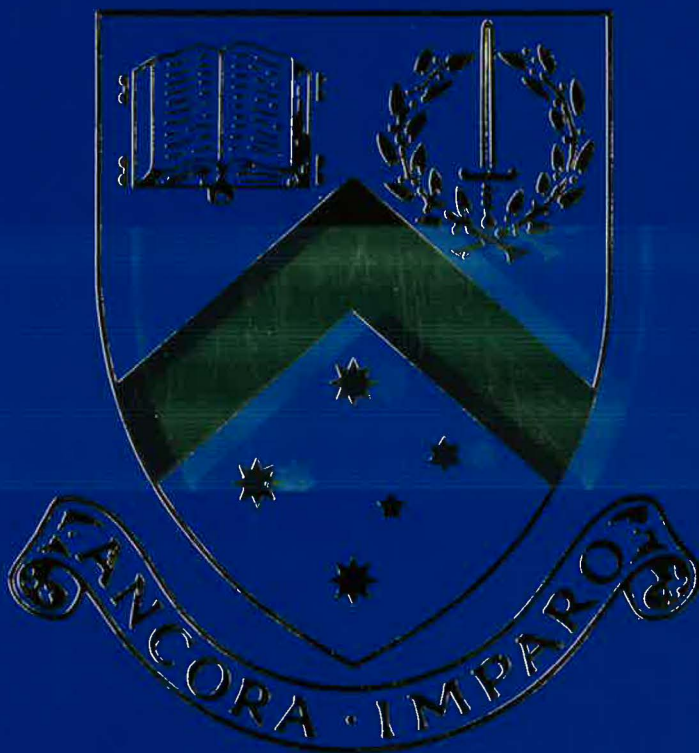


# Monash University



*Annual Report 1983*

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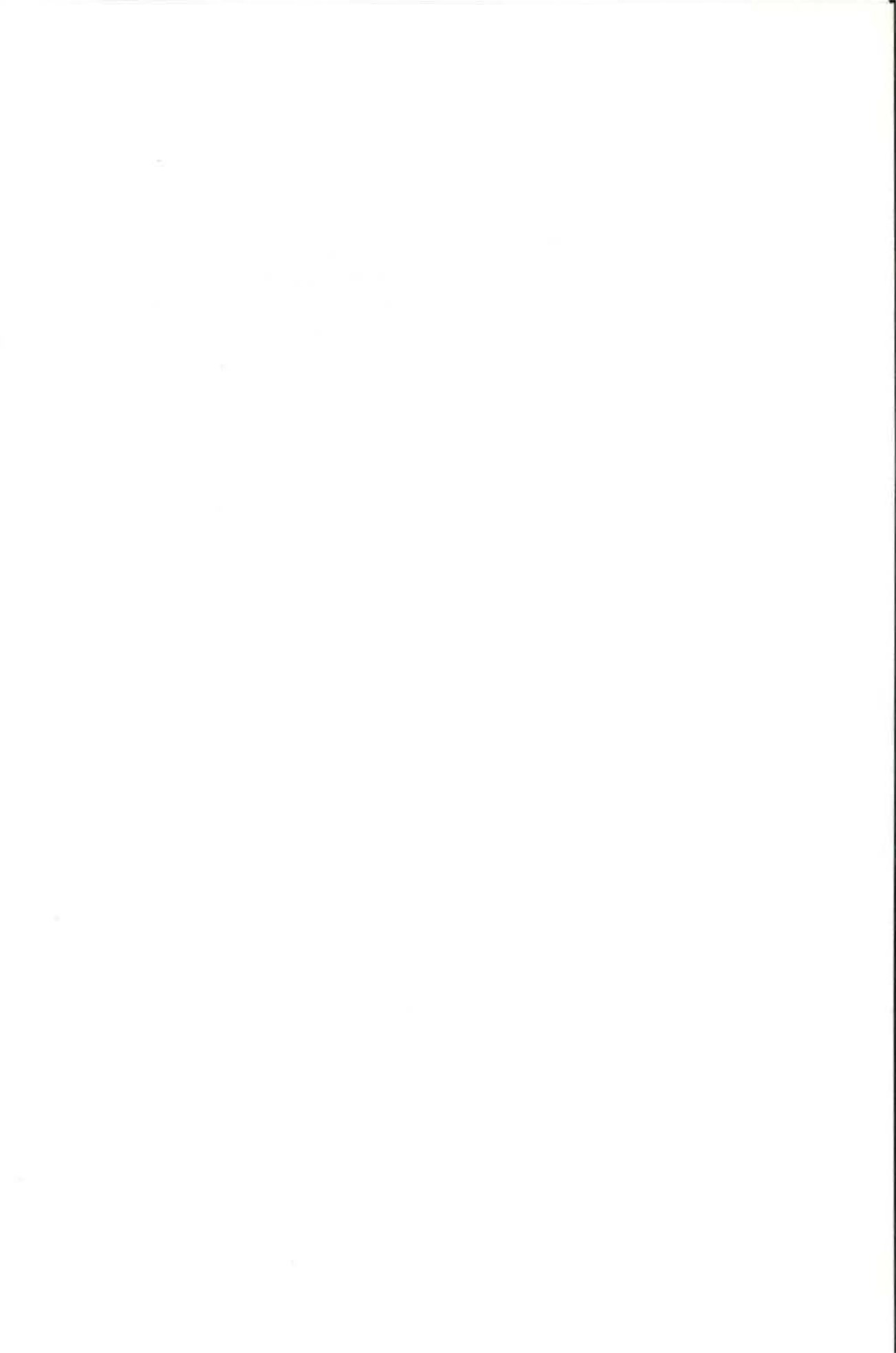
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**The Report of the Council  
of Monash University for  
the period 1 January 1983  
to 31 December 1983**

In accordance with Section 41 of the Monash  
University Act 1958, as amended, I submit  
the Report of the Council for 1983.

**For and on behalf of the Council**

**G.H. Lush  
Chancellor**



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# THE COUNCIL

Members of Council as at 31 December 1983

## Members ex officio

The Honourable Sir George Hermann Lush,  
LL.M.(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

The Honourable William Robert Baxter,  
M.L.C.  
The Honourable James Vincent Chester  
Guest, M.A.(Oxon.), M.B.A.(Melb.),  
Barrister-at-Law of Lincoln's Inn,  
Barrister-at-Law (Vic.), M.L.C.  
Gerard Marshall Vaughan, A.R.M.I.T.,  
Dip.Ed.(S.C.V.), B.E., M.Eng.Sc., Ph.D.,  
A.R.A.C.I., M.P.

## Appointed by the Governor in Council to represent the interests of agriculture, the professions, industry and commerce

Geoffrey Alistair Knights, M.A., Ph.D.  
(Cantab.)  
Jan Eric Kolm, A.O., Eng.Chem.(Prague  
Tech. Uni.), A.R.A.C.I., F.A.I.M., F.T.S.  
Hugh Mitchell McKenzie  
Sir James Charles McNeill, C.B.E.,  
Hon.D.Sc.(N'cle), F.A.S.A., F.A.I.M.  
Nigel Wood, B.Ec.(N.E.)

## 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.), C.Eng., F.I.Mech.E.,  
M.Aust.I.M.M. (*Engineering*)  
The Honourable Mr Justice Robert Clive  
Tadgell, LL.B.(Melb.) (*Law*)  
Nigel John Gray, A.M., M.B., B.S.(Melb.),  
F.R.A.C.P., F.R.A.C.M.A. (*Medicine*)  
Hugh Alexander Grayson, F.M.T.C.,  
C.Chem., F.R.A.C.I., F.I.D.A., F.A.I.M.  
(*Science*)

## Elected by the Professors

John William McCarty, B.Com.(Melb.),  
Ph.D.(Cantab.), F.A.S.S.A.  
Ian James Polmear, B.Met.E., M.Sc.,  
D.Eng.(Melb.), F.T.S., F.I.M., F.I.E.Aust.  
Bruce Oswald West, B.Sc.(Adel.), Ph.D.(Adel.  
and Cantab.), F.R.A.C.I.  
Jean Primrose Whyte, B.A.(Adel.),  
A.M.(Chic.), F.L.A.A.

## Elected by teaching staff other than the Professors

Peter LePoer Darvall, B.C.E.(Melb.),  
M.S.(Ohio State), M.S.E., M.A.,  
Ph.D.(Prin.), Dip.Ed., M.I.E.Aust.  
Ian McCance, M.Sc.(Melb.), Ph.D.  
Martin George Sullivan, M.A., B.Ed.(Q'ld.),  
Ph.D.

## Appointed by the Minister for Education

Ronald George Ritchie, B.Mech.E.,  
Dip.Ed.(Melb.), Dip.Mech.E.(Caulfield  
T.C.), M.Admin., F.I.E.Aust., M.A.C.E.

## Co-opted

Keith Thomas Henry Farrer, O.B.E.,  
D.Sc.(Melb.), M.A.(La T.), C.Chem.,  
F.R.I.C., F.R.A.C.I., F.I.F.S.T.(U.K.),  
F.A.I.F.S.T., F.T.S.  
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**

Lance Aubrey Endersbee, A.O., 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.  
John David Legge, M.A.(Melb.), D.Phil.(Oxon.), F.A.S.S.A.

**Elected by the non-academic staff**

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

**Elected by the students of the University**

Hugh Christopher Cameron

Dudley Dissanayake, B.A.(S.Lanka), M.S.W.(Minn.)

John Joseph Lenders, B.Ed.(S.C.V.)

*Secretary:* Mr M.D. Watson

**Changes in Membership of Council during 1983****Members who retired or resigned from office during 1983**

The Honourable Sir Richard Eggleston (Chancellor) 1975-83; Ms S.E. Armstrong (Undergraduate and Diploma Students) 1981-83; Mr R.J.A. Elliott (Undergraduate and Diploma Students) 1982-83; Mrs A.W. Hamer (Co-opted) 1977-83; Professor J.D. Legge (Co-opted Dean) 1982-83; Professor R.C. Nairn (Professors) 1979-83; Dr B.A. Parker (Non-professorial Teaching Staff) 1979-83; Sir Robert Price (Faculty of Science) 1979-83; Ms C.C. Strahan (Postgraduate Students) 1982-83; Mr G.B. Sword (Governor in Council — Trades Hall Council) 1982-83.

**Members re-elected or re-appointed for a further term of office during 1983**

The Honourable W.R. Baxter, M.L.C. (Governor in Council — Parliament) 1983-87; Dr N.J. Gray (Faculty of Medicine) 1983-87; The Honourable J.V.C. Guest, M.L.C. (Governor in Council — Parliament) 1983-87; Dr G.A. Knights (Governor in Council) 1983-87; Professor I.J. Polmear (Professors) 1983-87; Dr G.M. Vaughan, M.P. (Governor in Council — Parliament) 1983-87.

**Members elected or appointed to Council during 1983**

The Honourable Sir George Lush (Chancellor) 1983-86; Mr H.C. Cameron (Undergraduate and Diploma Students) 1983-85; Dr P. LeP. Darvall (Non-professorial Teaching Staff) 1983-87; Mr D. Dissanayake (Postgraduate Students) 1983-85; Professor L.A. Endersbee (Co-opted Dean) 1983-84; Mr H.A. Grayson (Faculty of Science) 1983-87; Mr J.E. Kolm (Governor in Council) 1983-85; Mr J.J. Lenders (Undergraduate and Diploma Students) 1983-84; Professor J.P. Whyte (Professors) 1983-87; Mr N. Wood (Governor in Council — Trades Hall Council) 1983-87.

**Vacancies in the membership of Council as at 31 December 1983**

One member appointed by the Governor in Council to represent the interests of agriculture, the professions, industry and commerce.

One member co-opted by Council.

# REPORT OF THE CHANCELLOR

## THE HONOURABLE SIR GEORGE LUSH, LL.M.(Melb.)

As foreshadowed in last year's report, I assumed the office of Chancellor of Monash University on 7 March in succession to Sir Richard Eggleston who had served the University with distinction during the previous eight years. A measure of the esteem by which Sir Richard is regarded by the Council can be gauged from the appended minute of appreciation which was adopted with acclamation on the date of his retirement from the University. He was further honoured by Council on 20 April when it was my pleasure to confer upon him the degree of Doctor of Laws *honoris causa*.

It was with some trepidation that I succeeded to the Chancellorship so ably filled in the past by Sir Robert Blackwood, Sir Douglas Menzies, and Sir Richard Eggleston. My task has been made easier, however, by the support and encouragement of the Deputy Chancellor, Dr Isaac, the Vice-Chancellor, Professor Martin, members of Council, and senior officers of the University. Following my recent retirement from the bench, I expect to devote more time to the life and affairs of the University during my remaining years in office.

The Council met on ten occasions in 1983, in the months of March to December inclusive. I chaired each of these meetings. As is usual, there were a number of changes in the membership of Council during the year and these are recorded following the current membership listing at the beginning of this report. I am grateful to all members — both past and present — for their contribution to the proceedings of Council in 1983. A full range of issues was dealt with during the year, further details of which will be given by the Vice-Chancellor in his report. Specific matters which occupied the attention of Council included the adequacy and provision of childcare and parking facilities on campus, and funding for the Library and for the clinical medical school building to be incorporated in the new Queen Victoria Medical Centre at Clayton. The debate concerning the imposition of quotas for over-

seas students continued in 1983 and, although little new ground was covered, it demonstrated once more what a vexed issue this is on campus. It was with some relief that further debate on this matter was deferred, to await the report of an independent committee of review established by the Commonwealth Government to report on all aspects of private overseas student policy. At its December meeting, Council took the exceptional step of revoking the degree of doctor of philosophy from a former student of the University after a select committee of the Professorial Board had found beyond reasonable doubt that the person concerned had knowingly falsified research findings in her doctoral dissertation. Although regrettable, it is most important that the University should resolutely maintain and defend the high standards of excellence that it has established over the past twenty-three years.

At its March meeting, Council congratulated the Chancellor of the University of Melbourne, Professor Sir Douglas Wright, A.K., the Chairman of our Patents Committee and subsequently a member of Council, Mr J.E. Kolm, A.O., and an Associate of the Faculty of Education, Dr P.P. Gorman, C.B.E., on being decorated in the Australia Day and New Year honours lists. On a sadder note, Council was informed at the same meeting of the death on 1 February of Emeritus Professor Sir Leslie Martin. Sir Leslie had strong links with Monash apart from being the father of its present Vice-Chancellor. He was a member of the Interim Council of Monash University and inaugural Chairman of the Australian Universities Commission between 1959 and 1966. Council was saddened by two other deaths in 1983. On 31 March, Emeritus Professor Donald Cochran died after a long illness. He was foundation Professor of Economics at Monash and Dean of the Faculty of Economics and Politics between 1961 and his early retirement in 1981. Apart from his many other activities both on and off campus, Professor



Former Chancellor, Sir Richard Eggleston (left), with present Chancellor, Sir George Lush.

— Photo *Richard Crompton*



Cochrane was a member of Council for thirteen years during his time at Monash. Also, Emeritus Professor Guy Manton died suddenly on 6 June. After a distinguished career in classics at the University of Otago, Professor Manton was Dean of the Faculty of Arts between 1965 and his retirement in 1977. He was a member of Council between 1974 and 1976.

In December Council conferred the title of Emeritus Professor upon Professor J. Bornstein of the Department of Biochemistry and Professor A.M. McBriar of the

Department of History to mark their retirement from the University at the end of the year. Apart from the honorary degree conferred upon Sir Richard Eggleston mentioned above, the degree of Doctor of Economics *honoris causa* was conferred upon Dr Colin Grant Clark at a graduation ceremony on 18 March.

All in all, the first year of my Chancellorship proved to be stimulating, and I look forward with confidence to the year ahead.

# THE HONOURABLE SIR RICHARD MOULTON EGGLESTON CHANCELLOR 1975-83

## MINUTE OF APPRECIATION ADOPTED ON 7 MARCH 1983

Sir Richard Eggleston was elected to the Chancellorship of Monash University on 13 January 1975 following the sudden death in office of the University's second Chancellor, Sir Douglas Menzies, on 29 November 1974. He was subsequently re-elected for two full three-year terms in November 1976 and 1979 and retired on 7 March 1983 after completing eight years in office.

He brought to Monash the wisdom and experience gained during a distinguished career in law, a career in which he made valuable contributions as a jurist, teacher, and scholar, and through his involvement in the arts and community affairs. Sir Richard practised as a barrister between 1932 and 1960, interrupted by a period on the staff of the Department of Defence during the Second World War. He lectured in equity in the Faculty of Law at the University of Melbourne between 1940 and 1949 and was appointed a King's Counsel in 1950. He was appointed to the Bench in 1960 and served as a judge of the Supreme Court of Norfolk Island until 1969 and a judge of the Commonwealth Industrial Court and the Supreme Court of the Australian Capital Territory up to his retirement in 1974. Between 1968 and 1972, Sir Richard served as Pro-Chancellor at the Australian National University. He took up a special, part-time appointment in the Monash Law School in 1974 and became a consultant to the Faculty in 1975 — a position to which he has been re-appointed annually by Council ever since. He was knighted by the Queen in 1971, honoured with the degree of Doctor of Laws *honoris causa* by the University of Melbourne in 1973, and elected to Fellowship of the Academy of Social Sciences in Australia in 1981 — largely on the basis of his writing on the law of evidence which has occupied much of his time at Monash since 1974.

Sir Richard has given distinguished leadership to Monash during the years of his Chancellorship. He represented the University on a number of important occasions, including the 1979 AVCC Conference of University Governing Bodies in Canberra at which he was invited to give a plenary address. He has presided at thirty-six graduation ceremonies (at which he shook the hands of some 10,000 new graduates) and chaired seventy-two of the eighty-one meetings of the University Council held during his term of office. Speaking at the last meeting of Council in 1982, Sir James McNeill said that 'Sir Richard had conducted meetings of Council with tact, tolerance, and great forbearance for which he earned the respect and gratitude of all members'. During many a long, earnest debate, he demonstrated that rare gift of a truly good chairman — the ability to encourage every member to contribute positively to discussion while never letting his hands slip from a firm grasp of the reins of orderly proceedings. His style of leadership was easy and relaxed — Sir Richard never allowed the pomp or trappings of office to interfere with the proper governance of the University. He never interfered with the day-to-day running of the University although he was always available for consultation. His door in the Law School was open to all who sought his advice. Outside the Council Chamber, Sir Richard will be remembered by most members for his warmth, wit, and wisdom and a seemingly endless repertoire of apt anecdotes.

This Council pays tribute to Sir Richard Eggleston's leadership of Monash University over the past eight years and wishes him and Lady Eggleston health, happiness and even more time together in the years ahead.



## 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.

An indication of the impact of 1983 on the affairs of Monash can be gauged by citing extracts from two consecutive Christmas messages to members of the University. In December 1982, I wrote in the University's official broadsheet, *Sound*:

*The past year has been, I suppose, the most difficult that universities have had to cope with in recent memory. We have suffered damaging cuts in our financial resources, and we have been forced to make unpalatable decisions in a number of important areas. I think, however, we have weathered these storms with the least possible damage to the long-term interests of the University. How much longer we can continue to adapt to these seemingly endless inroads into what many of us passionately believe to be the essence of university existence is, of course, open to serious question.*

One year later, in December 1983, I wrote:

*At this time last year, I wrote — a little solemnly — about the difficulties we had experienced in the year just ending and the challenges we faced in 1983. Well, we met those challenges and, I believe, overcame them in fine style. Today, a marked change has come over the scene. In the community generally there is a greater degree of confidence and optimism than we've seen for several years and I believe this spirit is abroad in the universities, too.*

With a change of government in Canberra and a new Victorian Government still finding its feet in Spring Street, the University faced much less external pressure or interference during the year when compared with the previous six years of my term as Vice-Chancellor. For a change it was internal matters that tended to come to the fore in 1983, a situation which we are better equipped to handle. It was very much a year of consolidation.

I foreshadowed the retirement of Sir Richard Eggleston as Chancellor of the University in my last report and again I pay tribute to his dedicated and distinguished leadership of Monash during his eight years in office. It is hard for a University to lose a

man of Sir Richard's stature and vision. However, I am pleased to report that Monash has continued to be in very capable hands since Sir George Lush assumed the office of Chancellor on 7 March. He has brought his own stamp of judicial dignity and experience to the Chancellorship and has chaired meetings of the Council with good humour and authority. Dr J.E. Isaac commenced his second term as Deputy Chancellor in March and we are fortunate indeed that, despite his heavy commitments with the Conciliation and Arbitration Commission, he still finds time to devote to Monash, not only to attend meetings of Council, but also to Chair our Staff and Honorary Degrees Committees. I am grateful once more to the Deputy Vice-Chancellor, Professor K.C. Westfold, and part-time Pro-Vice-Chancellor, Professor M.I. Logan, who gave their assistance and advice so willingly during the year especially in May and August when I was overseas.

