectonic significance of the Ordovician rock sequence in the Victorian segment of the Lachlan fold belt	6,650
Professor B.E. Hobbs, Professor M.A. Etheridge	The defect chemistry of minerals and its influence on deformation	23,450
Dr I.A. Nicholls	Geochemistry and petrology of Silurian-Devonian volcanic rocks in the south-eastern Lachlan mobile belt	5,060
Dr P.V. Rich, Dr T.H. Rich, Dr M. Archer	Australian tertiary mammals and birds	16,780
Dr P.V. Rich, Dr M. Archer, Dr T.H. Rich	Search for Australian cretaceous tetrapods	3,700
Genetics		
Professor B.W. Holloway, Dr A.F. Morgan, Associate Professor	Genetic analysis of pseudomonas and its application in the genetic exploration of selected gram negative bacteria	38,979

Investigator	Project Title	Grant \$
V. Krishnapillai Associate Professor	Genetics of transfer of pseudomonas aeruginosa R plasmids	9,500
V. Krishnapillai Dr S.W. McKechnie, Dr L.H. Schmitt	An elucidation of biochemical and genetic factors which maintain enzyme polymorphisms in drosophila melanogaster	10,700
Dr D.R. Smyth	DNA organisation in chromosomes of lilium	7,000
Mathematics		
Mr R.H. Clarke, Professor B.R. Morton, Dr R.K. Smith	Morning glory wind squalls	21,000
Professor J.N. Crossley	Recursive content of algebra and analysis	5,000
Dr J.J. Monaghan	A numerical technique for fluid systems in astrophysics and meteorology	15,000
Physics		
Dr J.D. Cashion, Dr P.E. Clark	Mossbauer scattering from solids	6,000
Dr T.R. Finlayson, Professor T.F. Smith	The study of superconducting transition metal alloys and compounds	10,500
Dr R.J. Fleming	Charge transport mechanisms and distribution of localised states (traps) in some simple organic polymers	6,750
Dr T.J. Hicks, Dr P. Wells	Polarization analysis of diffuse neutron scattering	21,200
Dr A.C. McLaren	Direct observation and identification of crystal defects and their role in the mechanisms of crystallization and deformation of minerals and rocks	3,900
Dr J.R. Pilbrow	Electron spin resonance of transition ions in biological and model systems	15,000
Associate Professor J.H. Smith	The relationship between atomic and magnetic short range order in mictomagnetic and super-paramagnetic alloys	2,500
Dr R.C. Tobin	Metal vapour lasers	1,000
Psychology		
Dr J.L. Bradshaw, Mr N.C. Nettleton	Human cerebral asymmetry: investigations with a display controlled by eye movements	16,950
Dr S.A. Crossley	Behaviour genetic studies of naturally occurring populations of Drosophila melanogaster	10,480
Professor R.H. Day	The components of geometrical visual illusions	13,750
Professor R.H. Day, Dr B.E. McKenzie	The development of perceptual constancies	13,980

Investigator	Project Title	Grant \$
Dr K.I. Forster	Visual processing of sentences	16,000
Dr D.R.F. Irvine	Organisation of acoustic input to association cortex	9,310
Zoology Dr J. Baldwin	Role of octopine dehydrogenase in energy metabolism of molluscs	2,000
		<u>1,480,517</u>

Education Research and Development Committee on Research and Development in Education

The following research grants recommended by the Education Research and Development Committee on Research and Development in Education were approved by the Commonwealth Government.

Investigator	Project Title	Grant \$
Dr L.H.T. West, Professor P.J. Fensham Professor R. Taft	The measurement of cognitive structure in undergraduate chemistry students	8,136
Professor P.J. Fensham	Family environment and bilingual skills of Italian and Lebanese Children	7,178
Professor P.J. Fensham	Case studies of school alienation and transition to work	8,645
Professor R.P. Tisher, Mr McK. Clements, Dr A. Owens	Decisions made and strategies used by learners and teachers within classrooms: their association with pupil growth and teacher awareness	4,533
Dr T. Hore, Dr L.H.T. West	Research workshop on mature age students	4,795
Dr M. Buxton	Concepts of recurrent education in Australia: philosophies, policies and implications for teaching practice in technical and further education	4,471
Dr B.M. Bullivant	The Pluralist Dilemma: six case studies (purchase of 300 copies to be forwarded to E.R.D.C.)	3,000
		<u>40,758</u>

National Health and Medical Research Council

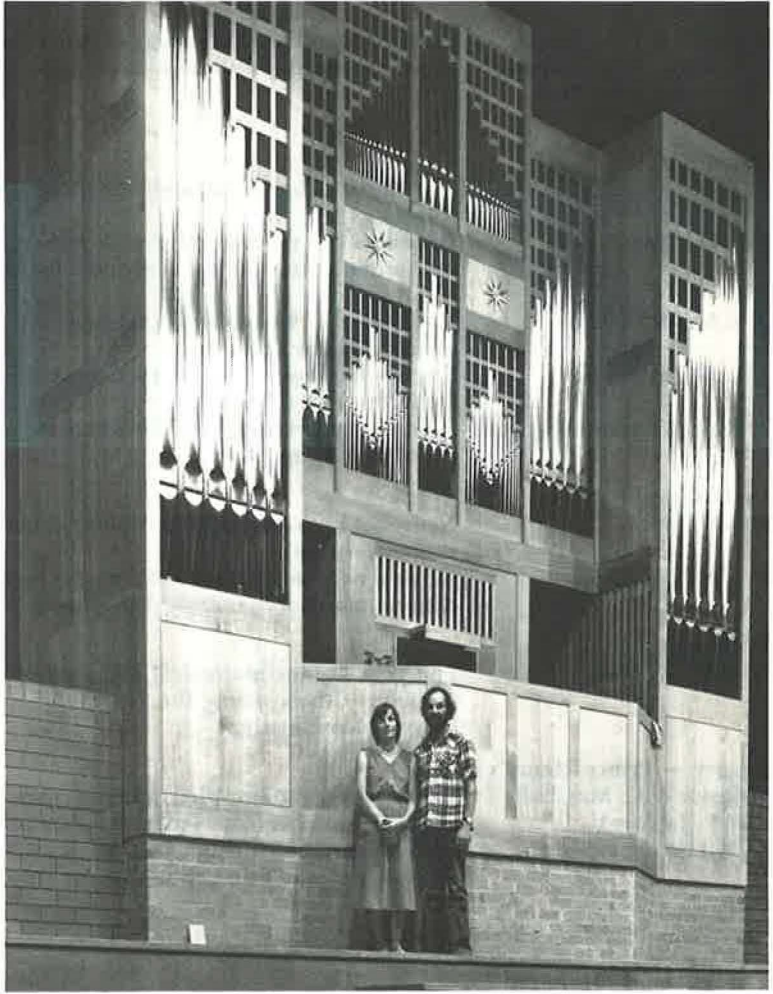
The following research grants recommended by the National Health and Medical Research Council, were approved by the Commonwealth Government.

Investigator	Project Title	Grant \$
Anatomy		
Professor D.M. de Kretser	Hormonal and structural studies on the mammalian testis (Cont.)	15,694
Dr J.B. Kerr	Ultrastructural organisation of sertoli cells	16,526
Dr P. Temple-Smith	Isolation, characterisation and <i>in vitro</i> culture of epithelial cells from the rat epididymis	12,190
Biochemistry		
Dr M.K. Gould, Professor J.C. Bornstein, Dr F.M. Ng	Insulin-like action of B-chain tetrapeptide B22-25 (Cont.)	2,000
Dr M.K. Gould, Professor J.C. Bornstein	Regulation of the insulin receptor by a phosphorylation/dephosphorylation mechanism (Cont.)	15,070
Dr M.K. Gould, Dr I.G. Sloan	Mechanism of the insulin antagonistic action of growth hormone: a unified hypothesis (Cont.)	3,267
Dr M.K. Gould, Dr I.G. Sloan	Regulation of sugar transport in skeletal muscle: Mechanism of insulin action (Cont.)	3,509
Professor D.A. Lowther, Dr J.D. Sandy	Biochemistry of the inflammatory response in arthritis (Cont.)	16,885
Centre for Early Human Development — Queen Victoria Medical Centre		
Dr J.E. Maloney, Dr A.M. Walker	The influence of intrauterine hypoxia on the morphological and functional development of the respiratory system in the fetus and new born	35,268
Dr J.E. Maloney, Dr A.M. Walker	The role of fetal respiratory activity on the morphological development of the respiratory system	19,468
Dr A.M. Walker, Dr J.E. Maloney	Baroreceptor control of arterial pressure and regional blood flow in the normal and growth retarded fetus	23,137
Developmental Biology Research Unit — Paediatrics — Queen Victoria Medical Centre (later changed to Centre for Early Human Development)		
Dr A.M. Walker, Dr J.E. Maloney	Development for autonomic nervous control of the heart in the fetus and newborn (Cont.)	18,183
Genetics		
Professor B.W. Holloway, Dr A.F. Morgan, Dr L.V. Asche	Detection and characterisation of antibiotic resistance plasmids in hospital strains of pseudomonas	17,151

Investigator	Project Title	Grant \$
Medicine		
Dr J. Hansky	Factors influencing levels of some peptide hormones in brain and gut	11,436
Dr J. Koutts	Interaction between plasma coagulation factors and platelets (Cont.)	16,217
Dr P.G. Matthews	The role of Killikrein-Kinin system in blood pressure regulation (Cont.)	38,702
Dr S. Pfeuller, Professor B.G. Firkin	Structure and reactivity of platelet membrane receptors involved in immune thrombocytopenia, haemostasis and thrombosis (Cont.)	49,055
Professor G.C. Schofield	Role of parietal cell membranes in gastric acid secretion (Cont.)	28,498
Dr M.B. van der Weyden	Role of adenosine deaminase in immune function	23,268
Dr M.B. Van der Weyden, Professor B.G. Firkin	Folate metabolism in erythropoiesis	17,583
Microbiology		
Professor S. Faine Dr S. Graves	Pathogenesis and Immunity in Leptospirosis (Cont.)	38,443
Dr S. Graves	The development of a vaccine against syphilis (Cont.)	20,185
Dr E.G. Westaway	Replication and immunochemistry of togaviruses (Cont.)	22,442
Dr E.G. Westaway, Dr P.J. Wright	Translation of arbovirus proteins in animal cells	30,319
Obstetrics and Gynaecology		
Dr A. Lopata	The ultrastructure and differentiation of pre-implantation human embryos (Cont.)	13,914
Dr A.O. Trounson, Dr P.L. Nayudu	Qualitative changes in protein synthesis in the mammalian oocyte during maturation, fertilisation and preimplantation embryo development and differentiation (Cont.)	20,242
Paediatrics		
Dr E.S. Wertheim	Study of the initial stages of social bond formation in humans	31,217
Pharmacology		
Associate Professor G.A. Bentley	The role of cerebral A-adrenoreceptors in the control of blood pressure	14,349
Professor A.L.A. Boura	A study of factors affecting prostaglandin and thromboxane release by the lungs	14,824