Being the middle year of the 1982-84 triennium, there were few funding surprises although the Government's decision to return to full retrospective cost supplementation was a welcome initiative. Monash commenced the year with a cut in recurrent funding of \$210,000 in real terms. Coming as it did on top of the massive reduction of \$1,137,000 in 1982, the cumulative effects of government funding pressure since 1975, and a background of sharply increased costs and charges, made the task of preparing the annual operating budget a challenging exercise in prudent resource allocation. In its fourth report for the 1982-84 triennium, the Commonwealth Tertiary Education Commission warned the Federal Government that restrictions on recurrent funding in recent years, together with a growth in enrolments, have made it increasingly difficult for universities to maintain high standards of teaching and research. The report stated:

*That academic standards are now at risk is illustrated by worsening student/staff ratios and*



*a decline in the numbers of junior academic staff in recent years.*

This statement echoes the main thrust of the Monash submission to the Universities Council for the 1985-87 triennium. The CTEC also warned that the Labor Government's commitment to increase participation levels at universities would have clear implications for capital developments. The relatively small building programme of recent years has resulted in a backlog of building needs, and the ability of universities to accommodate future growth will be limited by a shortage of adequate accommodation and facilities. In this context the CTEC stated:

*If the government wishes to see participation in university education increased, and those increases sustained, then substantial additional resources will be needed over the next triennium to enable universities to cater for additional enrolments.*

On 2 and 3 May, Monash was host to members of the Universities Council as part of its regular programme of triennial visits. Summing up after a busy round of inspections of research-in-progress and discussions with different groups from the University community, the Chairman, Professor D.N.F. Dunbar, said that the Council had been impressed with the degree of enthusiasm shown by the staff and the high quality of the work they were doing. His comment reflects the efforts made by staff over the past seven years to maintain a spirit of innovation on campus and the respect which Monash commands within the community for its international reputation for excellence in research.

We have also taken positive steps to insulate ourselves as far as possible from the vagaries of government funding policies. From its own earnings and fund-raising activities, the University has been able to supplement its operating budget by \$512,000 in 1982 and \$738,000 in 1983. The injection of non-government funds will rise to \$1,500,000 in 1984 in an effort to bridge

the gap between our perceived needs and government grants. In terms of capital development, the University has had to rely also on a self-help programme to relieve the pressure on accommodation and the evolving needs of teaching and research facilities. During the year we committed, from free funds at our disposal, \$80,000 for long-awaited extensions to the Department of Materials Engineering, \$700,000 for the construction of a computing laboratory to cater for the rapidly expanding field of computer-based instruction, \$1,500,000 for a new multi-discipline centre, the highlight of which will be an exhibition gallery and home for the nucleus of the growing Monash University Art Collection, \$36,000 for the conversion of under-utilised space to office accommodation in the Department of Chemistry, and \$120,000 for the refurbishing of laboratory facilities in the Department of Biochemistry. Perhaps the most significant development in this regard during the year was the establishment in June of the *Monash University Foundation*, an independent trust fund administered by five trustees appointed by Council with the purpose of *providing funds for the University to promote and encourage the aims and objects of the University as set out in the Act*. It is intended that the Foundation will act as a focus for the generation of additional income for Monash and create a degree of independence and flexibility that is an essential characteristic of the great universities of the world.

As a sidelight to the foundation of a Monash University Art Gallery, a small group of committed citizens known as the *Friends of Russell Drysdale* organised an auction of donated art works in October to raise funds for a memorial to the late Sir Russell Drysdale — a long-time supporter and honorary graduate of the University — to be incorporated in the new gallery. The Regent Hotel provided the venue and Sotheby's Australia Pty Ltd conducted the auction in an honorary capacity. In all, some \$100,000 was raised from the sale of works and cash donations

towards the memorial, an excellent example of what can be achieved with goodwill and community support for a worthwhile cause.

One area of pressing concern, which is beyond the scope of self-help is the provision of funds for the 'fast-track' construction of the new clinical medicine school in conjunction with the relocation of the Queen Victoria Medical Centre at Clayton. After so many years of waiting, a start was made on the project early in the year only to find that the agreement of the Commonwealth to provide the State with funds for the clinical school had not been obtained. This matter is still unresolved despite an urgency debate in State Cabinet and personal representations to the Prime Minister. As the clinical school — for very sound reasons — is integrated within the whole new hospital complex, work on the two projects must proceed in parallel. A recommendation on funding has been made to the Minister for Education and Youth Affairs by the CTEC, but so far the Commonwealth Government has failed to give a firm commitment. Compounding this problem is the prospect of a significant short-fall in funds for the project. The CTEC has recommended that the Commonwealth Government should allocate \$M6.00 which is well below the budget of \$M7.85 and there is no indication from the State Government of where the balance is to come from. Being an integrated design, there is very little leeway to economise on construction costs and the facilities proposed are considered minimal for the University's — and indeed, the community's — needs. I hope that this vexing situation will be resolved promptly and responsibly. At stake is the continued viability of our Departments of Obstetrics and Gynaecology and Paediatrics which have done so much to focus world attention on new advances in reproductive biology and early childhood development in recent years.

In my last report, I mentioned the inquiry being undertaken by the CTEC into the rec-

ommendations of the Ralph Report on management education in Australia. This report had recommended that one of five regional schools of management, offering largely part-time courses, be established at Monash to complement the full-time courses offered by two national management schools at the Universities of New South Wales and Melbourne. The CTEC, however, proposed to the Minister that the Victorian regional school of management be established at RMIT which had the considerable benefit of a central business district location. At the same time, it praised the quality of the Monash Master of Administration course and recommended that it continue to be funded by the Commonwealth.

Monash gained media headlines on two occasions during 1983; that is, apart from the regular reporting of significant research findings which have brought distinction to the University both at home and abroad. The first occasion concerned the revocation by Council in December of the degree of doctor of philosophy of a former student of the University on the grounds of falsification of experimental findings, which has been mentioned already by the Chancellor. The decision was, of course, not taken lightly by Council, having been made after a most thorough investigation by an independent committee of the Professorial Board and was based upon the advice of senior counsel. Regrettable though it was, I believe the incident has shown that the University can and does act with integrity and firmness. It should be viewed as an isolated occurrence and placed in context with the 33,678 degrees conferred by the University between 1963 and the end of 1982, 3371 of which were higher degrees. The second involved publicity surrounding the exposure of forty-six volunteers to higher than intended amounts of radioactive material during a research project between September 1980 and September 1982 aimed at improving the first-aid treatment of snakebite. The snakebite research project was abandoned late in



1982 when it was discovered that a malfunction had occurred in electronic monitoring equipment used to measure the amounts of radioactive iodine administered to volunteers. Subsequent tests showed that 46 of the 116 people who participated in the project had received higher than intended levels of Iodine-131. Although it was later found that the health effects of this incident on the volunteers were negligible, the University took an extremely serious view of the matter and I moved immediately to establish a full and independent inquiry under the chairmanship of Mr D.J. Stevens, former Director of the Australian Radiation Laboratory. In its report, submitted in July, this inquiry found that the amounts of radioactive iodine taken up by the thyroids of volunteers were very small — in fact, smaller than occurs in the routine medical diagnostic procedure which uses Iodine-131 to measure thyroid uptake in patients. Nevertheless, it was understandable that some volunteers might experience anxiety about the incident and the University arranged for them to have medical consultations with two specialists — one from the University and one from outside.

The Chancellor has mentioned the continuing debate at Monash during the year in regard to the imposition of sub-quotas for overseas students. This is not an area that is best left to individual universities to resolve because action at one campus has inescapable effects on others. It was with some relief, therefore, that we noted the establishment by the Commonwealth Government of a committee of review into its private overseas student policy. Despite the wide range of opinion on this matter at Monash — understandable in such a large and complex institution — there is little dispute that this is an area best left to the discretion of government. There is also little argument with the proposition that, regardless of the number of overseas students admitted by the Government, few problems would arise if they were enrolled uniformly throughout the uni-

versity and college sectors. These views formed the basis of Monash's submission to the Committee of Review.

Academic developments during 1983 included the establishment of the Research Centre for Molecular Biology and Medicine to accelerate research into the medical and industrial application of recent developments in biochemistry, cell biology, and DNA technology. The Centre will coordinate research in these areas at Monash and collaborate in research programmes with outside organisations such as CSIRO and the Commonwealth Serum Laboratories. In another new move, Professor M.D. Brunt of the Department of Economics was appointed to a part-time position as Professorial Associate in the Faculty of Law where she will take part in the joint presentation of new courses on 'Law and Economics'. It is believed to be the first appointment of its kind in Australia. Financial support for the University's teaching and research effort came in the form of a most generous promise of \$100,000 over the next three years from the Ukrainian community of Victoria to fund the teaching of Ukrainian in our Department of Slavic Languages. Also, as foreshadowed in my last report, an appointment was made to a new Chair of Psychological Medicine based at the Royal Park Psychiatric Hospital and funded by the Health Commission of Victoria. An early retirement scheme was established by Council in April which will facilitate the retirement of members of the academic and general staff after the age of fifty-five when this can be justified in the academic or managerial interests of the University and within a quota set annually by Council. It is hoped that this scheme will introduce some much-needed mobility within the staffing ranks and create opportunities for some new blood to be appointed. Ten members of staff will have retired by the end of 1984 under the provisions of this scheme.

Professor W.A. Sinclair took up his appointment as Dean of the Faculty of Eco-

nomics and Politics at the beginning of the year in succession to the late Emeritus Professor Donald Cochrane who, as the Chancellor has already mentioned, died in March after a long illness. Monash staff distinguished themselves in many fields during the year. Associate Professor J. Agnew of the Department of Chemical Engineering and Associate Professor K. Muller of the Department of Pathology and Immunology were appointed to chairs in their respective disciplines at other Australian universities; Professor J.D.C. Crisp of the Department of Mechanical Engineering was awarded the 1984 A.G.M. Michell Medal by the Institute of Engineers, Australia; Pro-Vice-Chancellor, Professor M.I. Logan, was appointed to a three-year term on the Universities Council; Professor C.G. Weeramantry of the Faculty of Law was awarded an honorary doctorate of law by the University of Colombo, Sri Lanka; and two further members of staff, Associate Professor M. Clyne and Professor O.E. Potter, were elected to fellowship of their respective learned academies. It was with much regret that in August, I approved an application from the Dean of the Faculty of Science, Professor J.M. Swan, for early retirement to take effect in August 1984. With characteristic candour, he said that he had always advocated early retirement as a means of creating opportunities for young scholars to enter the academic ranks and had decided to act accordingly. John Swan has served Monash with great distinction since his appointment to a chair of organic chemistry in 1966. He served as Pro-Vice-Chancellor between 1971 and 1975 and, since 1976, has been Dean of the Faculty of Science. It is a sign of the University's growing maturity that each year sees it lose some colleagues who were associated with the foundation and early days of Monash.

The spirit of the University community really came to the fore in the aftermath of the disastrous Ash Wednesday bushfires. At least six Monash staff members lost their homes and belongings in the fires and many

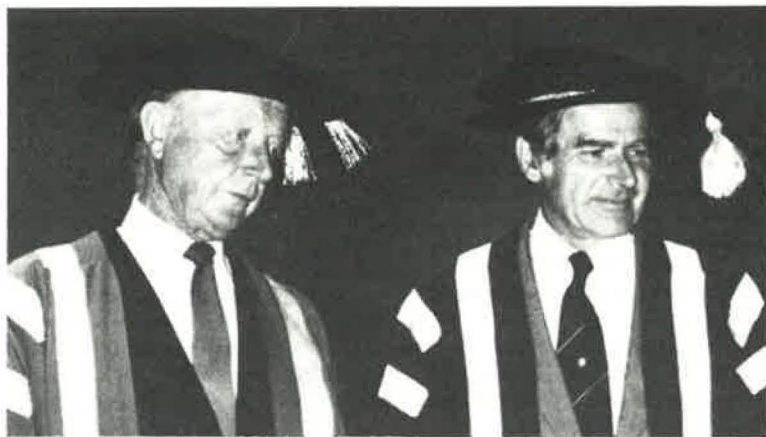
others suffered damage to their properties. Within three weeks, over \$15,000 had been donated on campus for immediate financial relief. Food, clothing, and furniture was distributed to victims and their families, and a supportive infrastructure had been established to help both staff and students whose lives had been so suddenly and dramatically affected by the tragic events of 16 February. Perhaps Monash could be forgiven for believing it had a special affinity with the victory of *Australia II* at Newport in September. Both skipper, John Bertrand, and crewman, William Bailieu, are Monash graduates. At the time, it was quickly recalled that John Bertrand had earned a distinction in 1969 for his fourth-year thesis in the Department of Mechanical Engineering entitled, *Investigations into the performance of a 12 metre yacht sail*.

A number of internal reviews were completed during the year. The Monash Review Committee, established by Council in 1977 to inquire into a number of aspects of the University's government and administration, submitted reports on promotion procedures for professional library staff and senior lecturers and on the role, appointment and tenure of deans. The Safety Committee commissioned a major survey of road safety on campus and the whole parking operation at Monash was reviewed by a Council sub-committee. Although the events which led to the establishment of this review took on the proportions of a major issue within the student body, those institutions less well-endowed with parking facilities than Monash could be forgiven for regarding the matter as a 'storm in a teacup'. Finally, the report of the Monash Transport Working Party was submitted to Council in December. This inquiry was established in late 1980 under the chairmanship of Mr V.E. Jennings, Research Director of Jennings Industries Limited, and was funded jointly by Monash and the Victorian Ministry of Transport largely through the interest and support of its former Minister, The Hon. R.R.C.



The Vice-Chancellor, Professor Ray Martin (right), accompanies Sir George Lush to the Chancellor's chair at the start of the installation ceremony.

— Photo Richard Crompton



Maclellan. The Working Party's report refuted the long-held perception that access to Monash was difficult and a major problem for students. It found that Monash was actually located closer to the homes of potential students than either Melbourne or La Trobe Universities and would continue to be closer as the centroid of Melbourne's population shifts further to the south-east. Of the three metropolitan universities, it said, Monash is the most accessible in terms of average car travel time and is well served by low-cost parking facilities. The University of Melbourne is better placed for public transport, but the advantage is slight — Monash students take some ten minutes on average longer than their University of Melbourne counterparts to reach campus by public transport. The report identified certain groups who have particular, although transient, transport problems — principally first-year undergraduates without access to car travel — and suggested a number of avenues for improving access to the University for all members of the Monash community.

1983 saw the proclamation of the Victorian *Freedom of Information Act* which,

however socially desirable, has sharply increased the workload for the University's administration and initiated yet another call on our limited funds. Although there was bound to be a teething period as new procedures are initiated and precedents established, it is already clear that the servicing of requests for information under this new legislation will result in a continued increase in staffing and legal costs which will be difficult to absorb.

As always, the year was enriched by a varied tapestry of events beyond the purely scholastic confines of the University's teaching and research programmes. Monash is indeed fortunate to be well-endowed with excellent facilities — both cultural and sporting — which enable it to participate so fully in the life and affairs of the greater Melbourne area. One event worthy of special mention was a public lecture given in September by Professor Rokuro Hidaka of Kyoto Seika University in Japan. Professor Hidaka's presence at Monash — indeed his presence in Australia — was a victory, albeit belated, for commonsense and the freedom of expression in this country.

# DEVELOPMENT AND ADMINISTRATION

## Site and Buildings

In 1983, construction projects completed included the Large Animal House, Anatomy Animal House (Stage 2), Japanese Studies Centre and Computer Centre Air Conditioning (Stage 2). Those projects that commenced during the year, with completion anticipated in 1984, include Chemistry Large Scale Laboratory, Chemistry Laser Laboratory and Extension to Engineering Building 6 (Stage 2).

The major construction projects completed in 1983 for the Students' Union were the Sports Centre Recreation Hall, Link Building and Fitness Centre.

Funds for minor building works, site works and services in 1983 were applied to the University Sign System; Documentation and Supervision and the provision of additional pavements and pavings, with contributions towards the Animal House (Stage 2), Japanese Studies Centre, Computer Centre Air Conditioning (Stage 2), and Chemistry Large Scale Laboratory projects.

## Legislation

Two new and two amending Statutes, and thirty-two new or amending Regulations were made in 1983. The new Statutes approved by the Governor in Council related to Discoveries, Inventions and Patents, and to the Computer Centre. New Regulations governing Matriculation, the degrees of Bachelor of Medicine, Bachelor of Surgery and Bachelor of Medical Science and the operations of the Computer Centre were among those introduced during the year.

## University Publishing

During the year, the Publications Section was closely involved with the introduction of new typesetting technology on campus. The use of word processor disks for initial key-stroke entry is increasing. This, coupled with the installation of the Baber disk conversion

unit in the Computer Centre and the Muse word processing program on some VAX computers, has enabled a wider application of typesetting to a range of material originating in the University. The technological developments prompted the establishment of an *ad hoc* Typesetting Advisory Committee, charged with the task of providing information to University staff on how to make the best use of the interface typesetting capabilities as they become available.

However, whilst many departments now have easier access to typesetting, the cost of printing and the difficulties of promotion and distribution of published work have still to be faced by the departments. It is in these areas that the Publications Committee is making special efforts to assist Monash authors. The Committee has also received an increasing number of requests for advice on publishing contracts and negotiations, work which is largely dealt with by the Secretary of the Committee and the Legal Officer.

The customary official publications were produced by the Publications Section during the year. The continuing delay in the receipt of audited accounts from the Auditor-General has meant the Section has again been unable to meet the legislated requirement to publish the Report of the Council promptly.

The Monash University Publications Committee met on four occasions during the year. More than twenty submissions of a wide variety were considered, indicating the difficulty experienced by authors in achieving publishing of academic works. The Committee remained active in the area of contract advice and negotiations, supported by the Secretary's expertise in this area, and by the legal office.

## Safety

The standards of general safety and radiation protection were maintained in 1983. A growing awareness and interest in general



safety was evidenced by the scope of matters considered by the Safety Committee and the increasing number of occasions the Safety Officer was called upon for advice and consultation.

The campus traffic management and road safety survey conducted on behalf of the Safety Committee was completed and its findings provided the basis for the Committee's recommendations on this important matter.

A review of buildings emergency procedures commenced and the emergency vehicle once again performed with distinction. It was called out fifty-seven times in 1983.

In the light of imminent changes to legislation relating to occupational health and safety, the Safety Committee made a submission to the Minister requesting that the special needs of teaching and research institutions be considered in the drafting of new legislation.

In radiation protection, the important occupational thyroid monitoring program has continued. Out of some sixty monitoring sessions some ten had detectable levels of

iodine-125 in the thyroid but none of these were greater than ten per cent of the occupational limit. The cost-effective thyroid monitoring system installed by the Radiation Protection Officer attracted interest both in centres in Australia and in South East Asia.

The Radiation Protection Officer continued with the program of introductory lectures on laboratory radiation protection to new research students and staff in departments in the Faculties of Medicine and Science, as well as external courses such as those of the Metropolitan Fire Brigade Training School.

The Radiation Protection Officer also collaborated with a visiting research scholar from Harvard University on a research project in which a new radioactive tracer technique was applied to marsupial reproductive zoology. A paper on this work is in the press.

Comments on the 1983 Radiation Safety Bill, which was passed as the Health (Radiation Safety) Act 1983, were made through the Chairman of the Safety Committee to the Minister of Health.

## STAFF

The recruitment of academic staff in 1983 remained at the low level of recent years although some indication of a slight improvement is evident. Under current conditions mobility of staff is restricted.

Over the years regular part-time staff, referred to in this University as fractional staff, have become an established part of the University's 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 1983 was:

	Professor	Assoc. Professor, Reader	Senior Lecturer	Lecturer, Teaching Registrar	Principal Tutor	Senior Tutor	Tutor	Total
Arts	22	20	84	40	3	11	35	215
Economics and Politics	13	11	32	34	2	4	35	131
Education	5	4	29	12	2	3	4	59
Engineering	9	14	41	9	—	11	1	85
Law	6	8	23	10	—	10	7	64
Medicine	20	19	58	23	1	21	3	145
Science	21	30	73	16	—	7	14	161
Other	—	2	—	4	—	—	—	6
Totals	96	108	340	148	8	67	99	866

The pattern of teaching-staff recruitment in 1983 was:

	Continuing Appoint- ment	Fixed Term	Short Term or Temporary
Professors	2	—	3
Senior Lecturers	1	—	5
Lecturers	5	3	23

	Continuing Appoint- ment	Fixed Term	Short Term or Temporary
Professors	2	—	—
Readers	2	—	—
Associate Professors	3	—	—
Senior Lecturers	5	1	3
Lecturers	3	5	14

and 27 Senior Tutors and 32 Tutors.

and 23 Senior Tutors and 40 Tutors, many being employed on a fractional basis, took up their first appointments in 1983. Those leaving the University in the year due to resignation, retirement or expiry of fixed- or short-term appointments were:

At the beginning of 1983, Professor W.A. Sinclair commenced a five-year term as Dean of the Faculty of Economics and Politics and during the year, Professor G.C. Smith was appointed to a Chair of Psychological Medicine, but will not take up duty until 1984.

Professor W.A. Sinclair, Dean of the Faculty of Economics and Politics.

— Photo *Richard Crompton*



Academic staff employed solely for research projects, expressed in full-time equivalent staff, comprised 242 Research Fellows, Officers and Assistants.

With a strength of 2,949 total equivalent staff at end April 1983, total staffing, whilst showing a slight increase over the 1982 total of 2,925, remains at approximately the same level as for the past four years.

The 1981 distribution of staff over the various fields of activity was:

		Total
Teaching and Research		
Teaching Staff	955	
Support Staff	688	1643
Research		
Academic Staff	242	
Support Staff	65	307
Library		178
Computing		60
Other Academic Services		43

Student Services	22
Central Administration	201
Buildings, Grounds, Cleaning, and Central Services	241
Continuing Education	10
Independent Operations — Student Union, Bookshop, etc.	242

The University records with regret the deaths of Mrs B.J. Bradley, Mr T.K. Collingbourne, Mr J.M. Dann, Mr B.G. Demnar, Mrs P.F. Flanagan, and Mr K.J. Richter.

At the end of 1983, Professors J. Bornstein and A.M. McBriar retired and were granted the status of Emeritus Professor.

The University remains within the C.T.E.C. 7 per cent limit for staff undertaking Outside Studies Programs.

## ACADEMIC DEVELOPMENTS

### Degrees and Diplomas conferred

The following degrees and diplomas were conferred by the University at graduation ceremonies in 1983, the final column indicating the total number of degrees and diplomas awarded since the foundation of the University.

	Male	Female	1983 Total	1961-83 Total
Bachelor of Arts	181	390	571	8,822
Bachelor of Arts with Honours	45	47	92	1,455
Bachelor of Social Work	8	31	39	79
Bachelor of Social Work with Honours	1	2	3	166
Master of Arts	10	11	21	329
Master of Librarianship	2	5	7	23
Master of Social Work	1	2	3	9
Bachelor of Economics	326	78	404	5,283
Bachelor of Economics with Honours	21	10	31	526
Master of Administration	40	6	46	410
Master of Economics	10	2	12	158
Bachelor of Education	23	23	46	1,565
Bachelor of Special Education	2	9	11	180
Master of Education	16	10	26	384
Master of Educational Studies	51	31	82	200
Bachelor of Engineering	57	4	61	1,058
Bachelor of Engineering with Honours	66	7	73	1,270
Master of Engineering Science	27	—	27	254
Bachelor of Jurisprudence	18	8	26	1,046
Bachelor of Laws	148	64	212	2,238
Bachelor of Laws with Honours	13	10	23	166
Master of Laws	12	9	21	145
Bachelor of Medical Science	—	—	—	12
Bachelor of Medical Science with Honours	4	3	7	139
Bachelor of Medicine, Bachelor of Surgery	64	35	99	1,742
Bachelor of Medicine, Bachelor of Surgery with Honours	26	12	38	529
Master of Psychological Medicine	1	—	1	2
Master of Surgery	—	—	—	2
Bachelor of Science	176	136	312	3,868
Bachelor of Science with Honours	114	94	208	2,349
Master of Environmental Science	12	1	13	126
Master of Science	11	5	16	306
Doctor of Philosophy — Arts	10	10	20	187
— Economics	5	—	5	31
— Education	10	5	15	85
— Engineering	7	—	72	225
— Law	1	—	1	21
— Medicine	4	4	8	95
— Science	31	6	37	708

Doctor of Letters	1	—	1	1
Doctor of Medicine	—	—	—	29
Doctor of Science	—	—	—	10
Honorary Master of Science	—	—	—	4
Honorary Doctor of Letters	—	—	—	10
Honorary Doctor of Economics	1	—	1	2
Honorary Doctor of Engineering	—	—	—	7
Honorary Doctor of Laws	1	—	1	33
Honorary Doctor of Medicine	—	—	—	5
Honorary Doctor of Science	—	—	—	11
Total Degrees	1,557	1,070	2,627	36,305

	Male	Female	1983 Total	1961-83 Total
Diploma in Commercial Law	7	—	7	28
Diploma in Computer Science	3	—	3	24
Diploma in Education	118	123	241	6,290
Diploma in Educational Psychology	15	25	40	218
Diploma in Engineering Geology	1	—	1	9
Diploma in English	3	5	8	31
Diploma in Family Law	1	—	1	6
Diploma in Immunology	—	—	—	15
Diploma in International and Comparative Law	1	—	1	2
Diploma in Japanese Studies	—	2	2	7
Diploma in Librarianship	1	4	5	18
Diploma in Linguistics	—	—	—	4
Diploma in Materials Engineering	—	—	—	1
Diploma in Microbiology	—	1	1	5
Diploma in Migrant Studies	—	—	—	22
Diploma in Operations Research	5	4	9	28
Diploma in Slavic Languages	—	—	—	1
Diploma in Taxation Law	12	1	13	23
Total Diplomas	167	165	332	6,732



### 1983 annual examination pass rates

There has been a continuation of the high percentage of first year full-time students passing examinations. 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.

Group (a)	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Arts	87	88	83	87	86	87	84	84	88	87
Economics and Politics	85	80	75	83	85	82	83	80	81	82
Law	92	94	91	90	93	97	92	95	90	95
Science	84	87	85	80	83	86	87	88	91	92
Group (b)										
Diploma in Education*	95	95	95	95	98	87	93	95	93	95
Engineering	64	64	67	71	73	74	75	83	80	84
Medicine	95	90	99	95	95	88	92	92	92	94

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.

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



# STUDENT ENROLMENT

The net total undergraduate population decreased from 10,566 in the previous year to 10,355, an decrease of 2.0 per cent. Graduate enrolments decreased from 2,472 to 2,365 and total enrolments of all students from 14,221 to 13,819. Full details of enrolments are given in the table below.

Of the total of 13,819 students, 1,739 (12.6 percent of the total) were from overseas as follows: *Oceania* — Papua New Guinea 4, Fiji 9, New Zealand 9, Tonga 1, other Pacific Islands 1; *Africa* — Ghana 2, Kenya 1, Lesotho 1, Malawi 2, Mauritius 5, Nigeria 1,

Rhodesia 2, South Africa 2, Zimbabwe 1, Tanzania 5, Uganda 4, Zambia 1, other Africa 1; *America* — Canada 7, USA 14, South America 2, other America 1; *Asia* — Brunei 2, Cyprus 1, Hong Kong 72, India 10, Malaysia 1,322, Singapore 90, Sri Lanka 27, other Middle East 2, Bangladesh 11, Burma 1, China 6, Indonesia 25, Japan 21, Korea 8, Pakistan 2, Philippines 4, Taiwan 3, Thailand 21, Turkey 2, Vietnam 1; *Europe* — UK and Eire 16, France 2, Germany 6, Malta 1, USSR 1, Nordic Lands 1, other Europe 5. A total of 1033 males and 736 females.

## Net Enrolments by Degree/Faculty 1983 (as at 30 April)

Faculty and year	Full-time			Part-time			Total		
	M	F	T	M	F	T	M	F	T
<b>Higher degree</b>									
Higher Doctorate	2	—	2	9	—	9	11	—	11
Ph.D.	287	140	427	123	59	182	410	199	609
Master	227	114	341	902	502	1,404	1,129	616	1,745
<b>TOTAL</b>	<b>516</b>	<b>254</b>	<b>770</b>	<b>1,034</b>	<b>561</b>	<b>1,595</b>	<b>1,550</b>	<b>815</b>	<b>2,365</b>
<b>Master preliminary</b>	18	11	29	26	45	71	44	56	100
<b>Postgraduate diplomas</b>									
Arts:									
Dip. Engl.	—	2	2	2	7	9	2	9	11
Dip. Gen. & Comp. Lit.	—	—	—	—	—	—	—	—	—
Dip. Jap. Stud.	—	—	—	1	—	1	1	—	1
Dip. Libr.	—	2	2	3	6	9	3	8	11
Economics & Politics:									
Dip. Ops. Res.	6	3	9	4	3	7	10	6	16
Education:									
Dip. Ed.	104	164	268	29	53	82	133	217	350
Dip. Ed. Psych.	5	11	16	12	32	44	17	43	60
Engineering:									
Dip. Mat. Eng.	2	—	2	2	—	2	4	—	4
Law:									
Dip. Com. Law	1	—	1	8	7	15	9	7	16
Dip. Int. & Comp. Law	—	—	—	2	—	2	2	—	2
Dip. Tax Law	—	—	—	19	2	21	19	2	21
Dip. Fam. Law	1	—	1	2	13	15	3	13	16
Medicine:									
Dip. Micro.	—	—	—	—	1	1	—	1	1
Dip. Imm.	—	—	—	—	—	—	—	—	—
Science:									
Dip. Comp. Sc.	—	—	—	—	—	—	—	—	—
Dip. Eng. Geol.	—	—	—	1	—	1	1	—	1
<b>TOTAL</b>	<b>119</b>	<b>182</b>	<b>301</b>	<b>85</b>	<b>124</b>	<b>209</b>	<b>204</b>	<b>306</b>	<b>510</b>

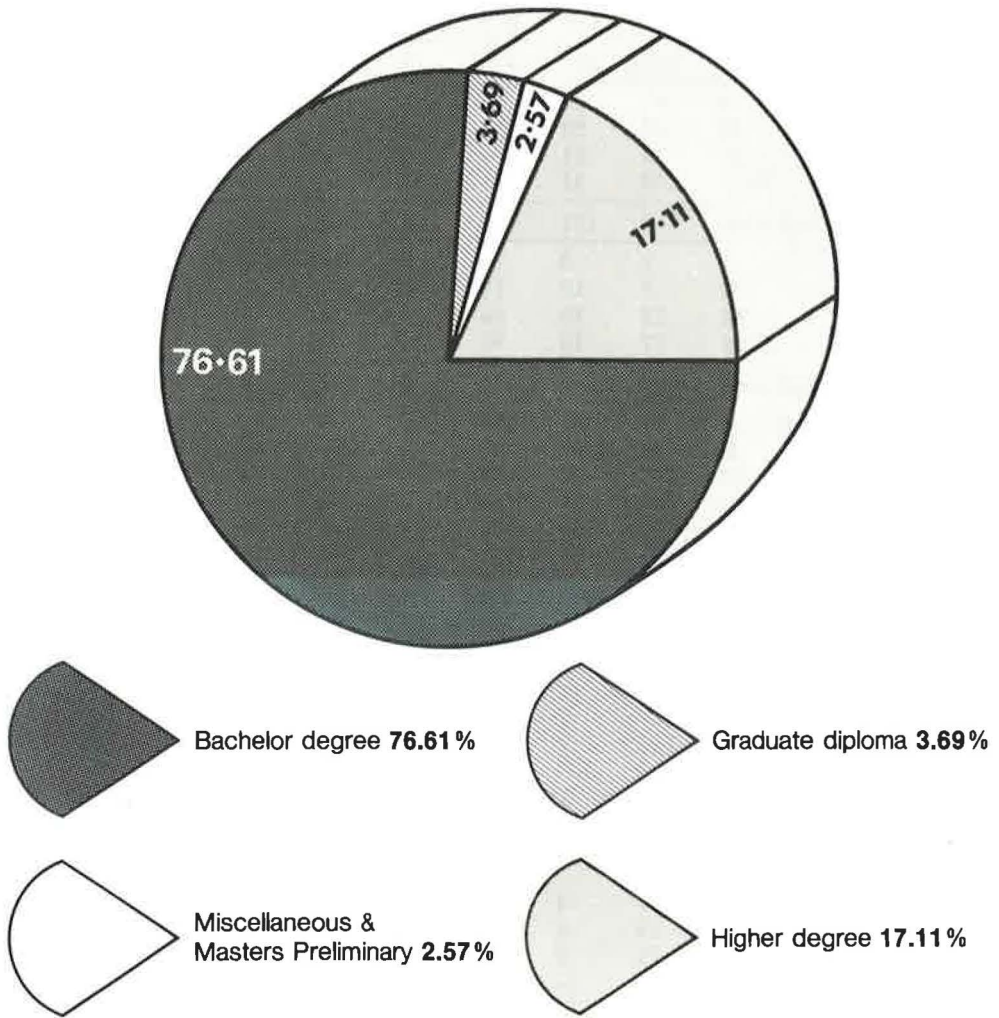
**Net Enrolments by Degree/Faculty 1983 (as at 30 April) (continued)**

Net Enrollments by Degree/Faculty, 1998 (as at 30 April) (continued)											
Faculty and year		Full-time			Part-time			Total			
		M	F	T	M	F	T	M	F	T	
<b>Postgraduate</b>											
<b>Bachelor degrees</b>											
Education:											
B.Ed.		1	7	8	57	73	130	58	80	138	
B.Sp.Ed.		—	3	3	12	80	92	12	83	95	
TOTAL		1	10	11	69	153	222	70	163	233	
<b>Bachelor degrees</b>											
Arts B.A:		I	222	508	730	74	260	334	296	768	1,064
		II	189	443	632	53	228	281	242	671	913
		III	175	386	561	113	301	414	288	687	975
		IV	26	40	66	6	19	25	32	59	91
Sub-total			612	1,377	1,989	246	808	1,054	859	2,185	3,043
Arts B.Soc.Wk:		III	9	30	39	—	—	—	9	30	39
		IV	5	37	42	—	—	—	5	37	42
Sub-total			14	67	81	—	—	—	14	67	81
Economics & Politics:		I	200	145	345	26	10	36	226	155	381
		II	242	152	394	37	13	50	279	165	444
		III	249	184	433	179	77	256	428	261	689
		IV	10	5	15	—	—	—	10	5	15
Sub-total			701	486	1,187	242	100	342	943	586	1,529
Engineering:		I	259	30	289	2	—	2	261	30	291
		II	290	25	315	5	2	7	295	27	322
		III	200	20	220	9	1	10	209	21	230
		IV	168	9	177	17	1	18	185	10	195
Sub-total			917	84	1,001	33	4	37	950	88	1,038
Law: LL.B.		I	1	—	1	1	4	5	2	4	6
		II	2	1	3	7	9	16	9	10	19
		III	13	8	21	12	6	18	25	14	39
		IV/V	43	29	72	31	15	46	74	44	118
Sub-total			59	38	97	51	34	858	110	72	182
Law: B.Juris./LL.B.		I	1	1	2	—	2	2	1	3	4
		II	7	8	15	3	1	4	10	9	19
		III	16	15	31	2	1	3	18	16	34
		IV/V	28	15	43	6	4	10	34	19	53
Sub-total			52	39	919	11	8	19	63	47	110
Law: B.Juris.		II	—	—	—	—	—	1	1	—	1
		I	—	—	—	—	—	—	—	—	—
		III	—	—	—	—	1	1	—	1	1
Sub-total			—	—	—	—	2	2	—	2	2

**Net Enrolments by Degree/Faculty 1983 (as at 30 April) (continued)**

Faculty and year		Full-time			Part-time			Total		
		M	F	T	M	F	T	M	F	T
Law/Arts:	I	22	40	62	—	—	—	22	40	62
	II	41	60	101	2	5	7	43	65	108
	III	47	76	123	7	5	12	54	81	135
	IV/V	103	117	220	8	13	21	111	130	241
	Sub-total	213	293	506	17	23	40	230	316	546
Law/Economics and Politics	I	61	24	85	1	2	3	62	26	88
	II	43	22	650	1	—	1	44	22	66
	III	79	24	103	4	2	6	83	26	109
	IV/V	153	51	204	18	—	18	172	51	222
	Sub-total	336	121	457	24	4	28	360	125	485
Law/Science:	I	7	9	16	—	—	—	7	9	16
	II	7	12	19	—	—	—	7	12	19
	III	23	13	36	—	1	1	23	14	37
	IV/V	32	10	42	2	1	3	34	11	45
	Sub-total	69	44	113	2	2	4	71	46	117
Medicine: M.B.,B.S.	I	94	66	160	—	—	—	94	66	160
	II	96	67	163	—	—	—	96	67	163
	III	93	62	155	—	—	—	93	62	155
	IV	98	67	165	—	—	—	98	67	165
	V	85	65	150	—	—	—	85	65	150
	VI	93	58	151	—	—	—	93	58	151
	Sub-total	559	385	944	—	—	—	559	385	944
Medicine: B.Med.Sc.		5	2	7	—	—	—	5	2	7
Sub-total		5	2	7	—	—	—	5	2	7
Science:	I	219	292	611	4	7	11	323	299	622
	II	297	247	544	39	23	62	336	270	606
	III	283	265	550	84	56	140	369	321	690
	IV	110	97	207	—	1	1	110	98	208
	Sub-total	1,011	901	1,912	127	87	214	1,138	988	2,126
Science/Engineering: B.Sc./B.E.	I	57	8	65	—	—	—	57	8	65
	II	48	6	54	—	—	—	48	6	54
	III	18	2	20	1	—	1	19	2	21
	IV	5	—	5	—	—	—	5	—	5
	Sub-total	128	16	144	1	—	1	128	16	144
TOTAL		4,676	3,853	8,529	754	1,072	1,826	5,430	4,925	10,355
Not for Degree		9	11	20	110	126	236	119	137	256
Total other than higher degree		4,823	4,067	8,890	1,044	1,520	2,564	5,869	5,587	11,454
Total net enrolments		5,396	4,321	9,660	2,078	2,081	4,159	7,417	6,402	13,819

**Total Net Enrolments at 30 April 1983: 13,819**





## Faculty of Arts

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

The year 1983 was the first year of a planned reduction in student load in the Faculty of Arts. It is intended that the faculty should stabilise its enrolments at a figure of 2,800 E.F.T.S. (equivalent full-time students) by 1987 in order to make possible an increase in Science enrolments within the University's prescribed total of 12,800 E.F.T.S. The change is expected to reduce the difference in cut-off for 'N' type students in Science and Arts. In fact, in 1983 the Faculty of Arts fell short of its target of 3,020 E.F.T.S., achieving a total of 2,902 and a cut-off for 'N' type applicants of 250. In 1984, to achieve the control total of 2,905 E.F.T.S. set for the faculty, no significant adjustment to the size of the 1984 intake should be required.

During the course of the year the faculty gave considerable attention to technological advances which, over a period, may be introduced to assist the scholarly and administrative work of its members. A start was made in 1982 when salary savings made possible the purchase of the faculty's first word processors. In 1983 a committee considered alternative ways of consolidating this beginning, including the possibility of providing word processing facilities as a central faculty service or, on the other hand, of extending direct departmental access to word processors. While these questions are still under discussion, it is clear that we are working within severe financial constraints. It was possible in 1983 to deploy funds in a way that will enable some expenditure in this area in 1984, but, ideally, the faculty needs a special grant over a two- or three-year period to enable it to modernise its equipment.

The Dean was away on Outside Studies Program leave for three months during the latter part of the year and is grateful to the

Associate Dean, Professor David Bradley, for acting as Dean during that period.

### Staff

For the second year in succession the faculty was able to maintain its overall level of staffing. With the planned reduction of student numbers this should help gradually to relieve some of the pressures on the tutorial system to which reference was made in the reports of the last two years.

At the end of the year the faculty lost, through retirement, Professor A.M. McBriar (History), Mrs O. Oleinikov (Slavic Languages) and Mr J.G.A. Parrott (Indonesian and Malay). Dr A.G. Serle, Reader in History and a foundation member of the department, resigned to take up the full-time editorship of the *Australian Dictionary of Biography*. (He has been half-time editor for a number of years.)