Investigator	Project Title	Grant \$
Professor A.L.A. Boura, Professor D.G. Lampard, Professor B.O. West, Dr J.K. Yandell	Chemistry and pharmacology of analogues of the hypotensive drug sodium nitroprusside (Cont.)	18,081
Physiology Dr B.G. Cragg	The distribution of extracellular space in the brain (Cont.)	20,113
Dr B.G. Cragg	Disorders of neuronal migration and connections in the brain after methylazoxymethanol treatment (Cont.)	19,361
Dr E.M. McLachlan	The effects of tenotomy on skeletal neuromuscular functions	1,800
Dr G.S. Taylor	Electrophysiology and contractility of the colon in Hirschsprung's disease (Cont.)	16,452
Dr R.A. Westerman	Recording intercostal spindle afferents by microneurography	6,380
Psychological Medicine Dr G.C. Smith	Neuronal basis of psychoneuroendocrine responses (Cont.)	24,558
Dr J.W.G. Tiller	Control of anxiety using electromyographic external psychophysiological feedback	15,448
Psychology Dr W.R. Webster	Functional neuroanatomical mapping of the auditory pathway using the 2-(¹⁴ C) – Deoxyglucose method	11,616
Surgery – Prince Henry's Hospital Professor V.C. Marshall, Dr P. Jablonski Mr W.E.W. Roediger	Kidney preservation; pharmacological protection of renal function from Ischaemic damage The effect of short-chain fatty acids (SCFA) on sodium and water absorption by the colon	11,544 1,980
		<u>736,375</u>

The Louis Matheson Pipe Organ was inaugurated on 22 April. The organ has 45 stops and 3,097 pipes and was built by Jurgen Ahrend pictured here with his wife. The organ was financed by public subscription and commemorates the work of the University's first Vice-Chancellor, Sir Louis Matheson.



Gifts in kind

- C.R.A. Exploration Pty Ltd, twelve boom-
erang samplers for sea bottom sampling,
together with ancillary gear consisting of
twelve radio transmitters and eleven flash-
ing lights, total estimated value \$39,450
(Earth Sciences)
- Emeritus Professor R.R. Andrew, gift of Sir
Russell Drysdale's drawing *Study for Maria*
(Monash University Art Collection)
- University of the Philippines, recording of
the Music of the Kanyah and Modang in
East Kalimantan Indonesia (from Dr Jose
Maceda, Department of Music Research,
College of Music), (Music)
- Watson Victor Limited, an H33AR Mettler
Balance (Chemistry)
- T. & G. Mutual Life Society Ltd, several cop-
ies of the video film *A Career in Life* to assist
in the career education of students (Careers
and Appointments Service)
- Mr C. Sironi, paintings and photographs ex-
ecuted by him in Hong Kong (Education)
- Dr Joseph Brown, two of the early works by
Jeffery Smart and Sidney Nolan (Monash
University Art Collection)
- Mrs L. Hirschfeld, seven works on paper, by
Mrs Hirschfeld's late husband Ludwig
Hirschfeld-Mack (Monash University Art
Collection)

Sources of Grants and Donations

	\$000	%
Private donations and indirect		
Government research		
grants	2,175	49.8
Australian Research Grants		
Committee	1,204	27.6
National Health and Medical		
Research Committee		
Council	952	21.8
Education Research and		
Development Committee	35	.8
	<u>4,366</u>	<u>100.0</u>

In addition to the above gifts and grants there have been many gifts of books, journals, artifacts and other material, some very valuable to the library, departmental libraries, the Monash University Art Collection and departmental museums.

The appeal by the University for the building of a pipe organ in Robert Blackwood Hall as a tribute to the first Vice-Chancellor, Sir Louis Matheson, reached a total of \$325,982 by 31 December 1980. The Library appeal reached a total of \$350,490.

FINANCE

The following points from the audited accounts of the University for the year 1980 are set out for ready reference.

Funds available

Recurrent Commonwealth Government funds available for expenditure on recurrent items during the year ended 31 December 1980 were:

		\$000
University — 1980 Grant	59,997	
Balance brought forward from 1979	324	
		60,321
Teaching Hospitals		239
Halls of Residence		201

Expenditure for recurrent purposes during the year 1980 was:

	University		Teaching Hospitals		Halls of Residence	
	\$000	%	\$000	%	\$000	%
Academic activities	43,374	71.7	239	100.0		
Academic services	5,326	8.8				
Student services	1,212	2.0				
General services	10,433	17.3				
Public services	74	0.1				
Other	66	0.1			201	100.0
	60,485	100.0	239	100.0	201	100.0

Capital Commonwealth Government funds received in 1980 for expenditure on capital projects (buildings and furniture) on the University site totalled \$1,546,000.

Research Commonwealth Government funds available for expenditure on special research projects in 1980 totalled \$714,000.

Equipment Commonwealth Government funds received in 1980 for expenditure on equipment totalled \$1,832,000.

Union Fees

Union fees payable by students enrolled for the year 1980 were as follows:

Students studying on campus — full time \$148; part time \$92 or \$64.

Students studying off campus — full time \$37; part time \$26.

Accounts

The audited accounts of the University for the year 1980 are appended to this report, and provide further details of the year's activities.

General

1980 was the second year of the triennium in which triennial funding was re-introduced after having been suspended for three years.

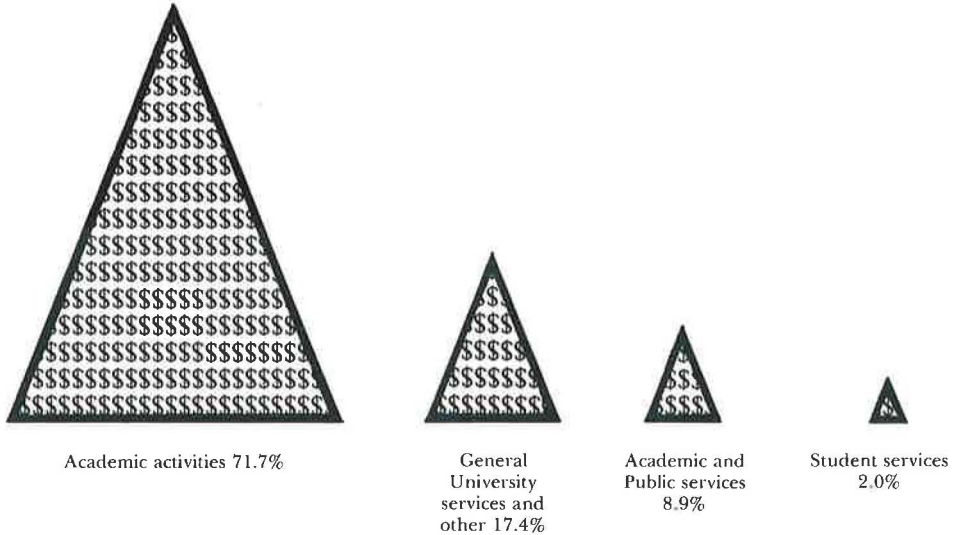
Reductions in the level of funding for the general operations of the University referred to in previous reports continued in 1980 with:

(a) the 1980 recurrent grant being \$296,000 less than the 1979 grant expressed at 31 December 1978 cost levels, and

(b) Government policy of not supplementing grants to cover cost increases on non-salary items during the year of the grant.

These factors, together with the increasing

Expenditure of Recurrent Grant — year ended 31 December 1980



staffing cost commitment arising from the progression of staff within approved salary scales, combine to effectively reduce the level of funding for recurrent purposes by some \$1,400,000 or 2.6 per cent on 1979. The continuous reduction in the level of funding will continue into 1981 and is the cause of great concern to the University. There is a limit to how long an institution can sustain continuous reductions in funding and still maintain a desirable level of teaching and research. Student numbers increased marginally in 1980.

The level of funding for the purchase of equipment continues to cause serious problems. The funds received are insufficient to meet the cost of replacing worn and obsolete equipment.

Whilst the Special Research Grant for 1980 increased slightly over the 1979 allocation and the Government has announced financial support for 'areas of excellence', the University continues to press for the recognition by Government that larger allocations should be made to universities for the purpose of general research in all disciplines.

A new superannuation scheme, common to all staff, was introduced in November 1980 with a view to consolidating the various schemes and benefits that were in existence for members of staff. The new scheme will provide benefits more in line with schemes operating in other allied fields, but short of the standards already set by the Commonwealth and State governments.

ACCOUNTS FOR THE YEAR 1980

Certificate by Monash University

In our opinion the statements which follow, numbered 1 to 19, correctly record the transactions of Monash University for the year ended 31 December 1980.

R.L. Martin
Vice-Chancellor

L.W. Candy
Comptroller

14 December 1981

AUDITOR-GENERAL'S CERTIFICATE

Pursuant to the Provisions of Section 36 of the Monash University Act 1958

The books and accounts of Monash University for the year ended 31 December 1980 have been audited. In my opinion the statements of account which follow, numbered 1 to 19, correctly summarise the financial transactions for the year.

B.J. Waldron
Auditor-General

24 December 1981

(1) Summary Statement showing Income and Expenditure for all general purposes for the year ended 31 December 1980

	Recurrent Grant	Building Projects Grant	Equipment Grant	Teaching Recurrent Grant	Hospitals Building Projects Grant
	\$	\$	\$	\$	\$
Income					
Commonwealth Government Grants	59,997,000	1,546,000	1,832,000	239,000	
Other					
Total Income	59,997,000	1,546,000	1,832,000	239,000	—
<i>Less</i>					
Expenditure					
Academic Activities	43,378,447	740	1,523,007	239,000	
Academic Services	5,326,023		339,036		
Student Services	1,212,152				
General Services	10,428,233	1,520,937	120,455		Cr. 6
Public Services	73,817				
Other	66,123				
Total Expenditure	60,484,795	1,521,677	1,982,498	239,000	Cr. 6
Surplus (Deficit) for the year	(487,795)	24,323	(150,498)	—	6
Surplus (Deficit) at 1 January 1980	324,138	80,243	343,798	—	20,633
Accumulated Surplus (Deficit) at 31 December 1980	(163,657)	104,566	193,300	—	20,639

Special Research Grant	Private and Indirect Gov't Research Grants	General Donations	Union Activities	Student Assist. Fund	Union Devel't Fund	General Auxiliary Activities	Fire Ins'ce Fund	Total	1979 Total
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
714,000	1,203,944					200,570		65,732,514	60,429,713
	2,732,274	563,428	1,494,946	544	718,331	4,320,371	17,296	9,847,190	8,424,073
714,000	3,936,218	563,428	1,494,946	544	718,331	4,520,941	17,296	75,579,704	68,853,786
697,022	3,829,635	219,874						49,887,725	43,984,347
11,131	12,080	56,886						5,745,156	5,682,628
	178,402	16,634						1,407,188	1,378,569
5,847	5,327	5,487			587,649	794,562		13,468,491	12,231,884
								73,817	73,262
		207,884	1,566,200	139	231,687	2,045,710		4,117,743	3,602,291
714,000	4,025,444	506,765	1,566,200	139	819,336	2,840,272	—	74,700,120	66,952,981
—	(89,226)	56,663	(71,254)	405	(101,005)	1,680,669	17,296	879,584	1,900,805
—	801,042	949,141	157,649	8,727	(538,717)	6,134,459	134,516	8,415,629	6,514,824
—	711,816	1,005,804	86,395	9,132	(639,722)	7,815,128	151,812	9,295,213	8,415,629