Approval was given to fill the second chair of Geography and the position has now been advertised. New appointments to the faculty include Mr Charles Stevenson of University College, Dublin, and Dr Peter Groves of Monash to fixed-term lectureships in English, Mr Paul Tickell to a fixed-term lectureship in Indonesian and Malay and Dr Marko Pavlyshyn to a lectureship in Ukrainian funded by the Ukrainian community of Victoria. The Department of English continued to host staff members from Chinese and Thai Universities under the Chinese Exchange Program and the Thai Lecturers' Scheme respectively.

Professor F.C. Jackson was an invited speaker at the VIIIth International Congress of Logic, Methodology and Philosophy of Science, held at Salzburg in July. Professor Peter Singer was awarded the Felix Wankel

Ms Carol Williams, lecturer in the Department of Music, completed a three-volume study of a collection of 14th century songs, known as the Mancini codex.

— Photo *Richard Crompton*



Animal Protection Research Prize for the book *Animal Factories*, written in collaboration with an American co-author. He also gave the first 'Horizon Lecture' on BBC Television on the subject 'The Expanding Circle: Ethics, Animals and Evolution'. Dr J.M. Pow-

ell of the Department of Geography became the first person to be awarded the Monash degree of Doctor of Letters by examination. Mr Philip Martin of the Department of English exchanged academic posts with Professor Keith Harrison of Carleton College, Min-



nesota, for a period of three months. This is the second exchange arranged between a member of the Department of English and a member of an American university.

Dr Conrad Hamann of the Department of Visual Arts became a jury member of the National Trust (Victoria) and a member of the President's Award Committee of the Royal Australian Institute of Architects. Professor Plant, also of the Department of Visual Arts, was appointed to the Board of the Australian National Gallery. Professor Jean Whyte has become a member of the Council of the National Library of Australia and of the Library Council of Victoria. Dr Brian McMullan (Librarianship) has been awarded a Mumby Fellowship at the University of Cambridge. Dr F.W. Kent (History) has been appointed co-editor of a new periodical *I Tatti Studies in the Renaissance* to be published by the Harvard University Centre for Italian Renaissance Studies in Florence. Associate Professor H. Bolitho was appointed to the Edwin O. Reischauer Visiting Professorship in Japanese at Harvard University for 1983-84. Dr Anne Edwards of the Department of Anthropology and Sociology has been elected President of the Sociological Association of Australia and New Zealand.

Dr C.W. Chamberlain (Anthropology and Sociology) and Mrs H.A. Thomson (English) were promoted to Senior Lectureships and Dr Ian Mabbett (History) and Dr David Roberts (German) to the position of Reader.

### Undergraduate Studies

As a result of a review of the structure of the Arts degree, launched in 1982, the Faculty Board this year approved a proposal for a Board of Inter-disciplinary Studies to encourage inter-departmental co-operation in the planning and administration of new inter-disciplinary courses. The exact responsibilities of the Board have yet to be determined, but at least it should provide a means of encouraging experimental courses

of the kind exemplified in 'Text and Context', a new course planned by the Centre for General and Comparative Literature, to be introduced in 1985.

On the basis of funding provided by the Ukrainian community, the Department of Slavic Languages was able to introduce a new first-year course in Ukrainian, to be provided for an initial period of three years. In 1984 and 1985 a second-year course will be available also, making it possible, within that time, for students to complete a minor sequence.

Language students have continued to benefit from a variety of Study Abroad Programs. Arrangements exist for students in French to study either in New Caledonia or in Nice. The Department of German has arrangements with a number of German Universities which enable students to take part of their fourth-year work in Germany. The Department of Japanese continues to maintain the Monash Centre in Tokyo. The Department of French has participated in research into the possibilities of computer-assisted language teaching and a pilot grammar teaching program has been developed for the teaching of first-year French.

After a rather shaky start in 1982 the on-campus teaching of Modern Greek, under the Commonwealth Tertiary Education Commission's Community Language Program, became an established part of the faculty's activities. The scheme is administered by the University of Melbourne and provides for the teaching of Modern Greek at the three metropolitan universities. Students were enrolled in Modern Greek I at Monash and a lecturer and a tutor were in residence at Monash for three days a week throughout the year. Some question marks hang over the future of the scheme. The funds provided by the C.T.E.C. do not cover the full costs of the program and the willingness of the University of Melbourne to continue to accept the responsibility for administering the program must inevitably depend upon the continuance of special funding.



## Research and Graduate Studies

At the end of 1982 the faculty was forced, by an apparent sudden increase in graduate student enrolments, to take stock of its graduate program. As a rough guideline for the time being it accepted the figure of 600 E.F.T.S. as representing an appropriate size for its Graduate School. In the event the completion rate of Master of Arts and Doctor of Philosophy degrees kept the figure of graduate enrolments below that ceiling. During 1983 thirty-one students completed the requirements for the degree of M.A., twenty-four students, enrolled in Arts departments, completed the requirements for the degree of Ph.D. and twelve qualified for the award of Diploma in Arts.

The inter-disciplinary Centres of the faculty continued to work productively. The Centre of Southeast Asian Studies held forty-two seminars. In conjunction with the Australian-Indonesian Association, it sponsored its annual series of public lectures and was involved in the organisation of a 'Women in Asia Workshop' which attracted 180 participants. It also organised a one-day seminar on the Philippines which brought together Philippines specialists from elsewhere in Australia.

The Centre for Migrant Studies held eleven seminars and continued to publish the *Journal of Intercultural Studies*. Fruits of the recent research activities of the Centre appeared as S. Manton, J. McKay and M.G. Clyne, *English Language Learning Needs of Adult Migrants in the Western Suburbs of Melbourne* published by the Australian Government Printing Service. The research for this report was commissioned by the Department of Immigration and Ethnic Affairs.

The Centre for General and Comparative Literature also maintained a strong inter-disciplinary seminar program and was largely responsible for organising a Conference on Satire and Modes of the Comic, under the auspices of the Australian and South Pacific Association of Comparative Literary Studies (ASPACLS). The conference was held at the

University of Melbourne in November. The Centre has also taken the major initiative in planning a new Master of Arts in Eighteenth Century European Studies to be taken by course work and minor thesis. The M.A. is to be co-ordinated by the Centre and taught by members of the Departments of English, French, German, Politics and Visual Arts.

Changes in the funding arrangements for the Centre for Human Bioethics has enabled Professor Peter Singer to take up the position of Director of the Centre on an 0.6 basis while remaining as an 0.4 member of the Department of Philosophy.

A Centre of a different kind, the Japanese Studies Centre, continued to provide a program of public lectures and published a series of specialist papers. The Centre was established in 1980 by representatives of Monash, the University of Melbourne, La Trobe University and Swinburne Institute of Technology. It has institutional as well as individual members and represents an unusual experiment in inter-institutional co-operation. In 1983, with the support of the Japan World Exhibition Fund, the Toyota Corporation, C.R.A. Limited and Monash itself, a building was constructed on the Monash campus to serve as the headquarters of the Centre.

Members of the Department of Librarianship, under the general direction of Professor J.P. Whyte, completed a report on access storage of printed library materials in university libraries. This investigation was funded by the C.T.E.C. and has been published by the Graduate School of Librarianship under the title *Cost Effectiveness of Alternative Library Storage Programmes*.

It is worth noting that in 1983 the *Australian Journal of French Studies* celebrated its twentieth birthday. Two special numbers of the journal were published in 1983; one marking the Bicentenary of the birth of Stendhal and the other devoted to the Semiotics of the Theatre. The journal is now well established and has a secure international reputation.

### **Lectures, Exhibitions, the Creative and Performing Arts**

In place of the Writer-in-Residence program, the Department of English, supported by faculty funds, the Literature Board of the Australia Council and the Vera Moore Fund, has invited sixteen poets and playwrights to the University to discuss and give renderings of their work. The visitors included Mark O'Connor, Vincent O'Sullivan, Bruce Dawe, Peter Porter, Frank Kellaway, Ray Lawler and Louise Nowra.

As part of their course work, third-year students in Indonesian and Malay presented four public performances of the play 'Sekda', by the distinguished Indonesian dramatist Rendra.

Two public lectures were given by Professor Zvi Yavetz, of the University of Tel Aviv, who visited the Department of Classical Studies for a period of three months. Professor Yavetz' lectures were entitled 'A New Approach to Imperialism' and 'Charismatic Leadership'.

The Department of Visual Arts continued its exhibition series. Exhibitions for 1983 included 'Masterpieces — Art of the 70s', an exhibition substantially drawn from the Australian National Gallery, Canberra and accompanied by a weekly guest lecture program with the participatory artists, Peter Tyndall, Imants Tillers and Peter Cripps; 'The Renaissance Gardens of Italy', an exhibition which accompanied a seminar on Renaissance Patronage sponsored by the Humanities Research Centre; 'Celia Rosser, Banksias'; 'Perspecta', an exhibition from the Art Gallery of N.S.W. in conjunction with Heide Gallery; 'Art Deco? Australia', an exhibition of painting, furniture, fabrics and architecture of the 1920s and 1930s; and

'William Wilkinson Wardell, His Life and Work: A Retrospective Exhibition, 1823-1899'. The Department of Slavic Languages sponsored an exhibition of Slavic bibles with the help of the Main Library staff and representatives from various Slavic groups.

The Department of Classical Studies gave support and professional advice to the Classics Group, consisting of recent graduates of the department, in its production of two Greek plays, 'Lysistrata' (in English translation) and 'Medea', (in Modern Greek), which were staged under the auspices of the Northcote City Council and the Ministry for the Arts in March. These were performed in an outdoor theatre on the banks of the Yarra and the experiment was widely acclaimed in the press.

### **Visitors**

Visitors to the faculty included: Professor John Barnes of Oxford University (Anthropology and Sociology), Professor C. Fornara of Brown University and Professor Z. Yavetz of the University of Tel Aviv (Classical Studies), Professor Malcolm Bradbury of the University of East Anglia, Bonnie Scott of the University of Delaware and Jonathan Goldberg of Temple University, Philadelphia (English), Professor Karl Riha of the University of Siegen, Professor H. Stern of the University of Toronto and Professor Goetz Grossklaus of Karlsruhe University (German), Professor Richard Goldthwaite of Johns Hopkins (History), Dr N. Chadwick of the School of Australian Linguistics (Linguistics), Professor Douglas Hooper of the University of Hull (Social Work) and Dr Francisco Nemenzo, University of the Philippines (Centre for Southeast Asian Studies).



## Faculty of Economics and Politics

**Dean: Professor W.A. Sinclair, M.Com.(Melb.), D.Phil.(Oxon.), F.A.S.S.A.**

There continues to be a strong demand for the courses offered by the faculty. Competition for entry into the Bachelor of Economics degree, from both here and overseas, became keener, the preferred combination with the core subject of economics being accounting and financial studies. There was also a much larger number of applications for acceptance to the Master of Administration degree. Although it seems clear that the approach taken by the faculty to education in resource management is meeting with community acceptance, it is also important that we keep abreast of relevant changes in the world into which its graduates will go. One serious problem the faculty faces in responding to this challenge is its difficulty in obtaining satisfactorily qualified staff in accounting and business management in competition with salaries being offered elsewhere. Another matter to which attention is being given is the extent to which the need to take account of new developments, such as in the use of computers, can be reconciled with the general aims of the undergraduate degree.

### Undergraduate Courses

There was an increase of the order of fifteen per cent in the number of students expressing a preference for the Bachelor of Economics course on their Victorian Universities Admissions Committee application forms and no decrease in overseas applications. The number admitted, however, had to be reduced owing to the large number of students, generated by earlier large intakes now in the later years of the degree, and to a reduction in the E.F.T.S. target for the faculty. The latter fell from 2,320 to 2,300, the eventual numbers being very close to target. The combined result of these various in-

fluences was a sharp rise in the minimum aggregate H.S.C. score required for admission from 272 to 280.

In comparison with the Australian average the proportion of overseas students continued to be high. However, there was a decline in 1983 from 24.8 per cent of all students to 23.6 per cent and from 30.9 per cent of Bachelor of Economics pass degree students to 28.0 per cent.

The number of students who graduated with the Bachelor of Economics pass degree was 489, constituting a record for any year of the faculty's history. In addition, there were twenty-seven honours graduates compared with eighteen in 1982.

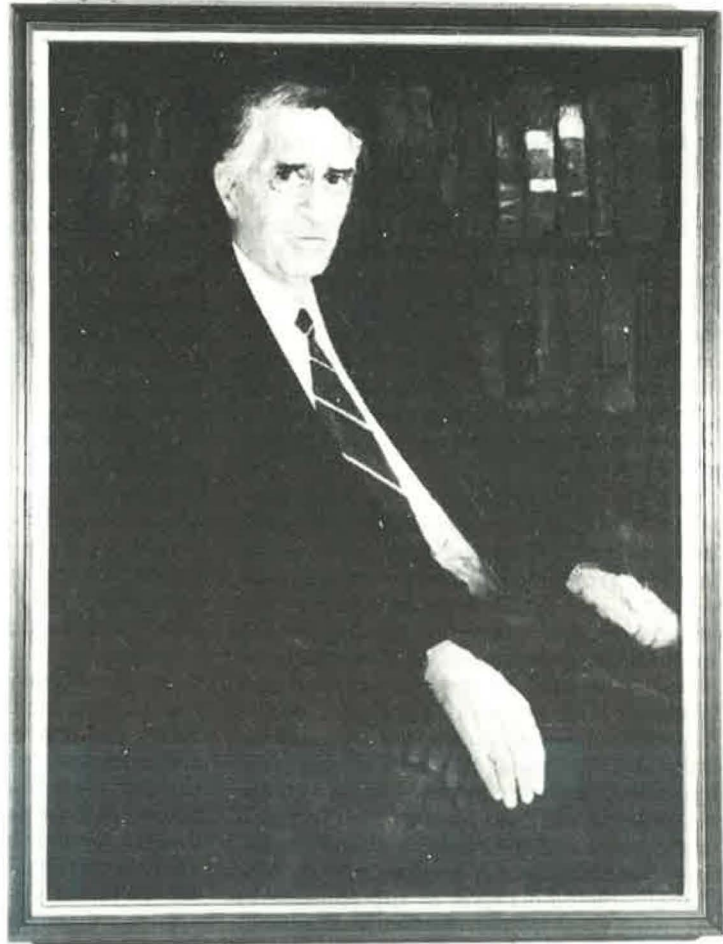
### Graduate Courses

Graduate numbers were held fairly steady in 1983 despite a marked increase in applications for entry to the Master of Administration degree. The keen interest in the latter was particularly gratifying in view of the recommendations made during the year by the C.T.E.C. on part-time degrees in business management. The recommendation reversed an earlier one made by the Ralph Committee of Inquiry into Management Education that Monash be designated as the location for a regional management school of Victoria. Although the faculty is contesting this C.T.E.C. recommendation, it took pleasure in the C.T.E.C.'s acknowledgement of the high standard of the Master of Administration degree and the strength of the Faculty of Economics and Politics and in its approval that existing specialisations in business administration, public administration and health administration continue to be offered by the degree.

The inaugural Graduate Research Thesis Medal of the Australia and New Zealand

Clifton Pugh's portrait of the late Professor Donald Cochrane, Foundation Dean of the Faculty of Economics and Politics.

— Photo *Richard Crompton*



section of the Regional Science Association was awarded to Dr Leong Liew for his Monash Ph.D. thesis in economics.

#### **Library and Technical Services**

The Donald Cochrane Library continued to be intensively used although the present tight financial constraints make it difficult to add to the existing holdings. The collection of Australian and New Zealand public company reports did however expand helped by a donation of 500 reports from the University of Canterbury. A fourth edition of the listing of public company reports has recently been produced.

The increasing role of computer applications in courses taught in the faculty has necessitated the addition of another seven terminals for the use of students.

#### **Staff**

A memorial service was held in the Religious Centre for Emeritus Professor Donald Cochrane, the foundation dean of the faculty, following his death on 31 March.

Mr P. Bowden resigned to accept appointment as Professor of Administration at the University of Manchester. A number of staff served on governmental bodies. Professor M. Brunt continued as a member of the



## Visitors

Sir Frank Espie was the inaugural Executive-in-Residence in the faculty. The faculty continued to attract a large number of distinguished academic visitors, particularly through the Centre of Policy Studies. Visitors included Professor W.J. Baumol of Princeton University, Professor A. Zeliner of the University of Chicago, Professor T.C. Bergstrom of the University of Michigan and Professor G.S. Maddala of the University of Florida. Many of the visitors participated in departmental seminars or presented papers at conferences.

Trade Practices Tribunal and as Chairman of the Victorian Consumer Affairs Council, Dr A. Fels was Commissioner of Prices for Victoria. Professor J.G. Head served as consultant to the Committee of Inquiry into State Government Revenue Raising, Professor R.M. Parish as a member of the National Advisory Council for the Handicapped and Professor R.H. Snape as a member of the Australian Steering Committee, Asean-Australia Joint Economic Research project, Professor M.G. Porter continued to be a member of the Australian Science and Technology Council and the National Energy Advisory Committee, and Professor W.A. Sinclair completed his term of appointment to the Australian Research Grants Committee.

## Centre of Policy Studies

The Centre of Policy Studies continues to be the only Special Research Centre designated by the C.T.E.C. for earmarked funding in the social sciences. Sixteen visiting fellows were present at times during the year and, partly in association with these, an active program of seminars and workshops was held. Conferences were sponsored on 'State Enterprise and Deregulation' and 'Distributive Justice and the Australian Medical Care System' and a number of commissioned studies for private and public agencies were completed. The Centre expanded its computing facilities with the acquisition of four IBM micro computers to make up a fully integrated communications system. It also improved its graphics and word processing capabilities with the use of a selection of sophisticated software.

During the year the Centre completed a study of mining industry in Australia which was funded by the Australian Mining Industry Council. A number of other studies under contract were also completed including Dry Dock Facilities in the Port of Melbourne: A Cost-Benefit Study (Economic and Budget Review Committee, Parliament of Victoria) and The Effects of Penalty Rates on the Victorian Hospitality Sector (Victorian Tourism Commission).

## Faculty of Education

**Dean: Professor Peter J. Fensham, M.Sc.(Melb.), Ph.D.(Brist. and Cantab.), F.R.A.C.I., A.B.Ps.S., A.A.Ps.S.**

I am pleased to be able to report that 1983 has been an active and positive year for the faculty. This resulted, in no small measure, from the confidence the faculty gained from the appointment of the seven new staff positions to which I referred in last year's report.

### Students

Once again the target load for the year was 1,100 but the internal distribution of this load among our seven different programs did change slightly, in line with our deliberate planning. There was a small expansion in the initial teacher education (Diploma of Education) and in the Bachelor of Education program enabling some non-graduate teachers to enrol. Both the Masters programs were reduced a little to balance the total. There was no difficulty in filling the various sub-quotas and there has been a more vigorous monitoring of the progress of our many part-time students, particularly in the Master of Educational Studies program. The study of this advanced professional degree involves three semesters (if full-time) of course work plus one semester of individual work on a project that can take many forms. After its introduction in 1978 there was a rapid build-up of enrolments and it is now our largest single program (about forty per cent of the total student load). Most of the students (apart from scholarship holders and some from overseas) are part-time so there is a time lag before enrolments and graduations level out. In 1983, just over 100 students completed this degree, by far the largest single group of higher degree graduates from a department or faculty at Monash. It is clear that the course does meet a number of the needs that teachers experi-

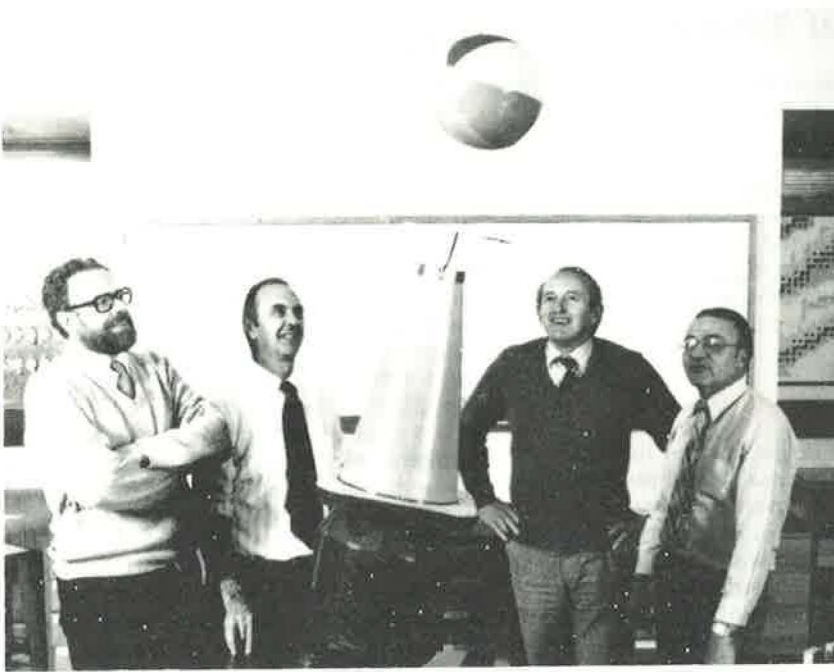
ence as their careers develop. Nevertheless, an active review of this program's development and operation is now underway. We believe, in this way, it can evolve to be even more useful to professionals in what is a fascinating period of educational change in Victoria. It is also hoped that the servicing of these students, particularly during the project phase of their studies, can be simplified as it is placing a very heavy load on both the academic and administrative staff. Interest in our doctoral program has been more than maintained and in 1983 seventeen theses were completed satisfactorily. I am especially pleased to be able to report that eighty-nine doctoral students are now to be found in many fields of educational research under the supervision of a large number of the academic staff. Eight students held research, and two students held course work scholarships in 1983 and late in the year our applicants were of such a standard that nine received research offers for 1984.

### Staff

As indicated above, most parts of the faculty had a positive and satisfactory staffing situation in 1983. Educational administration was the least stable and we have learnt that it will not be easy to recruit new staff in this field, when funds constrain us to offer short-term or relatively junior posts. As schools in Victoria move towards still more autonomy over policy and practice and begin, in 1984, to appoint their principals, interest in administrative aspects of education is sure to quicken. We have been fortunate in this field, as in others, to be able to attract first-rate visitors (e.g., Professor Dan Griffiths from New York in 1983) and also to continue to share with Deakin some of its visitors in

The Faculty of Education and the Department of Physics combined to play a leading role in the design and construction of *Experilearn*, a major new science display in the Museum of Victoria. Pictured with one of the exhibits are Dr Richard Gunstone, Ray Horan, Professor Richard White and Professor William Rachinger.

— Photo Steve Morton



educational administration. An insight into the range of teaching and research undertaken by staff can be obtained from the interests of the visiting lecturers now regularly attracted to the faculty.

Under the Australian-American Fellowship scheme we were pleased to welcome Professor Ned Flanders from Berkeley. His interest in the faculty stemmed from the work in the field of classroom behaviour that several staff members had conducted over a number of years. Some of them were able to work with him on new forms of inservice education for teachers and some very positive experience was gained for the future.

Professor Neil Sutherland, an historian from British Columbia, and Professor Heidi Kass, a science educator from Alberta, continued a very fruitful set of links we have been able to make in the last few years with Canadian scholars and universities. Several members of this faculty have now taken

Outside Studies Programs at these Canadian centres. I believe we have much to gain from these links since the issues and the problems of education in Canada and Australia have many points of common interest.

Professor Tony Edwards, a sociologist from Newcastle on Tyne also found a lot of mutual scholarly interest among the social scientists since his work on funding education in non-government schools in English was very topical in 1983. Professor Michael Apple from Wisconsin was the triennial University Visiting Professor in the faculty from July to October. His field is the politics of curriculum and this was again a mutually stimulating appointment. He was in considerable demand for conferences and for lectures elsewhere, since the politics of Australian curriculum has probably never been as open or problematic as it is now.

Other visitors to the faculty during the year were Professors A. Blum and E. Jung-



wirth (Israel), Drs D. Shipstone and K. Fogelman (U.K.), Dr R. Petersen (Sydney), Professor Liu Yulin (China), and Dr T. Chelliah (Malaysia).

In this middle year of the present triennium the faculty embarked on a major review of staffing policies and practices. The review has covered both the academic and general staff and a great deal of useful information has been forthcoming. I believe it will also enable us to make much better plans for the funding for the 1985-87 triennium. In a faculty where so much of the budget (95 per cent plus) is spent on staffing it is imperative that we get some relief soon from the current experience in which the good work of staff can only be rewarded (increments, promotions, new initiatives, etc.) by the loss of one or more of our members per year.

### **Professional Service**

As usual many of the staff have made contributions to the profession in Victoria. Professor R.J.W. Selleck and Associate Professor M. Balson completed long periods of service and leadership to the Coburg College of Advanced Education and to the Institute of Early Childhood Development respectively. Several others continue to serve on the councils of such bodies. Three of the historians have also been busy assisting aspects of the Bicentenary preparations. EXPERILEARN opened in the National Museum of Victoria in September. Professor R.T. White and Dr R.F. Gunstone are to be congratulated for the very great effort they, with others at Monash, put in to enable the University to make this outstanding contribution to the Victorian community.

Many staff participate in a great variety of inservice courses and workshops for teachers, parents, and administrators. Much of this occurs outside Monash but through the Monash Teachers' Centre the faculty's staff and physical resources were used by more than 2,000 teachers in 1983.

The Evaluative Studies group in the faculty, chaired by Dr P.L. Gardner, carried out a number of projects for schools and for Regions of the Education Department. As the Participation and Equity scheme looms on the educational scene, about a dozen staff reviewed its predecessor, the Transition Education project in schools of the Eastern Region.

### **Research**

The research output by staff has been substantial during the year although the demands of teaching are heavy and the funds to support major projects are meagre. A better balance is urgently needed between the support that is given to staff for research and the resources in terms of staff expertise which the community expects and gets from the faculty (and indeed from the University as a whole).

Among the number of international acknowledgements received by staff during 1983 were a Rudolf Dreikurs Award by the International Adlerian Institute to Associate Professor M. Balson, and the Nyholm Medal of the Royal Society of Chemistry (U.K.) to Professor P.J. Fensham. Invitations were extended to Dr D.F. Davis and Dr L. Bartak to give plenary lectures at conferences in Montreal and Japan respectively.



# Faculty of Engineering

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

## Student Entry

The demand for places in the faculty continues to rise. The increasing competition to enter the faculty has also meant higher pass rates, particularly in first year, and this is leading to an overall increase in student numbers in the faculty. Fortunately the University has approved an increase in student numbers in the faculty for the next triennium which will be consistent with present enrolments and expected pass rates.

The preferred entry subjects for the faculty are English, Physics, Chemistry and Pure and Applied Mathematics; virtually all students entering the faculty with Victorian H.S.C. have completed these subjects. For entry in 1986 and later years, the faculty has prescribed: English and any three of Chemistry, Physics, Applied Mathematics, Pure Mathematics as prerequisites.

## Quota for Overseas Students

In order to provide greater opportunities for Australian students to enter the faculty, the Faculty Board in 1982 decided to recommend to the University that there be a first-year quota of eighty places for overseas students within the total enrolment of 300 students in the first-year Engineering course. That quota was approved by the Professorial Board and applied for the 1983 entry. During 1983, the Professorial Board decided to suspend the quota for 1984 entry, contrary to the recommendations of the Faculty of Engineering.

## Undergraduate Courses

The recently introduced five-year combined degree programs for Bachelor of Engineering/Bachelor of Science continue to at-

tract able students, with high demand for the program offering Bachelor of Science (Computer Science) with Bachelor of Engineering (Electrical and Computer Systems Engineering). The faculty is also contemplating new consecutive degree programs to permit students to qualify for the degrees of Bachelor of Engineering and Bachelor of Economics. It is considered that there would also be a high demand for these course combinations, especially for courses combining Civil Engineering or Mechanical Engineering with Economics.

## Collaboration with Deakin University

In its proposals for the current triennium the Universities Council confirmed the closure of the engineering course at Deakin University and suggested possible collaboration of Deakin University with the University of Melbourne or Monash University to cater for those Deakin students wishing to undertake engineering courses. As a result of proposals by Deakin University, the Board of the Faculty of Engineering approved an arrangement whereby a selected quota of Deakin students could be enrolled for five-year programs leading to Bachelor of Science (Deakin)/Bachelor of Engineering (Monash). Very little interest in this program was shown by Deakin students in 1983.

## Research and Consulting and Continuing Engineering Education

The faculty maintains a wide range of contact with Australian engineering industry and professional engineering groups: this is reflected in the extensive faculty research programs, consulting activities for government and industry, and in continuing engi-

A research team from the Department of Mechanical Engineering has produced an inventory of techniques which can be used to identify a maintenance need in industrial machinery. Bruce Kuhnell, a senior lecturer in the department, monitors a set of bearings in the machine condition monitoring laboratory.

— Photo *Eddie O'Neill*



neering education programs designed to present latest engineering developments to the profession.

However, a major concern is the low numbers of young Australian engineers in our research school. It is evident that scholarship stipends must approach professional level salaries if we are to encourage Australian engineering graduates into research in universities.

Some 220 research papers were published during the year.

#### **Staff Movements, Honours and Awards**

Professor K.H. Hunt (Mechanical Engineering) was awarded the Peter Nicol Russell Memorial Medal for 1983: this is the highest award offered by the Institution of Engineers, Australia. Professor O.E. Potter (Chemical Engineering) was elected to Fellowship of the Australian Academy of Tech-

nological Sciences. The Dean was Congress Chairman for the Fifth International Congress of the International Society for Rock Mechanics held in Melbourne. He is also advising the Mass Transit Railway Corporation of Hong Kong on aspects of design and construction of tunnels and subway stations. Professor E.M. Laurenson (Civil Engineering) was awarded the Crawford Munro Prize of the Institution of Engineers for outstanding contributions to water resources research in Australia. Associate Professor J.B. Agnew (Chemical Engineering) was appointed Professor in Chemical Engineering at the University of Adelaide. Dr K.W. Ogden (Transport Group, Civil Engineering) and Dr B. Parker (Materials Engineering) were appointed Associate Professors. Professor I.J. Polmear (Materials Engineering) was invited to London to deliver the Liddiard Memorial Lecture to the Metallurgical Society. Professor W.H. Melbourne (Mechani-

cal Engineering) completed his four-year chairmanship of the International Association for Wind Engineering, and was responsible for the organisation of the Sixth International Conference on Wind Engineering held in Australia and New Zealand.

The vacant Chair in Electrical Engineering was re-advertised in 1983, and it is hoped that an appointment may be made. It is noted, however, that there appears to be a national and international shortage of qualified senior engineering academics. Our advertisements for vacant positions attract few qualified applicants, and our offers of appointment are often declined. In Australia the problem apparently arises from the few Australians undertaking postgraduate research in engineering in the last two de-

CADES, and the attractions of industry, both national and overseas.

### **Funding**

The shortage of sufficient funds for resources for teaching our modern engineering programs continues to be a major concern. All departments in the Faculty of Engineering were forced to reduce some activities because of the continued shortage of funds for maintenance and equipment. The nature of developments in modern technology requires the faculty to be appropriately equipped to teach its courses, and to have sufficient funds for the associated stores and consumable items.

## **Faculty of Law**

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

### **Introduction**

As with 1982, 1983 was a successful year for the Faculty of Law. Difficulties facing the University as a whole (mainly in funding), have continued to plague administrators of all faculties. Despite these difficulties, we were able to achieve much, and indeed, initiate some new developments. Perhaps the most disappointing aspect of the year (apart from the continued refusal of the Federal government to provide sufficient funds) was the inability of members of the faculty to gain promotion within the University system. The restricted number of associate professors and readers available to the University as a whole has made it difficult for all suitably qualified members of faculties to be rewarded.

Undergraduate entry into the faculty was again of a high quality. Despite pressures within the legal profession, a very large number of students (whether school leavers or mature students) still wish to do law as their first choice. The graduate program has been cut back as a result of pressures from the Federal government in relation to student numbers.

The faculty's involvement with sections of the community continues at a satisfactory level. Many members of the faculty have been asked to provide advice on law reform, parliamentary reviews and other developments.

Research in the faculty has been maintained at an excellent level. During the year,



members of the faculty published, either alone or in collaboration with others, a total of seventeen books. In addition, members of the faculty are directly responsible for editing a number of journals and surveys. A number of research grants have been received from within the University from the Australian Research Grants Scheme, government and private bodies for research into various areas of law.

### Students

As at 30 April 1983, there were 1,660 students enrolled in the faculty giving a E.F.T.S. figure of 1231.38.

	Full time	Part time	Total
B.Juris/LL.B.	21	91	112
B.A./LL.B.	506	40	546
B.Ec./LL.B.	457	28	485
B.Sc./LL.B.	113	4	117
LL.B.	86	96	182
Not for Degree	1	30	31
	1184	289	1473
Diplomas	2	53	55
LL.M.	18	103	121
Ph.D.	9	2	11
	29	158	187
			1660

### Staff

The notional equivalent academic staff (E.A.S.) of the Faculty of Law was 76.8 (including casual staff). Actual appointments, other than casual staff, as at 31 December 1983, totalled 61.6 (including staff on leave without pay).

Professor Maureen Brunt was appointed a Professorial Associate in Law. Professor Brunt is an outstanding economist and a member of the Trade Practices Tribunal, and her appointment to the faculty will ini-

tiate further inter-disciplinary work in Economics and Law. Dr Michael Pryles was appointed a part-time Commissioner of the Australian Law Reform Commission to carry out work on the reform of Australian law on Service and Execution of Process project. In addition, Professor Enid Campbell has been appointed as a consultant to the Australian Law Reform Commission. Dr Terry Carney was appointed Chairman of the Victorian Committee to Review Child Welfare Practice Law.

One of the faculty's continued strengths has been its effective relationship (both working and otherwise) with the legal profession. This has been shown in many ways including continued support by the profession for the Professional Practice course.

### Visitors

The Faculty of Law entertained a number of distinguished visitors from all branches of the profession and from various countries. Many of these came to the faculty for short periods and gave lectures or conducted seminars for students or staff. Visitors included Professor P. Anisman, Professor of Law at Osgoode Hall Law School and former Director of the Canadian Task Force on Securities Law; Professor R. Hashizume of the School of Law, University of Chukyo at Nagoya; Professor R. Moffat, School of Law, University of Florida; and Emeritus Professor G. Sawyer, Faculty of Law, Australian National University.

The 1984 Wilfred Fullagar Memorial Lecture was given by Professor Phillip Areeda, Langdell Professor of Law at Harvard University. The lecture topic was 'Antitrust Law and Market Alternatives to Regulation'. Professor Areeda was brought to Australia by this faculty in association with the Business Law Section of the Law Council of Australia. He also spoke at the Law Convention in Brisbane and conducted a number of sessions at the annual Trade Practices Workshop organised by the faculty.



Professor Christie Weeramantry (The Sir Hayden Starke Chair of Law) whose book *The Slumbering Sentinels: Law and Human Rights in the Wake of Technology* was published by Penguin in September.



### **Graduate Studies Program and Summer Teaching**

During the course of 1983, a total of 148 students were enrolled for graduate degrees. Twenty-two LL.M. candidates completed their degree during the year. Because of this, numbers at any one time were close to the agreed E.F.T.S. figure of 160. The twenty-five overseas candidates came from fourteen countries in Europe, Africa, Asia, Canada and the Pacific.

A total of sixty-six students were enrolled in the Diploma program; twelve of these completed their Diplomas during 1983.

### **Law Library**

The demand for reference services, both from University and non-university users, continued to grow apace; the unexpected strengthening of the Australian dollar relieved some of the pressure on the book budget; and the shortage of free shelving space began to cause problems for library staff and users.

With the change of Federal government members of the faculty experienced an increase in their workload as a result of increased legislative and other developments. This increase in the legislation and the development of new laws, puts pressures not only on human resources, but because of the added costs in books needed in these new areas means that the library facilities in the University, already eroded by inflation, are falling behind the needs of faculties. This is particularly so in the Law Library.

During 1983, the faculty continued its financial support of the library, particularly for the purchase of expensive monographs, and a number of back sets of taxation journals. A further sum covered subscriptions to nominated journals. The Victoria Law Foundation approved the commitment of some \$18,000 for the purchase of expensive monographs, reprints, and back sets. A generous gift from the Honourable Sir Richard Eggleston provided extra copies of law reports, statutes, legal journals and monographs, all in constant demand by students.

### **Continuing Legal Education**

The Continuing Legal Education scheme ran twenty-five programs in 1983. Apart from the more usual topics addressed in Taxation, Company, Family and Trade Practices Law, a growing diversity of interest and expertise within the faculty was reflected by programs in Customs Law, Maritime Law, Migrant Law and Policy and Industrial Law.

Late in the year C.L.E. conducted a course in Insurance Law. The program was designed to cater for solicitors and others working in the insurance industry who had limited knowledge of insurance law. The course was very successful and filled an education need in the area.

Much of the C.L.E. work is done in conjunction with other bodies and institutions representing a variety of business and professions. The faculty has continued to play an important role in the work of the Leo Cussen Institute for Continuing Legal Education.

### **Professional Activities**

The faculty continues to be strongly represented on professional bodies both at a national and State level. A number of members of the faculty are consultants and advisers to various committees of the Leo Cussen Institute for Continuing Legal Education, the Law Institute of Victoria and the Law Council of Australia.

## **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 at 30 April 1983 was 1,710. There were 951 medical undergraduates distributed as follows: Year I: 160; Year II: 163; Year III: 155; Year IV: 165; Year V: 150; Year VI: 151; B.Med.Sc.: 7. Female entrants comprised 41 per cent of the first year intake.

### **Staff**

Academic staff comprised 124 full-time and fifty-six part-time members. Clinical teachers included some 270 visiting medical staff and seventy full-time hospital medical staff in affiliated hospitals and approximately 350 general practitioners.

### **Honours and Distinctions**

Professor H.G. Burger (Medicine, Prince Henry's Hospital) accepted appointment as the Sir Arthur Sims Commonwealth Travelling Professor for 1984-85. Miss D.J.L. Caelli (Community Practice) was awarded a Medal of the Order of Australia for service to the sport of gymnastics. Dr N. Gray was re-elected for a third term as Chairman of the Scientific Council of the International Agency for Research on Cancer based in France. Associate Professor J.P. Masterton (Surgery, Alfred Hospital) was re-elected Chairman of Medical Staff, Alfred Hospital, for 1984. Associate Professor H.K. Muller (Pathology and Immunology) was appointed to the Chair of Pathology at the University of

Tasmania. Professor R.C. Nairn (Pathology and Immunology) was re-appointed Consultant in Cancer Research to the Office of the President at the University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, Texas, U.S.A.

### **Appointment of Professors**

During 1983 the faculty was strengthened by the appointment of two new Professors of Psychological Medicine. In August 1983 Professor G.C. Smith took up the Chair of Psychological Medicine at Prince Henry's Hospital which had been left vacant by the retirement of Professor W. Ironside. Prior to his appointment Professor Smith held the position of Clinical Associate Professor in the Department of Psychological Medicine. Professor B.S. Singh was appointed to the newly established second Chair of Psychological Medicine at the Royal Park Psychiatric Hospital.

### **Retirements**

Professor Bornstein, Foundation Professor of Biochemistry since 1 July 1961, retired on 31 December. During his appointment at Monash University the Department of Biochemistry came to be regarded highly for its teaching and research activities and as a leading department in the Australian academic scene. In recognition of Professor Bornstein's distinguished service to the faculty and the University, the title of Emeritus Professor was conferred by Council on Professor Bornstein's retirement. Dr R.C. Webb, Commonwealth Director of Health for Victoria, retired from his appointment in July 1983, following thirty years of service with the Commonwealth Department of Health. In 1974, Dr Webb was elected a member of the Board of the Faculty of Medicine as a nominee of the Board and has agreed to continue in that role for 1984. Since that time he had followed the affairs of the faculty with close interest and had been a wise counsellor in many areas. Dr Webb is

greatly respected for the way in which he dealt with highly complex issues relating to health care administration.