(2) **Recurrent Grant**
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
55,153,000	Income	
55,153,000	Commonwealth Government Grants	59,997,000
	Total Income	<u>59,997,000</u>
	<i>Less</i>	
	Expenditure	
	<i>Academic Activities</i>	
	Teaching and Research—	
34,373,391	Salaries and Related Items	38,157,642
2,043,661	Maintenance	2,544,289
842,603	Computing Services	993,272
622,653	Equipment	666,943
225,079	Outside Studies Program	181,432
59,054	Appointment Costs	66,976
660,384	Other Items	767,893
<u>38,826,825</u>		<u>43,378,447</u>
	<i>Academic Services</i>	
	Libraries —	
2,618,284	Salaries and Related Items	2,827,726
1,169,944	Books and Journals	1,388,195
104,358	Maintenance	136,589
107,741	Computing Services	82,460
9,686	Equipment	40,828
1,881	Other Items	6,939
<u>4,011,894</u>		<u>4,482,737</u>
	Computing —	
750,438	Salaries and Related Items	826,777
149,267	Maintenance	130,729
607,997	Equipment	83,504
1,086,604Cr.	Recoveries	1,209,884Cr.
16,781	Other Items	398
<u>437,879</u>		<u>168,476Cr.</u>
	Other Academic Services —	
856,262	Salaries and Related Items	923,884
70,515	Other Items	87,878
<u>926,777</u>		<u>1,011,762</u>
44,203,375	<i>Sub-Total carried forward</i>	48,704,470

(2) Recurrent Grant
Statement of Income and Expenditure for the year ended 31 December 1980 (continued)

1979		1980
\$		\$
44,203,375	Sub-Total brought forward	48,704,470
	<i>Student Services</i>	
471,350	Salaries and Related Items	497,961
715,646	Scholarships	694,141
19,978	Other Items	20,050
<u>1,206,974</u>		<u>1,212,152</u>
	<i>General Services</i>	
	Administration —	
3,440,780	Salaries and Related Items	3,813,952
146,489	Computing Services	134,164
138,113	Other Items	114,951
<u>3,725,382</u>		<u>4,063,067</u>
	Overheads —	
545,472	Postage, Telephone and Advertising	612,292
44,232	Furniture and Furnishings	61,288
782,019	Power, Lighting and Heating	785,562
512,201	Other Items	564,472
<u>1,883,924</u>		<u>2,023,614</u>
	Buildings and Grounds —	
2,778,634	Salaries and Related Items	3,015,167
1,130,903	Maintenance	1,149,644
75,673	Other Items	176,741
<u>3,985,210</u>		<u>4,341,552</u>
	<i>Public Services</i>	
	Continuing Education —	
67,014	Salaries and Related Items	71,797
3,149	Other Items	2,020
<u>70,163</u>		<u>73,817</u>
60,961		
<u>55,135,989</u>		<u>66,123</u>
	<i>Union Administration</i>	
	Total Expenditure	<u>60,484,795</u>
17,011(S)	Deficit for the year	487,795
307,127	Surplus at 1 January 1980	324,138
<u>324,138(S)</u>	Accumulated Deficit at 31 December 1980	<u>163,657</u>

(3) Building Projects Grant
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
<u>1,579,700</u>	Income	
<u>1,579,700</u>	Commonwealth Government Grant	<u>1,546,000</u>
	Total Income	<u>1,546,000</u>
	<i>Less</i>	
	Expenditure	
1,261,066	New Buildings	1,454,894
7,918	Furniture and Furnishings	26,590
258,973	Site Development	39,453
<u>28,053</u>	Teaching and Research — Equipment	<u>740</u>
<u>1,556,010</u>	Total Expenditure	<u>1,521,677</u>
23,690	Surplus for the year	24,323
<u>56,553</u>	Surplus at 1 January 1980	<u>80,243</u>
<u>80,243</u>	Accumulated Surplus at 31 December 1980	<u>104,566</u>

(4) Equipment Grant
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
<u>1,600,000</u>	Income	
<u>1,600,000</u>	Commonwealth Government Grant	<u>1,832,000</u>
	Total Income	<u>1,832,000</u>
	<i>Less</i>	
	Expenditure	
	<i>Academic Activities</i>	
	Teaching and Research —	
<u>1,012,195</u>	Equipment	<u>1,523,007</u>
	<i>Academic Services</i>	
	Libraries —	
46,362	Books and Journals	55,757
<u>26,426</u>	Equipment	<u>—</u>
<u>72,788</u>		<u>55,757</u>
<u>71,372</u>	Computing	<u>247,432</u>
<u>46,427</u>	Other Academic Services	<u>35,847</u>
	<i>General Services</i>	
32,493	Administration	119,565
<u>17,828</u>	Buildings and Grounds	<u>890</u>
<u>50,321</u>		<u>120,455</u>
	<i>Public Services</i>	
3,099	Continuing Education	<u>—</u>
<u>1,256,202</u>	Total Expenditure	<u>1,982,498</u>
343,798(S)	Deficit for the year	150,498
<u>—</u>	Surplus at 1 January 1980	<u>343,798</u>
<u>343,798</u>	Accumulated Surplus at 31 December 1980	<u>193,300</u>

**(5) Teaching Hospitals: Recurrent Grant
Statement of Income and Expenditure for the year ended 31 December 1980**

1979 \$		1980 \$
<u>218,000</u>	Income	
<u>218,000</u>	Commonwealth Government Grant	<u>239,000</u>
	Total Income	<u>239,000</u>
	<i>Less</i>	
	Expenditure	
	<i>Academic Activities</i>	
<u>218,000</u>	Teaching and Research —	
<u>218,000</u>	Maintenance	<u>239,000</u>
	Total Expenditure	<u>239,000</u>
<u>—</u>	Surplus for the year	<u>—</u>

**(6) Teaching Hospitals: Building Projects Grant
Statement of Income and Expenditure for the year ended 31 December 1980**

1979 \$		1980 \$
<u>—</u>	Income	
<u>—</u>	Commonwealth Government Grant	<u>—</u>
	Total Income	<u>—</u>
	<i>Less</i>	
	Expenditure	
621	New Buildings	6Cr.
2,468	Equipment	—
<u>314</u>	Furniture and Furnishings	<u>—</u>
<u>3,403</u>	Total Expenditure	<u>6Cr.</u>
3,403(D)	Surplus for the year	6
<u>24,036</u>	Surplus at 1 January 1980	<u>20,633</u>
<u>20,633</u>	Accumulated Surplus at 31 December 1980	<u>20,639</u>