### **Visitors**

During the year, visitors to the faculty included: Professor K.H. Anders, Ruhr University, West Germany (Physiology); Dr K.M. Arsyad, Sriwijaya University, Indonesia (Anatomy); Dr R. Benzie, Toronto General Hospital, Canada (Obstetrics and Gynaecology); Mr P. Boulter, Guildford Medical Centre, St. Luke's Hospital, U.K. (Surgery); Professor B. Brackett, University of Pennsylvania, U.S.A. (Obstetrics and Gynaecology); Dr K. Budd, Bradford Royal Infirmary, U.K. (Pharmacology); Professor J. Dorrington, Toronto General Hospital, Canada (Obstetrics and Gynaecology); Dr O.F. Giwa-Osagie, Lagos University Teaching Hospital, Nigeria (Obstetrics and Gynaecology); Dr F.M. Graham, The University of Auckland, National Women's Hospital, New Zealand (Obstetrics and Gynaecology); Professor M.M. Grumbach, University of California at San Francisco, U.S.A. (Paediatrics); Dr H.J.G. Gundarsen, Aarhus University, Second Clinic of Internal Medicine, Denmark (Anatomy); Professor E. Haber, Massachusetts General Hospital, Boston, U.S.A. (Medicine); Dr C.J. Huang, Peking Children's Hospital, People's Republic of China (Paediatrics); Professor A. Iggo, University of Edinburgh, Scotland (Physiology); Professor W.G. Irwin, The Queen's University of Belfast, Northern Ireland (Community Medicine); Dr H. Ishida, Showa University, Tokyo, Japan (Anatomy); Dr K-I. Lie, Toronto General Hospital, Canada (Obstetrics and Gynaecology); Dr K. Mao, The Chinese University of Hong Kong, Hong Kong (Obstetrics and Gynaecology); Dr M.D. Mitchell, The University of Texas South-western Medical School, Dallas, U.S.A. (Physiology); Dr Y. Mori, Tokyo University of Agriculture and Technology, Japan (Physiology); Dr A. Prochazka, St Thomas' Hospital Medical School, London, U.K.



(Physiology); Professor G.T. Stevenson, University of Southampton, U.K. (Pathology and Immunology); Professor P.J. Taylor, The University of Calgary, Canada (Obstetrics and Gynaecology); Dr F.C.W. Wu, Centre for Reproductive Biology, Edinburgh, Scotland (Anatomy); Dr S. Yamana, Saijo Central Hospital, Hiroshima, Japan (Pathology and Immunology); Dr G-Y. Zhang, National Research Institute of Family Planning, Beijing, People's Republic of China (Anatomy); and Dr J-F. Zhang, Institute of Epidemiology, Beijing, People's Republic of China (Microbiology).

### Teaching Hospitals

The past year proved to be a difficult one for all teaching hospitals in that each was required to function with a substantial reduction in funding. Full medical registration for Australian medical graduates occurs only after completion of a period of intern training and considerable concern followed a government statement that medical graduates might not necessarily be appointed to intern positions at the successful completion of the medical course. Subsequently, however, the government announced that the appropriate period of intern training for the purposes of full medical registration would be made available for all Victorian medical graduates for the next three years at least.

**Prince Henry's Hospital.** In his Report of September 1983 to the Minister of Health on The Capital Requirements of Publicly Funded Health Services in Victoria for the Next Ten Years Mr J.E. McClelland, Executive Officer of The Geelong Hospital, referred to studies being carried out to determine the future of Prince Henry's Hospital. For the purposes of the report, Mr McClelland assumed that relocation of Prince Henry's Hospital in whole to Sunshine would be the preferred option. Subsequently a working party, including Professor G.C. Schofield and Professor L.J. Opit from Monash University, was appointed by the Minister and

given the task of recommending on the future development of the hospital and reporting to him by 31 March 1984.

It is clear that any decision affecting Prince Henry's Hospital should be made quickly and that the time scale of events associated with any relocation be clearly defined so as to permit an orderly planned progression from existing to new facilities with minimal disruption to existing service and teaching programs. It is assumed that the University will readily support and adapt to any plan for the future of Prince Henry's Hospital provided that it best meets community needs, is consistent with aims acceptable to the hospital, and provides for accommodation and facilities to be developed at a level which enables the Clinical School to function at an appropriately high standard. It is essential, however, that funding for the provision of appropriate accommodation and facilities for teaching be secured before the hospital is relocated.

**Queen Victoria Medical Centre.** On 11 March 1983 the Vice-Chancellor and members of the Faculty of Medicine attended the ceremony of the 'turning of the first sod' at the Clayton site for the new Queen Victoria Medical Centre. The 436-bed hospital will house the University Department of Paediatrics, Department of Obstetrics and Gynaecology, and the Centre for Early Human Development. By chance, the ceremony coincided with the twenty-second anniversary of the opening of the University in 1961.

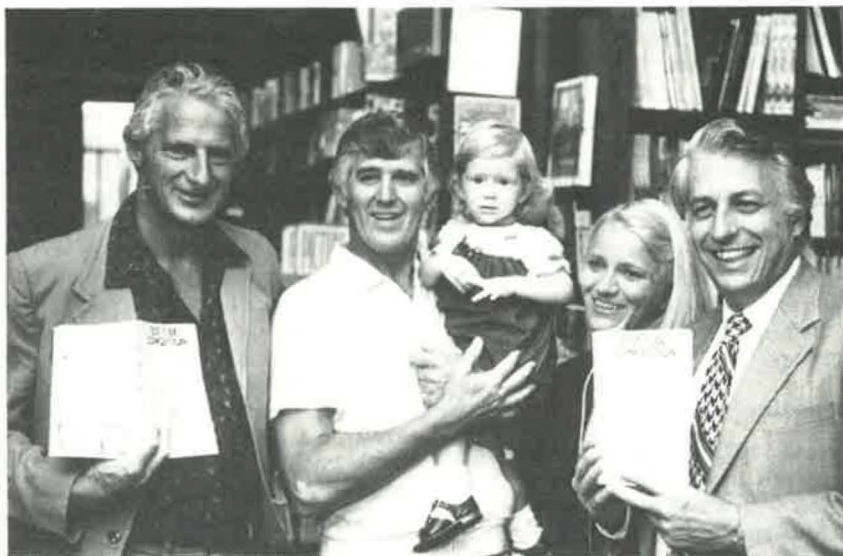
The foundation plaque for the new Queen Victoria Medical Centre was unveiled by The Honourable John Cain, M.P., Premier of Victoria, at a ceremony held on the hospital site on 28 October 1983.

University departments planned for the new Centre are those in the existing hospital in the city. On present planning there will be insufficient clinical facilities to justify the construction of University Departments of Medicine and Surgery although the Centre



At the launching of the book *Test-Tube Conception* (by Professor Carl Wood and Ann Westmore), Professor Wood (left), 'test tube baby' parents Len and Jan Brennan and their daughter Pippin, and Sir Gustav Nossal. Professor Wood joined Monash as foundation professor in Obstetrics and Gynaecology in 1965.

— Photo Richard Crompton



will continue to contribute significantly to teaching in these subjects.

**Alfred Hospital.** With the appointment of Professor B.S. Singh to the second Chair of Psychological Medicine, the University is in a position to make a significant contribution to the development of psychiatry within Victoria. Professor Singh is based at Royal Park Psychiatric Hospital but will also be the first member of the full-time staff of the University to hold an academic appointment as psychiatrist at Alfred Hospital.

Particular reference should be made to the outstanding role of the Burns Unit at Alfred Hospital developed by the Department of Surgery under the direction of Associate Professor J.P. Masterton. In the period during which great personal tragedies were experienced by many Victorians, the Burns Unit provided a resource of inestimable value to many unfortunate people injured during the bush fires. This unit was identified in the McClelland Report, along with a new Drug and Alcohol Unit, as a facility

which should be included as part of the future development program for Alfred Hospital.

**Cabrini Hospital.** This hospital is one of the 'not for profit' teaching hospitals associated with Monash University and provides clinical instruction for Monash students. After his retirement as Monash Dean of Medicine in 1976, Emeritus Professor R.R. Andrew took up an appointment as Director of Medical Education at Cabrini. He retired from that position at the end of 1983. Not the least significant factor in the growth of the Faculty of Medicine towards maturity and balance has been our link with the Cabrini Hospital.

#### Affiliation Agreements

During 1983 formal Affiliation Agreements between the Faculty and Epworth Hospital and between the University and the Victorian Academy for General Practice Limited were completed.

## Curriculum

At its meeting on 20 April 1983 the Board of the Faculty of Medicine approved, in principle, course outlines for the various subjects to be taught in the first three years of a new medical curriculum. The revised curriculum for the paraclinical and clinical program was also approved in principle. New Bachelor of Medicine, Bachelor of Surgery Regulations relating to the new curriculum were approved by Council at its meeting on 10 October 1983.

Teaching under the new curriculum will commence in 1984. One of the main objectives of the new curriculum is to introduce students to the medically-based subjects early in the course and the first year will now include studies in Anatomy, Behavioural Sciences, Biological Chemistry, Medical Biology and Physics.

## Research

The faculty needs to attract a progressively increasing proportion of its funds from outside sources. Funds obtained by the faculty in 1983 for new and continuing projects were \$1,690,952 from the National Health and Medical Research Council, and \$299,446 from the Australian Research Grants Committee. Research funds from other sources amounted to \$1,941,629. Total outside support for the faculty amounted to \$3,932,027. Research productivity, as evidenced by publications in international journals of high standing, continues to give cause for satisfaction, but the increasing costs of maintaining the present momentum in research and the fact that almost one quarter of the income of 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.

## Centre for Molecular Biology and Medicine

In recent years there has been a substantial

growth of knowledge and technical development in molecular biology which has widened significantly our basic understanding of biological phenomena and their application to human and veterinary medicine. Developments in biochemistry, cell biology and DNA technology, as well as associated analytical procedures, are rapidly expanding opportunities for solving clinical and other problems. For these reasons and on the initiative of Professor A.W. Linnane of the Department of Biochemistry, and Professor B.G. Firkin of the Department of Medicine, Alfred Hospital (who subsequently were appointed Director and Associate Director, respectively) the Faculty of Medicine recommended to Council that a Centre for Molecular Biology and Medicine be established. The establishment of the Centre was approved by Council in July 1983. The Centre will provide an opportunity for individuals from different disciplines to work co-operatively on problems of common interest. It is envisaged that the Centre will co-ordinate research at Monash University and its teaching hospitals and will collaborate in research programs with organisations such as the C.S.I.R.O. and the Commonwealth Serum Laboratories. The broad aims of the Centre are to carry out research in molecular biology of both a fundamental and applied nature, bringing together clinical and other scientists; to foster research and collaboration within the Centre by integrating the expertise of departments, faculties and outside organisations; to attract Australian and overseas post-doctoral fellows and visiting scholars for research and training; to extend the breadth and quality of graduate student experience by providing exposure to a range of disciplines; and to attract funds for both general and specific research and for the long-term continuity of the Centre.

The Centre is now administered by a Board of Management with the assistance of a Scientific Advisory Committee and a Finance Management Committee. Sir Charles McGrath, prominent Australian industrialist



and an honorary graduate of Monash University, has been appointed Chairman of the Board. Other members of the Board are the Vice-Chancellor (or his nominee), Mr B. Gadsen, Mr C.B. Goode, Mr J.C. Habersberger and Mr H. Rogers.

### **Centre for Early Human Development**

The Centre undertakes both clinical research and experimental research in perinatal medicine, with particular reference to morphological and physiological aspects of cardio-respiratory development before and after birth. The Centre continues to attract increasing amounts of funding for research programs. Significant new areas of study were initiated in 1983. These include a novel

study of birth employing radiotelemetry equipment (in collaboration with the Stanford University Integrated Electronics Laboratory, the United States National Aeronautics and Space Administration, and the University of Calgary); an investigation of the effects of local analgesic agents on the central nervous system and circulation of the fetus (in collaboration with the Department of Anaesthesia at the Queen Victoria Medical Centre); and a detailed examination of the control of cerebral blood flow in an animal model of cerebro-ventricular haemorrhage (in collaboration with the Neonatal Intensive Care Unit at the Queen Victoria Medical Centre and the Department of Paediatrics). In 1983 a total of twelve research staff and six postgraduate students collaborated in the Centre's program.

## **Faculty of Science**

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

### **Student Enrolment**

The total faculty student enrolment increased to 2,850 students as at 30 April 1983.

The continued growth of total enrolment is explained in part by steadily increasing graduate enrolments. The number of Master of Science and Doctor of Philosophy students in 1983 was 406. The prime reason for the growth in overall student numbers has been a rather substantial lift in retention rates, that is, in the proportion of the first- and second-year students continuing into their next higher year of study, due to the improved quality of students admitted to the faculty.

The somewhat unexpected high retention rate within the undergraduate courses contributed to the faculty exceeding its 1983

E.F.T.S. target of 2,650 E.F.T.S. The total of 2,765 E.F.T.S. was also influenced by a conscious decision to avoid marked oscillations in first-year intake. Given the enrolment profile by year of study, rigid adherence to the E.F.T.S. target would have called for a rather substantial reduction in first-year intake in 1983, with the subsequent need, in 1984, to lift the intake again to a level above that of 1982. The policy adopted will enable the faculty to keep the first-year intake over the next few years at a relatively stable and predictable level, given no change to agreed E.F.T.S. targets.

### **Undergraduate Enrolment Requirements**

Much discussion of the possibility of changes



Researchers in the Department of Chemistry have synthesised a new carbon oxide — tricarbon monoxide,  $C_3O$ . From left, Dr Peter Godfrey, Dr Patricia Elmes, Dr Frank Eastwood and Professor Ron Brown.

— Photo Richard Crompton



to the Victorian Institute of Secondary Education Year 12 (H.S.C.) examination procedures and their implications in terms of university matriculation and selection took place during 1983. Given the ceiling placed on growth in new enrolments by the Commonwealth Government, and the increase in the number of applications for entry, most faculties, and certainly the Faculty of Science, have had to become more selective in the admission of new students. The resultant more stringent criteria adopted by the faculty selection committee in the last two years have led to a marked improvement in student quality, already mentioned as a factor in the observed improvement in retention rates.

The demand/supply situation for student places, together with uncertainty concerning V.I.S.E. policy, have promoted debate on alternatives to current selection criteria. So

far no wide-ranging changes have been contemplated by the Faculty of Science, but during 1983 it was agreed that the faculty should specify prerequisite subject requirements for entry to the faculty as from 1985. Previously the faculty had only recommended that students proceeding from the H.S.C. should have studied at least two, and preferably more, of the subjects chemistry, physics and a branch of mathematics. For 1985 entry the faculty will, in parallel with the Faculty of Science at the University of Melbourne, require that entering students have obtained at least a pass in H.S.C. Group 1 chemistry or physics, and a Group 1 mathematics subject, or equivalent.

The faculty has been concerned also with the unique Monash score calculation feature which provides for an additional penalty on the score of an applicant who has failed H.S.C. English, but has matriculated by com-

pensation. A statistical investigation of first-year performances within the faculty suggested that there was no justification for this policy to apply to students considered by entry to Science. The faculty has sought a change in University policy in this matter.

### **Review of Computer Science**

During 1983 a committee of review, appointed by the Vice-Chancellor, conducted an enquiry into the Department of Computer Science. The review resulted from expressions of dissatisfaction by staff in the Department of Computer Science regarding the level of resources available, and concerns in relation to impending resignations of departmental academic staff and consequent difficulties in fulfilling the department's teaching and research responsibilities. Internal problems of the department were exacerbated by the high external demand for computer science professionals, the consequent student demand for places in the course, and the difficulty (experienced world-wide) of recruiting suitable academic staff.

The full committee of review, which was appointed by the Vice-Chancellor on the recommendation of a preliminary review committee, was chaired by the Deputy Vice-Chancellor and included as members the Pro-Vice-Chancellor, the Dean of the Faculty of Science, the Chairman of the Department of Computer Science and the Director of the Computer Centre.

The recommendations contained in the report suggested an expansion of the size of the department and supported a bid made by the department for the establishment of a second Chair. The committee further recommended that special emphasis be placed on graduate education and on a more concentrated and co-ordinated program of research. The possible development of a new 'computing methods' subject and a further subject aimed at first-year students in the Faculty of Economics and Politics was

encouraged, primarily with the aim of allowing a greater number of students to undertake studies in computing. Considerable weight was given in the report to the need for the department to establish strong links with other University departments with interests in computer science and computing methods and for the department to support and foster activities related to its discipline in collaboration with other interested parties.

The review committee report was accepted by the Vice-Chancellor, and at this stage the Professorial Board has referred the report to all faculties for comment. The second Chair proposal was accepted by Council and the position was advertised prior to the end of the year.

### **Course Development and Review**

No entirely new subjects were approved during 1983, but a number of courses and subjects were reviewed during the year.

**Bachelor of Science/Bachelor of Engineering.** At the faculty level several courses and subject areas were subject to consideration during the year. The consecutive Bachelor of Science/Bachelor of Engineering program, which was formally introduced only in 1981, was again the focus for developmental work in the light of experience, both academic and administrative. The course has proved to be extremely popular with applicants, and in terms of the lowest H.S.C. cut-off score required for entry, the course was only slightly behind Law and Medicine. As from 1985, entrants proceeding from the H.S.C. year will be required to have passed the Group 1 subjects applied mathematics, pure mathematics and two of chemistry, physics and English.

**Bachelor of Science/Bachelor of Laws.** Some tidying up of the faculty regulations in regard to the Bachelor of Science/Bachelor of Laws combined course program was carried out in 1983. It had become clear that

this course lacked detailed description of subject choice possibilities, and that had led to frequent queries from the Student Records Officer regarding the certification of the completion of course requirements. This matter was resolved satisfactorily after consultation with the Faculty of Law by more clearly defining the combined course structure in the faculty regulations.

#### **The Geography Sequence of Studies.**

Although it is reported above that no entirely new subjects were approved in 1983, the Faculty Board of the Faculty of Science, after reviewing the full sequence of geography studies in the Science course, gave approval to the request from the Department of Geography to offer the subject geography 203 in two parts, as geography 207 and geography 209, with each of the latter subjects being of half the weight of the 203 subject. The syllabuses for all the geography subjects offered for Science students were re-written as part of the review and particular emphasis was placed on the requirement of the department that students complete a substantial amount of essays and field work.

#### **1983 Research Grants**

The faculty continues to receive a high level of support from funding agencies for its

research. The faculty is extremely grateful for this support, which makes possible a vigorous research program. Details of research undertaken, the research papers and theses published, and the higher degrees conferred are given in the University's publication *1983 Research Report*.

#### **Staff**

Professor R.H. Day continued to serve as Associate Dean, and Mr N. Cameron as Sub-dean. The Committee on Undergraduate Matters was chaired by Professor R. Van der Borgh, and the Committee on Graduate Matters by Associate Professor A.A. Holland. During the year the present Dean, Professor J.M. Swan, announced his intention to retire from the Deanship in August 1984, and a search for his successor is in progress.

We record with regret the death of Dr Enn Elbing, Principal Tutor in the Department of Chemistry.

As in previous years, many of our academic staff gave voluntary service to a wide range of professional societies, other academic institutions, and bodies such as the Victorian Universities Admissions Committee and the Victorian Institute of Secondary Education. Details can be obtained from departmental reports.



# Library

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

It was a difficult year at every level. Money was short, and the dramatic devaluation of the Australian dollar in March made it shorter; the resulting restraint on book purchases and especially the cancellation of periodical subscriptions placed a considerable strain on relations between the library, its User Committees and its users, as all were forced to make decisions contrary to their own interests. Two hundred and forty-five periodicals titles were closed off during the year — some in order that more favoured ones could be ordered but most simply in order to save costs. Library staff numbers were reduced for the fifth year in succession from a peak of 210 down to 178, and this in spite of a more sophisticated and demanding population, and new areas of work, such as on-line data-base searching. The situation was made worse by the resignation, to move to other positions, of two senior members (and the inevitable delay in replacing them) and the long-service leave of a third. It is becoming clear that the present staffing level is hardly adequate to maintain an acceptable service.

Intake of new books fell slightly from the previous year, but about the same number (32,234 as against 31,114) were catalogued. Including periodical and microform volumes, and taking account of withdrawals, stock increased during the year by 49,556 to a total of 1,165,442 volumes, as well as 1,461 other items, films, video and audio tapes, etc.

## Cataloguing

For several years production of the library's microfiche catalogue had been handled by an outside contractor, as part of a union catalogue operation run under the control of C.A.V.A.L. (Co-operative Action by Vic-

torian Academic Libraries). With the advent of the Australian Bibliographic Network, an on-line cataloguing system based on the National Library, many of the C.A.V.A.L. libraries saw this as a better alternative. The regional union catalogue was itself entered into A.B.N., and the libraries concerned thereafter carried out their cataloguing operations on-line to Canberra. C.A.V.A.L. provided the training and support function. The University was conscious that there were problems of governance, of aim, and of systems development, and felt that the time was not ripe to join A.B.N., but rather to continue with the existing contractor, who was developing an on-line system of his own.