(7) Special Research Grant
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
652,000	Income	
<u>652,000</u>	Commonwealth Government Grant	<u>714,000</u>
	Total Income	<u>714,000</u>
	<i>Less</i>	
	Expenditure	
	<i>Academic Activities</i>	
	Teaching and Research —	
454,261	Salaries and Related Items	509,263
166,513	Maintenance	166,643
1,500	Computing Services	4,652
<u>9,630</u>	Other Items	<u>16,464</u>
<u>631,904</u>		<u>697,022</u>
	<i>Academic Services</i>	
	Other Academic Services —	
19,302	Salaries and Related Items	<u>11,131</u>
	<i>General Services</i>	
794	Postage, Telephone and Advertising	<u>5,847</u>
<u>652,000</u>	Total Expenditure	<u>714,000</u>
<u>—</u>	Surplus for the year	<u>—</u>

(8) Private and Indirect Government Research Grants
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
1,043,655	Income	
	Commonwealth Government Grant	1,203,944
1,639,298	Grants and Donations	1,815,741
901,395	Government Financed Bodies	916,533
2,540,693	Other	2,732,274
3,584,348	Total Income	3,936,218
	<i>Less</i>	
	Expenditure	
	<i>Academic Activities</i>	
	Teaching and Research —	
2,198,038	Salaries and Related Items	2,644,609
559,759	Maintenance	695,792
830	Computing Services	1,461
235,369	Equipment	385,319
82,292	Other Items	102,454
3,076,288		3,829,635
	<i>Academic Services</i>	
	Other Academic Services —	
4,189	Salaries and Related Items	7,204
1,872	Other Items	4,876
6,061		12,080
	<i>Student Services</i>	
	Salaries and Related Items	11,185
151,669	Scholarships	164,852
—	Other Items	2,365
151,669		178,402
	<i>General Services</i>	
4,294	Postage, Telephone and Advertising	4,499
389	Furniture and Furnishings	279
11,366	Buildings Maintenance	549
16,049		5,327
3,250,067	Total Expenditure	4,025,444
334,281(S)	Deficit for the year	89,226
466,761	Surplus at 1 January 1980	801,042
801,042	Accumulated Surplus at 31 December 1980	711,816

(9) General Donations
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
	Income	
	Donations	
	Government Financed Bodies	38,469
63,601	Other	401,966
<u>220,199</u>		<u>440,435</u>
<u>283,800</u>		
	Appeals	
15,210	Robert Blackwood Hall — Organ	6,172
39,244	Library Books	44,036
11,811	Other	10,420
<u>66,265</u>		<u>60,628</u>
<u>62,939</u>		<u>62,365</u>
<u>413,004</u>	Other Income	<u>563,428</u>
	Total Income	
	<i>Less</i>	
	Expenditure	
	Academic Activities	
	Teaching and Research —	
	Salaries and Related Items	107,038
68,094	Maintenance	40,456
41,449	Equipment	16,675
34,666	Other Items	55,705
<u>44,405</u>		<u>219,874</u>
<u>188,614</u>		
	Academic Services	
	Libraries —	
	Salaries and Related Items	28,489
24,150	Books and Journals	15,866
35,393	Maintenance	250
835	Computing Services	777
—	Equipment	—
3,417	Other Items	125
<u>3,842</u>		<u>45,507</u>
<u>67,637</u>		
	Other Academic Services —	
18,351	Salaries and Related Items	11,170
4,140	Other Items	209
<u>22,491</u>		<u>11,379</u>
<u>278,742</u>		<u>276,760</u>
	<i>Sub-Total carried forward</i>	

(9) General Donations
Statement of Income and Expenditure for the year ended 31 December 1980 (continued)

1979		1980
\$		\$
<u>278,742</u>	<i>Sub-Total brought forward</i>	<u>276,760</u>
	<i>Student Services</i>	
17,636	Scholarships	15,567
<u>2,290</u>	Other Items	<u>1,067</u>
<u>19,926</u>		<u>16,634</u>
	<i>General Services</i>	
	Administration —	
<u>1,189</u>	Other Items	<u>1,448</u>
	Overheads —	
405	Furniture and Furnishings	1,809
<u>982</u>	Other Items	<u>—</u>
<u>1,387</u>		<u>1,809</u>
	Buildings and Grounds —	
16,266	New Buildings	472
<u>177</u>	Maintenance	<u>1,758</u>
<u>16,443</u>		<u>2,230</u>
	<i>Other Items</i>	
<u>165</u>	Union Activities	<u>619</u>
	<i>Appeals</i>	
142,353	Robert Blackwood Hall — Organ	156,234
53,695	Library Books	44,061
<u>3,647</u>	Other	<u>6,970</u>
<u>199,695</u>		<u>207,265</u>
<u>517,547</u>	Total Expenditure	<u>506,765</u>
104,543(D)	Surplus for the year	56,663
<u>1,053,684</u>	Surplus at 1 January 1980	<u>949,141</u>
<u>949,141</u>	Accumulated Surplus at 31 December 1980	<u>1,005,804</u>

Note: Gifts in kind are detailed on page 85 of this Report.

(10) Union Activities
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
1,193,477	Income	
<u>117,195</u>	Union Fees	1,310,539
<u>1,310,672</u>	Other	<u>184,407</u>
	Total Income	<u>1,494,946</u>
	<i>Less</i>	
265,782	Expenditure	
186,914	Sports and Recreation Association	313,468
104,099	Monash Association of Students	208,557
137,415	Clubs and Societies Council	127,245
123,954	Union Tuition and Courses	199,268
398,817	Union Building Management	167,096
	Union Administration and Special Projects	461,985
	Business Activities –	
68,120(D)	Catering – Operating Deficit	(D) 121,302
<u>29,716(S)</u>	Other – Operating Deficit	<u>(D) 4,562</u>
1,255,385		<u>1,603,483</u>
	<i>Less</i>	
35,553	Contribution by University for use of facilities by staff	<u>37,283</u>
<u>1,219,832</u>	Total Expenditure	<u>1,566,200</u>
90,840(S)	Deficit for the year	71,254
<u>66,809</u>	Surplus at 1 January 1980	<u>157,649</u>
<u>157,649</u>	Accumulated Surplus at 31 December 1980	<u>86,395</u>

(11) Student Assistance Fund
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
420	Income	544
	<i>Less</i>	
<u>20</u>	Expenditure	<u>139</u>
400	Surplus for the year	405
<u>8,327</u>	Surplus at 1 January 1980	<u>8,727</u>
<u>8,727</u>	Accumulated Surplus at 31 December 1980	<u>9,132</u>

(12) Union Development Fund
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
395,769	Income	
<u>148,824</u>	Union Development Fees	434,196
<u>544,593</u>	Rentals and Other	<u>284,135</u>
	Total Income	<u>718,331</u>
	<i>Less</i>	
	Expenditure	
	<i>General Services</i>	
447,509	New Buildings	447,859
88,902	Maintenance — Buildings	130,491
<u>15,707</u>	Furniture and Furnishings	<u>9,299</u>
<u>552,118</u>		<u>587,649</u>
	<i>Other Items</i>	
81,399	Equipment	51,733
58,042	Occupancy Expense	78,424
<u>94,390</u>	Other Items	<u>101,530</u>
<u>233,831</u>		<u>231,687</u>
<u>785,949</u>	Total Expenditure	<u>819,336</u>
241,356	Deficit for the year	101,005
<u>297,361</u>	Deficit at 1 January 1980	<u>538,717</u>
<u>538,717</u>	Accumulated Deficit at 31 December 1980	<u>639,722</u>

(13) General Auxiliary Activities
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
	Income	
183,358	Commonwealth Government Grant — Halls of Residence	200,570
2,174,654	Outside Earnings	2,313,732
1,429,135	Other Income	2,006,639
<u>3,787,147</u>	Total Income	<u>4,520,941</u>
	<i>Less</i>	
	Expenditure	
	<i>General Services</i>	
	Overheads —	
13,360	Furniture and Furnishings	11,419
	Buildings and Grounds —	
411,047	New Buildings	642,394
22,138	Site Acquisition	104,198
<u>22,516</u>	Maintenance	<u>36,551</u>
<u>455,701</u>		<u>783,143</u>
	<i>Other Items</i>	
837 Cr.	University Bookshop	7,008
	Halls of Residence —	
183,358	From Commonwealth Government Grant	200,570
76,156 Cr.	Operating Result	7,341 Cr.
54,804 Cr.	South East Flats	27,454 Cr.
38,639 Cr.	Owned Houses and Transit Flats	23,158 Cr.
1,898,098	Outside Earnings	1,872,784
<u>23,233 Cr.</u>	Other	<u>23,301</u>
<u>1,887,787</u>		<u>2,045,710</u>
<u>2,356,848</u>	Total Expenditure	<u>2,840,272</u>
1,430,299	Surplus for the year	1,680,669
<u>4,704,160</u>	Surplus at 1 January 1980	<u>6,134,459</u>
<u>6,134,459</u>	Accumulated Surplus at 31 December 1980	<u>7,815,128</u>

(14) Fire Insurance Fund
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
	Income	
10,902	Income from Investments	17,296
	<i>Less</i>	
	Expenditure	
1,114	Repair of Fire Damage	—
9,788	Surplus for the year	17,296
<u>124,728</u>	Surplus at 1 January 1980	<u>134,516</u>
<u>134,516</u>	Accumulated Surplus at 31 December 1980	<u>151,812</u>

(16) Donor-Nominated Trust Funds
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
<u>7,269</u>	Income	
	Income from Investments	<u>7,506</u>
	<i>Less</i>	
	Expenditure	
—	Oscar Mendelsohn Lectures	1,335
900	Max Buxton Scholarship	900
—	Graham John Beard Memorial Fund	400
568	J.W. Dodds Memorial Scholarship	500
750	Vallejo Gantner Memorial Travel Fund	700
58	Monash University Rowing Club	106
240	W.P. and H.E. O'Shea Fund	245
50	The David B. Rosenthal Memorial Trust	50
500	Hume Turnbull Scholarship	—
<u>2,100</u>	William and Katherine Winter Foundation	<u>2,000</u>
<u>5,166</u>	Total Expenditure	<u>6,236</u>
<u>2,103</u>	Surplus for the year	<u>1,270</u>

Balance Sheet at 31 December 1980

1979		1980
\$		\$
104,072	Accumulated Funds	
<u>2,103</u>	Funds at 1 January 1980	106,175
<u>106,175</u>	Surplus for the year	<u>1,270</u>
	Total Accumulated Funds	<u>107,445</u>
	<i>Represented by:</i>	
	Investments	
1,000	Government Securities, at cost	1,000
62,978	Semi-Government Securities, at lower of cost or par	63,000
27,960	Fixed-Interest Securities, at lower of cost or par	27,960
3,171	Ordinary Shares, at cost	3,272
	(Market Value — 31 December 1980 — \$7,474	
	31 December 1979 — \$4,975)	
<u>95,109</u>		<u>95,232</u>
	Current Assets	
10,700	Fixed Deposit Stock	11,700
366	Cash at Bank	513
<u>11,066</u>		<u>12,213</u>
<u>106,175</u>	Total Assets	<u>107,445</u>