In the event, a company takeover of the contractor resulted in a change of policy regarding development and the on-line system is not to be. We are disappointed, and worried as to the future but we continue to use the batch system for the moment.

Meanwhile, our own work was advancing on several fronts: a specification group drawn from all across the library worked on the re-design of our in-process system, and this was largely written and partly in operation by the end of the year; another group was producing specifications for on-line catalogue, as a logical development from the in-process system; experiments were conducted with the data retrieval package called S.T.A.T.U.S., encouraging enough that an operating license was negotiated; and a project was carried out jointly with H.E.A.R.U., to design a friendly and easily usable enquiry module, the part of the system the public could be expected to use. The whole complex has been named SESAME (not an acronym); we believe it will give details for users in and out of the library, by terminal, of all the books catalogued, in process, on

order, or in special collections, of which the library has records. We look forward to it with a sense of excitement. This is a chance to bring together the various *ad hoc* arrangements which have inevitably developed over the years.

The year saw the end of joint data collection, for circulation purposes, with the Rusden and Burwood campuses of Victoria College. The College still uses the library's programs and the Computer Centre's computer, but now runs its own data collection network.

### Activities and Services

Loans for the year fell slightly in the Humanities and Social Sciences Library and in the Biomedical Library and its sub-branches, but rose in the Hargrave and Law Libraries. Overall, loans rose from 639,917 in 1982 to 649,991. Inter-library loans fell once again from 25,151 to 23,355; borrowings from other libraries rose slightly, from 6,439 to 7,244. During the year, the Library Association of Australia, which administers a voucher system allowing libraries to pay for photocopies supplied in response to inter-library requests, increased the agreed price of a basic photocopy from one dollar to three, a slightly more realistic figure. It will be interesting to observe whether any changes in the pattern of traffic will follow.

Two staffing changes have been mentioned, but deserve special mention: Ms Moria MacKinnon resigned her position as Humanities and Social Sciences Librarian to

become Director, Information Sciences Division, of the State Library of Victoria. She has been replaced by Mrs Ho Chooi-Hon, formerly of the National University of Malaysia and Chisholm Institute. Mr Bruce Davidson, Deputy Hargrave Librarian, has become Deputy Parliamentary Librarian of Victoria. His position has been taken by Mr Leigh Oldmeadow.

### Gifts to the Library

The library benefited to the extent of 4,648 volumes as gifts from various donors, to whom our gratitude must be expressed. Notable among these was a collection of 1,123 volumes of Australian children's literature, collected by Mr Lindsay Shaw. The Swift Collection was enhanced by the purchase, thanks to the Friends of the Library, of an extremely scarce title, Swift's *A Meditation upon a Broomstick*, as well as several items from Miss Radcliff of Phillip Island, relating to Swift and an Australian descendant. A delightful facsimile, in an extremely limited edition, of Blake's *Songs of Innocence & Experience* was added to our already fine collection, from a donation by Mrs Prudence Myer.

To these donors, and to all others, friends, students, and graduates, who have supported the library so generously, go our continued thanks. Especially we must thank the Parents' Group, whose support is always so welcome, and who, recognising the library's difficulties this year, especially in the Hargrave area, gave even more generously than usual.



## UNIVERSITY FACILITIES

### Alexander Theatre

1983 was not a good time for theatre generally in Melbourne. It is therefore pleasing to report that the Alexander Theatre had a busy year, with 324 performance sessions attracting a total audience of 96,712. This represents an average of sixty-seven per cent theatre capacity, which is most satisfactory.

For the second time the Alexander's involvement in student theatre was concentrated in the Festival of Student Theatre in second term. This Festival comprised three major productions — the musical *Irene* (M.U.M.C.O.), *Henry V* (Monash Shakespeare Society) and *You Can't Take It With You* (Monash Theatre Workshop) which played twenty-three performances to a total audience of 5,858. The Festival also included a number of day-time activities, largely organised by the Director of Student Theatre, Tony McGregor, which helped create interest. The launching of the Festival by the noted playwright, Barry Dickins, was one such memorable occasion. While the choice of play is always difficult (a question which Mr Dickins, in his own inimitable way, raised) particularly for a larger venue such as the Alexander, it is to be hoped that student groups might in the future give greater thought to what might be expected to interest and attract a university audience.

Children's theatre had another successful year, with total audiences in excess of 40,000. The pantomime, *The Wizard of Oz*, did not match the exceptional success of the previous year's *Mr Men*, but nevertheless enjoyed seventy-one per cent capacity houses. Other successful productions included the Australian Dance Theatre's *Sweat*, which introduced children to the world of dance and dancers, while the Saturday Club maintained its devoted following.

In professional adult theatre, however, the Theatre had a lean year, and this very much reflected the depressed state of the local scene. The most memorable produc-

tion to visit the theatre was Jack Davis' *The Dreamers*, performed by an Aboriginal company from Western Australia. This was a play which impressed all who saw it, both in terms of its sense of theatre and its essential honesty. The three-week season was over before Melbourne realised what it had missed. The Committee does not regret the money lost on this production, but it was a pity that a longer season was not possible which would have enabled 'word of mouth' to carry its message. Neither did the operetta offerings of the Melbourne Music Theatre fare as well as in previous years. Notable for its enterprise and impact, however, was the Cheltenham Light Opera Company's production of Sondheim's *Sweeney Todd*, not previously performed in Melbourne: it only was rewarded with eighty-five per cent capacity houses.

In 1983 the Committee adopted a master plan for the future development of the Theatre. An application was made to the University Development Committee for support for the first stage of the plan which involves the building of a new workshop and conversion of the space formerly used for additional dressing room facilities. These works are necessary for the effective functioning of the Theatre, and the initial response of the University has been sympathetic. The exact mode for the financing of the project remains to be settled.

The obtaining of a liquor licence has taken longer than expected, but the licence has now been approved in principle. A re-siting of the box office in the Rotunda Link will be necessary, and plans are already under way. 1984 should see the licence finally come into effect.

In all, the Theatre has had a satisfactory year, and continues to maintain a secure financial position. The Committee is particularly grateful to the Manager of the Theatre, Mr P.D. A'Vard and his staff for their continued cheerful and loyal service. We record our sense of loss at the death of our mechanist, Jules Everaert, who had been a loyal and



hard-working member of the staff for the last ten years.

### **Robert Blackwood Hall**

Robert Blackwood Hall maintained its busy schedule throughout 1983, providing, as usual, a venue for both Monash University activities, Robert Blackwood Hall activities and outside hirings.

The physical management of the Hall was made much easier following the completion of the north-eastern extension and the modification of the sound and light control boxes.

The highlight of the year's activities was the Brahms Chamber Music Festival, 10 April to 7 May, celebrating the sesquicentenary of the composer's birth. A generous donation from Mrs Vera Moore paid fares and expenses for the renowned Rowe Quartet from the United States to join distinguished Australian artists to present all twenty-seven works in a nine-concert season, sponsored by the A.B.C. and Robert Blackwood Hall. All concerts were broadcast direct, nationally, on the A.B.C. FM stereo channel, and 6,000 patrons attended these free concerts.

As always, A.B.C. activities dominated the outside hirings. These activities included another successful six-concert Monash Series, with the Melbourne Symphony Orchestra, and some twenty sessions of special rehearsals and recordings.

Australian Youth Music Festival groups presented concerts for school children in August. The performers came from Bali, the Philippines, Canada, the United States, Perth, Adelaide, and Japan, the latter including 110 members of the Funabashi Youth Orchestra.

For the second successive year, the Science Talent Search attracted about 400 enthusiastic students demonstrating their exhibits in the foyer and lobby of the Hall.

The Louis Matheson (Ahrend) organ was

in continuous use for practice and featured in two A.B.C. concerts, one in a Monash Series concert and the other a special concert by the distinguished English organist, Gillian Weir.

The Hall continued to mount concerts for schools and, as far as its limited income could be stretched, free concerts for the campus and neighbouring public.

### **Monash University Bookshop**

The Bookshop's year was marred by the grave illness and subsequent death, in late August, of the Manager, Mr B. Demnar. The Deputy Manager and the rest of the staff made very real contributions and maintained the Bookshop functions at peak level throughout the difficult period. A new manager, Mr J. McGrath, was appointed to commence duty in January 1984.

In view of the deficits incurred in recent years, it was gratifying for the Bookshop to achieve an overall operating profit of \$18,429 for the year. The University provided some financial relief by agreeing, for example, that all University publications would be subjected to normal trade discount rather than the short discount which had applied to some publications previously. Once again, the presence of other book and stationery outlets on campus has reduced sales. A review of Bookshop operations was undertaken during the year by an *ad hoc* committee; the Bookshop Board received the report late in the year but deferred its detailed consideration pending the appointment of the new manager. However, some recommendations have already been acted upon.

The Bookshop Board commenced negotiations for withdrawal from the operation of the branch at Victoria College's Prahran campus in the light of changed circumstances.

Concern was expressed by some staff members during the year about the use of asbestos-containing materials on ceilings of

the ground floor area of the Bookshop. Expert advice was sought on the most appropriate action to be taken since in some areas, mechanical damage was apparent. Subsequently, the damaged areas were patched and, in those parts of the shop with low ceilings, a false ceiling has been installed to guard against further mechanical damage. Air tests conducted by an interstate testing authority confirmed that the level of air-borne asbestos fibres present when the work was completed was substantially below that considered dangerous.

### Religious Centre

Changes in the Chaplaincy during the year included the Reverend Philip Huggins taking up his appointment as Anglican Chaplain at the beginning of the year and the departure of Rabbi Laibl Wolf, Chaplain to Jewish students, at the end of the year. Father Laurence Foote, O.P., served as Roman Catholic Chaplain throughout the year.

The Religious Centre continued to be used daily for individual meditation and services for various faiths. The campus religious societies utilised the Religious Centre facilities for meetings and discussion groups and a number of outside organisations also used the Centre for courses, recitals and services. Bookings were made for the celebration of ninety-eight weddings and several funeral and memorial services were conducted in the chapels.

A series of fourteen weekly recitals was held during second and third terms, attracting students, staff and visitors. The recitals featured organ, harpsichord, piano, voice and instrumental groups.

As in the previous two years, an interfaith service was held to mark the commencement of the academic year. The service was conducted jointly by the Anglican and Roman Catholic Chaplains with the address being given by the Reverend Dr John Gaden of Trinity College.

### Careers and Appointments Service

During 1983 the Service again aimed to meet non-salaried costs through cash donations, subscriptions to *Careers Weekly* and recruiting fees charged to employers who interview students on campus. Due to economic circumstances, fewer employers visited the campus, causing a reduction in income from recruiting fees.

Research reports and other publications produced by the Service were well supported by employers. A booklet on transition titled *From Here to There* attracted a subsidy sufficient for printing and mailing to all secondary schools in Australia. The printing of the publication *What is ...?* and *More Interview Questions* were also subsidised. Again in 1983 a number of reports and booklets for job hunters were printed by employers representing a major cost saving to the Service. New publications included *Graduate Careers in Mathematics* (in conjunction with the Department of Mathematics), *On Starting Work, Graduate Starting Salaries April 1983* and *Survey of Accounting Graduates 1982*. The Service bore the cost of printing survey reports on graduates in medicine and in sociology, while survey reports on students of Spanish and German are currently being produced.

In co-operation with the Graduate Careers Council of Australia, the Service again undertook the annual collection of statistics on destinations of graduates. Graduates generally took longer to find employment than their counterparts of the previous year, with those from the commercial disciplines experiencing the highest demand. Many graduates are showing a heartening tendency to be flexible, finding employment in less publicised fields. The number of vacancy notifications received by the Service increased in the last part of the year, including those for graduates with work experience. A large number of arts and science graduates, as is usual, enrolled in higher degrees, or in postgraduate diplomas to acquire vocational training.



The number of secondary school students, undergraduates and graduates counselled has been increasing, but interviews are made more fruitful as a result of talks given by staff of the Service in first-year lectures and the availability of video and hard copy information. Advice of staff is often sought on the format of letters of application for employment, and the production of multiple copies of resumes is possible on the word processor at a reasonable fee. Students are tending to be more aware of career possibilities earlier in their courses and this year the employer interview program will be extended to include students of earlier years.

Contacts with secondary schools nearly doubled over the 1982 level. Staff of the Service visited just over 200 schools to fulfil requests for talks or interviews with groups of students. An effectiveness review of a high school careers service has been commenced at the school's request. The Service was also involved in the planning of talk-back programs on radio aimed at applicants to tertiary courses.

Although the employer interview program was well supported by employers the number of representatives from the private sector had fallen by nine per cent over the 1982 number. With fluctuating levels of employers' participation, particularly from the private sector, and their tendency to interview students from a narrow range of disciplines a more pro-active approach with employers has become necessary. Attempts to make new contacts in industry and government have met with some success. New initiatives were taken by the Service in 1983 in conducting, jointly with academic departments, seminars for employers on 'The Monash Graduate in Accounting' and 'The Monash Graduate in Engineering'. The Careers and Appointments Committee newly defined its objectives in order to support the efforts of the Service and has undertaken to meet with professional associations. Meetings with the Royal Australian Chemi-

cal Institute and the Institute of Chartered Accountants took place during 1983.

### **University Counselling Service**

The past year has been an extremely busy one for the Counselling Service. There has been a marked increase in the number of students utilising the service, both for one-to-one counselling and for group work. There has been an extension of the Service's consultative work with University staff, and the Service's staff has continued to update its skills through attending courses, seeking supervision of their work and by visiting other institutions, locally, interstate and overseas. The detected change in the usage of the Service, noted in last year's report, has continued, in that more students appear to be needing longer term counselling, with an apparent increase in the stress they face in tertiary education. The only subjective reason for such a situation appears to be the economic climate, which currently necessitates that a student not only pass, but pass well in order to secure a job.

The work load has been very heavy throughout the year, especially with one member of staff on six months' study leave. Consequently, some services were withdrawn which traditionally have been provided — namely, to the Halls of Residence and to the Alfred Hospital medical students. The heavy work load also meant that many students were waiting from one to two weeks for an appointment during the busiest times of the year. Despite the work load, the staff remained undaunted by the challenges they face and continue to find those challenges exciting.

The bulk of the Service's work is in one-to-one counselling. During 1983 there was an increase of twelve per cent in the number of students seen and a ten per cent increase in the number of visits to the unit. In all, over 600 students took part in the various group programs such as study skills, stress management and relaxation, preparation for ex-



ams, life planning, various personal growth groups and orientation for part-time and mature-age students. Counsellors continued to be available to see clients after hours by appointment. The Service provided lectures for both the Medicine and Law Faculties during the year. The counsellors value these opportunities for making these contributions to the academic life of the University.

Four major problems continue to dominate amongst clients: relationship difficulties, issues of identity and self-esteem, study skills and academic problems. There continues to be a marked change, not so much in the type of problems presented, but rather in the level of stress and severity experienced. Thirty per cent of clients now have severe problems, a marked increase over previous years, and the severity of the problems is such that their normal functioning as either a student or staff member is inhibited. This has put a considerable strain on the counsellors, to the point of physical and mental tiredness. The Service has to continue to monitor the health of the counsellors and to consider whether in the future the Service can continue to offer the same variety of services. Consequently, the Service has made plans for the streamlining of its study skills program for 1984 and hopefully this will not only provide a better service for students in this area but also allow more work to be done in one-to-one counselling.

### **Students' Grants and Loans Committee**

Seventy-one applications for assistance were considered, of which seventy were approved; all as loans.

The total amount of approved loans was \$100,974, compared with \$101,197 during the previous year (which comprised seventy-three approved applications for assistance).

A total of \$79,802 was received in repayment of loan principal, and interest on loans

and on unutilised funds aggregated \$17,109. Although the amounts of individual loans levelled after several years of steady increase, the Committee continued to monitor closely the ability of the funds available to meet anticipated future requests.

Expressions of appreciation for assistance given continued to be received.

### **Student Housing**

The number of requests for assistance to the Student Housing Office in 1983, either for advice or for direct assistance in finding housing, was 3,766.

The proportion of students requesting the various types of outside accommodation remains about the same as for the last few years. In 1983, 88.6 per cent asked for independent living (flats, houses or rooms in student groups) and 11.4 per cent for private home accommodation. Nearly all of the last group wanted rooms with use of facilities, which also gave measure of independence; only fifteen requests for full board were received over the year.

The severe shortage of housing everywhere is accentuated for students by their inability to pay both the escalating rents and the high cost of transport to accommodation some distance from Monash. This problem is likely to grow each year for the foreseeable future.

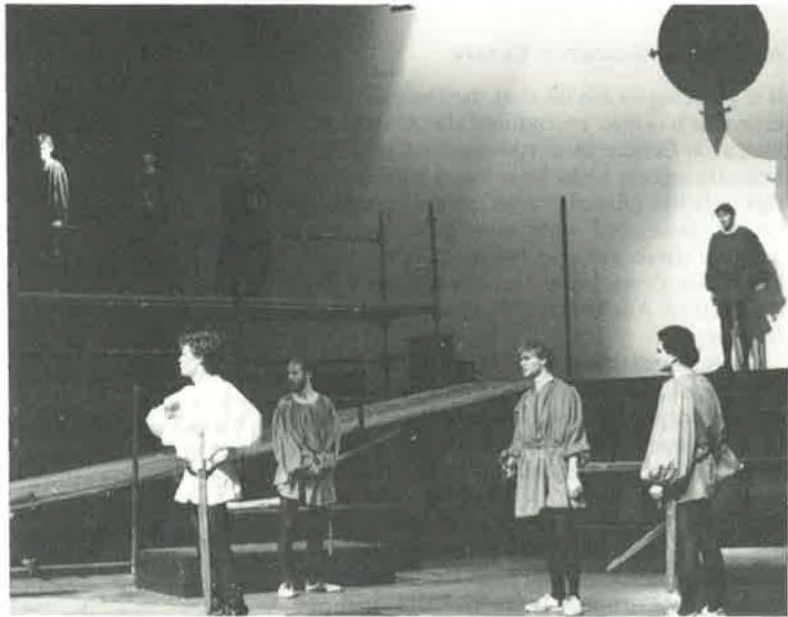
The pressure to obtain a whole flat, or a room, in the South-east flats has become intense, particularly from overseas students. The occupancy rate for 1983 was 97.9 per cent.

### **Halls of Residence**

For the first time in a number of years the Halls of Residence had difficulty filling its undergraduate rooms, this despite an increase in room rental (9.8 per cent) significantly below the average inflation rate.

Undoubtedly there is an increase in the number of students unable to afford the cost

A scene from the production of *Henry V* at the Alexander Theatre. The King (played by Greg Evans) inspires his army on the morning of battle.



of living in the Halls of Residence and this is a matter of great concern to everyone connected with the Halls' operation.

The Committee of Wardens has become increasingly aware of the need to strengthen the level of academic assistance given to Hall residents. To enable this to occur the tutor establishment in Halls has been rationalised and reorganised for 1984.

Dr J.L.A. Francey commenced his term as Chairman of the Committee of Wardens. Dr Terry O'Brien, Reader in the Department of Botany, was appointed Warden of Roberts Hall upon the resignation of Dr Ross Young.

### **Health Service**

The overall attendance at the Health Service in 1983 changed little from previous years,

with 7,413 people making 21,655 visits. This was forty-two less people, but 174 more visits, than the previous year. The number of individual students seen was fewer than last year, having fallen to 5,518.

Certain differences in some areas of illness are probably the reflection of individual changes in classification due to staff changes. There is one area where the change is probably significant. This is the area of emotional illness, where the number of individuals and consultations both fell — individuals from 727 to 537, visits from 1,157 to 836. This reflects the loss of our consultant psychiatrist at the end of 1981 and of Dr Lanyon, who had had considerable psychiatric training, at the end of 1982. Much of this consultative load has probably been transferred to the Counselling Service.



## RESEARCH CENTRES

### Aboriginal Research Centre

It is pleasing to advise that the Federal Government has now recognised the Aboriginal Research Centre as a 'national' centre. Particularly strong links have been established through the Director with several national bodies associated with Aboriginal matters. Two of these are the National Aboriginal Education Committee and the National Accreditation Authority for Translators and Interpreters.