(17) Students' Loan Fund
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
	Income	
2,106	Interest on Loans	2,347
737	Interest on Term Deposit	615
519	Bank Interest	257
12	Donations	—
<u>3,374</u>	Total Income	<u>3,219</u>
	<i>Less</i>	
	Expenditure	
—	Loans Written Off	2,029
<u>3,374</u>	Surplus for the year	<u>1,190</u>

Balance Sheet at 31 December 1980

1979		1980
\$		\$
	Accumulated Fund	
141,998	Fund at 1 January 1980	145,372
	<i>Add</i>	
3,374	Surplus for the year	1,190
<u>145,372</u>	Total Accumulated Funds	<u>146,562</u>
	<i>Represented by:</i>	
	Loans to Students	
121,963	Principal	131,550
3,602	Accrued Interest	3,085
<u>125,565</u>		<u>134,635</u>
	Term Deposit	
10,000	Principal	—
312	Accrued Interest	—
<u>10,312</u>		<u>—</u>
9,495	Cash at Bank	11,927
<u>145,372</u>	Total Assets	<u>146,562</u>

(18) Assistance to Students in Need Fund
Statement of Income and Expenditure for the year ended 31 December 1980

1979		1980
\$		\$
	Income	
7,745	Interest on Term Deposits	9,140
1,371	Interest on Loans	1,853
276	Bank Interest	683
<u>9,392</u>	Total Income	<u>11,676</u>
	<i>Less</i>	
	Expenditure	
1,705	Grants paid to Students during the year	650
58	Other	15
<u>1,763</u>	Total Expenditure	<u>665</u>
<u>7,629</u>	Surplus for the Year	<u>11,011</u>

Balance Sheet at 31 December 1980

1979		1980
\$		\$
179,188	Accumulated Fund	
	Fund at 1 January 1980	186,817
7,629	<i>Add</i>	
	Surplus for the year	11,011
<u>186,817</u>	Total Accumulated Fund	<u>197,828</u>
	<i>Represented by:</i>	
	Term Deposits	
105,000	Principal	35,000
5,233	Accrued Interest	3,462
<u>110,233</u>		<u>38,462</u>
	Deposits held by University	
—	Principal	70,000
—	Accrued Interest	2,013
<u>—</u>		<u>72,013</u>
	Loans to Students	
68,908	Principal	55,012
2,287	Accrued Interest	2,816
<u>71,195</u>		<u>57,828</u>
5,389	Cash at Bank	29,525
<u>186,817</u>	Total Assets	<u>197,828</u>

(19) Superannuation and Pension Schemes
Statement of Income and Expenditure for the year ended 31 December 1980

1979 \$		1980 \$
	Income	
620,980	Members' Contributions	779,906
1,089,677	University's Contributions	1,400,080
1,155,318	Income from Investments	1,536,729
504,727	Other Income	82,431
<u>3,370,702</u>	Total Income	<u>3,799,146</u>
	<i>Less</i>	
	Expenditure	
401,767	Benefit Payments to Members	424,174
218,017	Payments on Withdrawal	233,710
4,656	Other Payments	3,126
<u>624,440</u>	Total Expenditure	<u>661,010</u>
2,746,262	Surplus for the year	3,138,136
9,389,739	Surplus at 1 January 1980	12,136,001
<u>12,136,001</u>	Accumulated Surplus at 31 December 1980	<u>15,274,137</u>

Balance Sheet at 31 December 1980

(Excluding contributions applied as premiums to assurance policies effected with the Staff Superannuation Scheme)

1979 \$		1980 \$
<u>12,136,001</u>	Accumulated Funds	<u>15,274,137</u>
	Accumulated Surplus	
	<i>Represented by:</i>	
	Investments	
8,356,882	Fixed-interest Securities at lower of cost or par	9,396,520
1,331,823	Ordinary Shares, at cost	2,518,543
	(Market Value: 31 December 1980 — \$3,835,944 31 December 1979 — \$1,854,015)	
<u>2,312,740</u>	Property and Mortgage Investment	
	Trust Units, at cost	<u>2,312,740</u>
12,001,445		14,227,803
352,044	Current Assets	
	University Current Account	1,250,333
	<i>Less</i>	
	Members' Contributions and Maturity Proceeds on hand at 31 December (awaiting disbursement)	<u>203,999</u>
<u>217,488</u> Cr.		<u>1,046,334</u>
<u>134,556</u>		<u>15,274,137</u>
<u>12,136,001</u>	Total Assets	

APPENDIX I

Changes in the Membership of Council during 1980

Members who retired or resigned from office during 1980

Mr P.H. Costello (Undergraduate and Diploma Students) 1978-1980; Miss M.J. Harris (Governor in Council – Trades Hall Council) 1979-1980; Mr A.T. Hird (Minister of Education) 1974-1980; Mr I. Langlands (Faculty of Engineering) 1958-1980, (Deputy Chancellor) 1974-1980; Mr G.D. Lewis (Faculty of Law) 1977-1980; Mrs E.R. Mahlab (Faculty of Economics and Politics) 1973-1980; Professor J.M. Swan (Co-opted Dean) 1979-1980.

Members re-elected or re-appointed for a further term of office during 1980

Dr K.T.H. Farrer (Co-opted) 1980-1984; Mr A.H. May (Graduates) 1980-1984

Members elected or appointed to Council during 1980

Mr D.G. Bloom (Undergraduate and Diploma Students) 1980-1982; Mr E. Forbes (Governor in Council – Trades Hall Council) 1980-1983; Mr C.B. Goode (Faculty of Economics and Politics) 1980-1981; Mr B.J. Joy (Minister of Education) 1980-1981; Mr R.J.N. Kinsman (Faculty of Engineering) 1980-1981; The Hon. Mr Justice McGarvie (Faculty of Law) 1980-1982; Professor P.W. Musgrave (Co-opted Dean) 1980-1981.

Vacancies in the membership of Council as at 31 December 1980

One Governor in Council appointee representing commercial and industrial interests.

One elected representative of the undergraduate and diploma students.