Over the past few years from a very early involvement in the general areas of Aboriginal demography, legal status, health and related issues, the Centre has been moving towards more specialisation in the fields of language, education, land rights and race relations. In these areas it has been providing instruction, developing papers and disseminating information both for Aborigines and non-Aboriginal persons and institutions. The Centre has also increased its service in providing information and advice to government departments and institutions involved in Aboriginal matters.

One of the most important projects to come to fruition over the past year has been the M.O.S.A. scheme (Monash Orientation Scheme for Aborigines). This is a pre-university year for selected Aboriginal students. It aims to teach them skills and strategies necessary to cope successfully with the attainment of a university degree. Centre staff consider that this is a far better way of assisting Aboriginal students to attain university degrees than merely lowering entry requirements to the University. Monash University concurred with this concept and successful negotiations were made with the Department of Education and Aboriginal Affairs to fund the project. The first intake of Aboriginal students will commence in 1984.

The Aboriginal Studies course continues to attract students of a high calibre. In addition, the Centre has increased its involvement in providing electives for Diploma in Education and Bachelor of Education students. This year saw the highest enrol-

ment in these courses and it is hoped that this interest will continue.

Research projects and submissions over the past year have included: submissions on a National Language Policy to the Senate Standing Committee on Education and the Arts; submission on funding in Aboriginal education for the House of Representatives Select Committee on Aboriginal Affairs; research into motivation patterns of Aboriginal graduates (to be concluded); and effects of television on remote communities. The Centre continued to be well represented at conferences.

The Elizabeth Eggleston Memorial Aboriginal Resource Centre continues to provide a much needed information service to both the public, staff and students of the University. The large number of written and telephone requests for information are an indication of the growing awareness of the Centre's role in the community. In practical terms its accommodation has reached maximum capacity. Despite this crowded situation, however, the Centre continues to attract students to use it as a study centre.

The Centre continues to play a role in providing a service to the Aboriginal community — several research proposals are presently under consideration for community organisations. These projects include the teaching of Bandjalang language to adult Aboriginal persons who have requested this as a result of their children having learnt some of the language.

### Computer Centre

The demand for computing services, together with the amount of computing performed using the facilities of the Computer Centre, continued to grow in 1983. At the beginning of the year two DEC VAX-750 computers were installed to help cope with the anticipated load. This enabled the Centre to satisfy reasonably well all the requests made by staff and students, although when computing assignments were due to be handed in, the computers used by



undergraduate students became overloaded. Some students spent all night at computer terminals in order to get rapid service from the machines, but this occurred for only a week or two at the end of the year.

The overloading of machines at peak times and the predicted growth in the number of students using computers as part of their course work in 1984, led to a thorough review of what was likely to be needed in terms of equipment and space. To meet the need for more laboratory space equipped with computer terminals the University allocated approximately \$750,000 for a building to hold some 300 terminals. In addition \$940,000 was allocated from the 1984 equipment grant for new computers and terminals, to which \$250,000 was added from the Centre's outside earnings.

New equipment was ordered at the end of 1983 for delivery by the start of term in 1984. The Centre's decision to offer a Unix service was a major factor in the selection of new equipment. Unix is a computer operating system which in recent years has gained wide acceptance in academic circles. It offers a machine independent system for writing and running programs and therefore facilitates the movement of programs from place to place. After considerable deliberation by the Centre and the Department of Computer Science the decision was made to order two new computers made by the Pyramid Technology Corporation as they have better Unix performance characteristics than the DEC VAX computers which had previously been considered the best choice. One Pyramid computer is to be installed in the Department of Computer Science to replace a VAX-780 running Unix and the other is to be installed in the Centre. The VAX-780 so liberated will be redeployed in the Centre running the VAX VMS operating system to increase the facilities available for teaching. An additional VAX-750 computer was also ordered. It is to be installed in the Department of Economics to improve the

service to staff and undergraduate students in Economics and Accounting. A significant part of the equipment budget was committed to additional disk storage devices, a total of 3,800 million bytes of storage being ordered. That will increase the amount of data which the Centre can store on-line to 8,290 million bytes.

During the year the MONET local area network was extended to many locations on the campus and to departments in teaching hospitals. At the end of the year there were some 500 terminals connected to the network along with 200 computer ports. It is anticipated that progressively the majority of the 900 or more computer terminals on the campus will be connected so that they can access more than the one computer. New facilities were also developed in association with the network. One is a mechanism for transferring files of data between machines. Another allows computer programs to select printers and other devices connected to the network thereby allowing the sharing of devices between a number of computers, for example, one printer in a department may be accessed by many computers.

There was again a substantial increase in the amount of computing carried out in 1983 compared with 1982. All departments were allocated the full computing budget which they requested based on 1982 charges. By the middle of the year it was clear that many departments would exceed their budget and the charge rates were altered to make computing in the evenings and weekends significantly cheaper than during normal working hours.

At the beginning of 1983 a total computing budget of \$1,301,365 (non-discretionary funds) was distributed to departments for the purchase of computing resources from the Centre. All departments received the allocation requested. During the year additional allocations were made to bring the total allocated to \$1,815,070. As in previous years the Centre did not charge for the use of

PDP 11 computers running the MONECS software.

Academic staff in the Centre taught thirteen units in Computer Science and Electrical and Computer Systems Engineering as well as a number of service courses for other departments. In terms of student numbers the largest course was in first-year mathematics, involving 850 students.

The bulk of the research and development activities continued to be devoted to the local area communication network, MONET and associated facilities. Systems programming staff completed a number of new facilities including a system for transferring files between machines using MONET, testing and installation of software packages and the evaluation of equipment which was being considered for purchase. Engineering staff installed three VAX-750 computers, additional disks memory and communications equipment. A significant amount of second-hand equipment was refurbished and added to the B6700 com-

puters. It is to the credit of the staff that they managed to support a significantly increased amount of equipment and computing work load with a nominal increase in staff.

The following table shows the allocation of computing funds to faculties and the amounts recovered during the year. The total University (FS1) budget (excluding equipment funds) allocated to the Centre was \$1,501,379. Of this about \$250,000 was spent on teaching and support services which cannot be included in the cost of time on the main computers. To break even the Centre should have recovered \$1,251,379 rather than the \$1,856,625 actually recovered. A rebate of thirty-two per cent was therefore made and the adjusted value figures in the table reflects this. The level of rebate is a rough estimate for the annual rate of growth of computing on the campus. A thirty per cent per annum growth rate is a typical figure for Australian universities.

1983 Computing Allocation and Expenditure

Faculty	Initial Budget	Final Budget	Actual Recovery	Adjusted Recovery
Arts	29,575	30,900	18,614	12,602
Economics and Politics	147,000	147,000	145,457	98,474
Education	9,800	13,800	15,067	10,200
Engineering	194,082	241,082	238,798	161,665
Law	1,400	1,400	1,227	831
Medicine	48,620	57,075	41,065	27,802
Science	671,255	1,069,055	1,112,639	753,253
Administration	126,000	161,000	178,594	120,908
Library	71,190	89,890	3,094	2,095
Others	2,443	3,868	3,094	2,095
	1,301,365	1,815,070	1,856,625	1,256,931

The total expenditure of the Centre was \$2,357,690, made up of \$2,154,193 provided by University recurrent funds and equipment grants plus \$203,497 from the

Centre's outside earnings. Revenue earning activities generated a surplus of \$215,727 to provide a final balance of \$413,862, of which \$250,000 has been committed to the pur-



chase of equipment in 1984. A breakdown of income and expenditure into a few broad classifications is shown below.

University recurrent funds	
Salaries	\$1,267,178
Consumables	184,398
Software	31,487
Equipment	16,076
Miscellaneous	5,176
	\$1,504,315
Outside Earnings	
Income	\$317,406
Less costs	101,679
	\$215,727
Total expenditure	
Salaries and associated costs	\$1,305,637
Consumables	241,868
Equipment purchased	741,843
Software	61,045
Miscellaneous	7,297
	\$2,357,690

### Centre for Continuing Education

In the overall program of the Centre, forty individual activities, with separate registrations, were run during 1983. The 'Welcare' program, which offers seminars and workshops for professional staff in a range of human service fields, — health care, welfare, law, education, to name a few — continued to be highly successful. One thousand and eighty registrations were received for the eleven activities in the program. Several other organisations collaborated with the Centre in the design and presentation of these activities; they included professional associations, foundations and hospitals. The Centre has developed an extensive network of contacts and advisers in this field and there is little doubt that the program will continue, with success, for some time to come.

By contrast, the 'Update' business training program was wound down in the second half of the year after several activities had been cancelled through lack of a viable number of registrations. Two factors appeared to

contribute to this lack of success: the depressed state of the economy in the first half of 1983 and the increase in the number of similar programs available from other providers, notably the T.A.F.E. colleges. Despite this outcome, mention must be made of the support and financial assistance given to this program by the Small Business Development Corporation.

The other continuing programs of the Centre, the series in engineering and technology short courses and the language classes for adults, both operated at similar levels to those of recent years. A new venture was the outcome of collaboration between the Centre and the Local Government Engineers Association of Victoria. This was an intensive introductory course in management for members of that Association. Here, the Centre was acting as agent for a professional association which did not wish to expand its own staff resources to undertake the planning and organisation of a continuing education program. This process provides a model for other possible forms of future activity by the Centre.

Normanby House continued to prosper as a conference centre, accepting 110 bookings in the course of the year. It has become not only a valuable resource for the Centre, which manages it, but also an avenue for introducing large numbers of people to the University and its campus.

Finally, mention must be made of the Thai University Lecturers' Scheme, in which the Centre plays a co-ordinating role. 1983 was the first year of a new three-year contract with the Australian Development Assistance Bureau and the visiting lecturers, who spent six months at Monash, were from Kasetsart and Silpakorn Universities. The scheme continues to be well received in Thailand and discussions about its longer term future are being planned to take place in 1984.

### Graduate School of Environmental Science

In 1983 the number of units taught by the



Graduate School was twenty-six and with other relevant units offered on campus, the number of units available for selection by candidates was 123.

A course on Applied Ecology and Conservation continued to be offered to undergraduates of the Faculty of Engineering and one on Soils, Land Use and the Environment was taught to Geography undergraduates.

Interest in the Master of Environmental Science course continued and a selection was made from a high standard of applicants.

Twenty-one candidates were involved in project work for which the research reports and minor theses will be submitted in early 1984. Topics studied were: fuel reduction burning (community awareness and attitudes); increasing autonomy in community buildings; trees on Victorian farms; the conservation of roadside vegetation; assessment of hazards to health from mercury resulting from gold-mining activities in the Bendigo district; open space planning for Melbourne; study of electroplating wastewater in Hong Kong and Melbourne; and evaluation of major agricultural problems in Samut Songkhram, Thailand.

As well as being involved in supervision of the above research teams, staff undertook research into: social contexts that connect care of the natural environment with care of the person; development of an educational game on Australian futures; evaluation of the use of a wind energy system to service intermediate community structures; public attitudes to energy conservation and energy management policy in Melbourne; post-graduate environmental education programs in Australia and South-east Asia; the way different means of transport affect the way we perceive the environmental phenomena; the implications of technology (the 'technical system') for sustainable lifestyles; and effects of environmental gradients and mechanical disturbance on the association of plants in Eucalypt forests of south-eastern Victoria.

Dr E.H.M. Ealey, Director, visited Mahidol University, Thailand, as an Australian Universities International Development Programme (AUIDP) consultant. He presented a paper at the UNESCO workshop on Environmental Education in Quezon City in the Philippines and assisted in setting up the ASEAN Council for Higher Education in Environment (ACHEE). Dr Ealey continued to serve in a number of appointments outside the University as did other staff members of the Graduate School.

A symposium of Fuel Reduction Burning was held at the University jointly sponsored by the Forests Commission, Victoria, the Conservation Council of Victoria and the Graduate School of Environmental Science. Attendance exceeded 300 persons. A seminar on Waste Treatment and a workshop on the Victorian Conservation Strategy Plan were also sponsored by the Graduate School.

Dr George Gaskell, London School of Economics and Co-ordinator of the European Economic Community Study into Household Energy Consumption and Policy, visited the Graduate School and had discussions with the staff on energy research.

#### Enrolment Information

	Full time	Part time	Total
Enrolled December 1982	25	112	137
Number of applicants for 1983	38	41	79
Offers made	24	32	56
Acceptances	12	28	40
Total enrolled March 1983	16	102	118
Total withdrawn/ intermitted during 1983	0	25	25
Graduated	2	11	13
Total enrolled December 1983	22	100	122

### **Higher Education Advisory and Research Unit**

The Higher Education Advisory and Research Unit (H.E.A.R.U.) has two sub-sections, the Advisory and Research Unit situated in the Law building and the Educational Technology Section located at the rear of the Medical building.

Both parts have experienced an increase in the demand for their advice and service from departments and individuals. The tasks have been diverse, ranging from requests for information to extended course evaluations, from advice on examining to the maintenance of the data bank, which commenced in 1970, of the sociological characteristics of entering first-year students. Of the 106 identifiable departments and sections within the University, the Educational Technology Section provided services to eighty-eight and provided the technical support to the Rotunda Lecture Theatres.

One innovation in 1981 was the introduction of a small grants scheme to encourage innovative teaching. The scheme was called the Teaching Improvement Projects (T.I.P.s) and was funded by the Vice-Chancellor in 1981 as a pilot year. The T.I.P.s scheme was so successful that it was continued into 1982 and 1983. Nine projects were supported, the content of which varied from videotapes of pre-laboratory instruction, to the development of materials for the three-dimensional projection of slides.

1983 was the sixth year in which Monash University has conducted the Thai Universities Lecturers' Scheme. This year Thai academics came from the Kasetsart and Silpakorn Universities and spent four days each week for four months in H.E.A.R.U. and a formal course in teaching and learning in higher education.

Eight articles, nine conference papers, ten reports and several confidential reports were published in 1983.



# STUDENT ACTIVITIES

## Orientation

Orientation aims to introduce new students to both the academic and the non-academic sides of university life.

New students now receive a general welcome and introduction to Monash at an official welcoming ceremony in the Robert Blackwood Hall. This ceremony was introduced in 1982 and has proven very successful. This year there was an 'overflow' attendance of 1,500 new students.

The principle academic orientation takes place in the faculties where each dean welcomes the new students and the teaching and the other work of the faculties are described. The academic orientation at departmental levels was further strengthened this year.

The initial orientation activity for many new students is provided by the Host Scheme, which has now become a most important part of the Orientation program. The scheme is based on small groups of ten to twelve new students who are introduced to the Monash campus by a later-year student. This year some 160 senior students volunteered their service as hosts, and 1,500 new students took part.

The overall success of orientation is dependent on the contributions of many later-year students as well as University and Union staff. Displays and other activities are organised by Clubs and Societies, Sports and Recreation groups, and the Monash Association of Students. In 1983, despite severe financial constraints, a wide range of such activities was provided.

## The Union — Administration and General

In 1983 the Union operated on an expenditure budget of \$2,009,340, derived from a Union fee of \$198 for full-time students and \$126 or \$88 for part-time students. Twenty-five per cent of the fee income was allocated to the Union Development Fund. One new budgetary area was established: the Prince Henry's Hospital Postgraduate Students So-

ciety, which now, like the student associations at the Alfred Hospital, receives a direct grant from the Union Board as well as normal grants from the Clubs and Societies Council, in recognition of the special circumstances of students at the teaching hospitals. The subscription rates for several categories of subscribing Union members were increased by \$5 per annum.

Three building projects proceeded at the Sports and Recreation Centre on a total budget of \$370,000. These were the redesign of a control area, additional facilities in the Recreation Hall and a fitness-oriented weight room. A twelve-bed extension to the Alpine Lodge at Mt Buller was approved by the Union Board and a permit for this extension was subsequently granted by the alpine authorities. The Board has authorised the purchase or lease of a house in the vicinity of the University to be used for emergency accommodation for students. Attention is now being given to improving working conditions and facilities in the main Union building by providing additional space. To this end, the Board has approved in principle a building extension of 1486.5 sq.m. An additional room was provided for Radio 3MU in the basement of the main building and a room in the 'Back of Beyond' at the Alfred Hospital was converted into a common room for the Alfred Research Students' Society.

The catering result for the year was a deficit of \$33,000 which was well below the catering deficits reported by other Victorian university unions. The Catering Department was without a manager until September when a new manager, Mr Joe Curtis, took up his appointment. A report on the Union catering service, commissioned from management consultants in 1982, was presented in April 1983. The Board acted upon the consultant's recommendations in upgrading the function catering service — even to the stage where it has agreed to suspend, on occasion, the normal lunch-time service in one area to achieve this goal — and in accepting a break-even objective for



the basic catering service combined with subsidisation of selected minor services. Recommendations from the consultant involving staff reduction have not been acted upon; instead, efforts are being made to expand food production and service to absorb the existing staffing.

In the staffing area, the positions of Student Welfare Officer and Student Employment Officer were converted from two-year appointments to permanent appointments. Two long-term staff members, Mrs March, Secretary to the Buildings Services Officer, and Mrs Stephens, Pantry Manager, retired. The introduction of a thirty-eight hour week for cleaning and grounds staff has resulted in a need, at times, to employ casual staff to replace regular staff on their rostered one day off per month.

Several issues in which the Union Board has an interest remained unresolved in 1983. The Tadgell Inquiry into the Sports and Recreation Association's request to Council to become an independent body directly responsible to Council, the Board's request to Council for additional funding for child care facilities, the establishment of the Club Alfred for staff and students at the Alfred Hospital, and a proposed licensed bar in the Union. The Board has postponed an application for a tertiary institution licence to operate a bar until the prototype bar at the La Trobe University Union is established and the conditions associated with the licence are clarified.

Other matters which occupied the Board included traffic hazards for parents and children arriving at or departing from the student creche in Beddoe Avenue, Union Board and Monash Association of Students delegations to the University Council in May, correspondence with the Minister for Education regarding delay in T.E.A.S. payments, and the possibility of Union constituents and individual clubs applying for corporate status under the Associations Incorporation Act. One new development was the establishment of an Arts and Crafts Commit-

tee to advise the Board on policy matters relating to the Arts and Crafts Centre. The Board was pleased to obtain the services of the Director of the Crafts Council of Victoria as a member of this committee. The Commercial Services Committee, which had met infrequently, was disbanded and its function was assumed by the Union Finance Committee.

Three amendments to the Union Constitution and one amendment to the Union Statute were approved by Council. The Board considered but rejected several proposals to increase the membership of the Board by the addition of more general student representatives and representatives from special interest groups.

Apart from the major student groups whose reports are included below, several other groups funded by the Union have contributed to a very active year in the Union: The Community Research Action Group (C.R.A.G.) continued to foster the acquisition by students and staff of skills in media preparation and production and in the administration of research projects, and to encourage interest on campus in community issues.

Student Theatre activities included workshops on various theatrical and promotion skills, guest performances, the establishment of a new theatre booking service for members of the student theatre groups, participation in the annual festival of Australian student theatre in Hobart, and in the establishment of an Australian student theatre association. The major event was a festival of theatre, in association with the Alexander Theatre, which saw the production of *Irene*, *You Can't Take It With You* and *Henry V*, involving the musical, drama and Shakespearian groups.

Student radio 3MU continued with preparations to transmit to the campus on an AM frequency early in 1984. A second studio was set up for pre-production purposes and for training of panel operators. During the year 3MU afforded the opportunity for

some eighty students to prepare and/or present programs which were broadcast over speakers in the Union Building.

### **Monash Association of Students**

1983 was an important year for the Monash Association of Students. The passing of Freedom of Information legislation at both state and federal levels has allowed students and others to be better informed concerning the actions of governments and government funded organisations — including the University. The Association has been involved in informing students of this legislation and also helping students to acquire information or fight decisions made on 'secret' information.

The sub-quota debate still continues, unfortunately. During 1983 there was strong student opposition to sub-quotas. The latest action saw the Professorial Board vote overwhelmingly to suspend sub-quotas in the Faculty of Engineering for 1984. It must be remembered that sub-quotas still remain a danger to our overseas students.

The Association has continued to operate the Student Employment and the Student Welfare Offices on campus, as well as our entertainment programs through activities and the production of the *Counter Faculty Handbook* to promote careful selection of courses.

Staff assistance was again valuable during 1983, with all members contributing long hours under difficult circumstances, with excellent results.

1983 was a worthwhile year from the Association's point of view, and it should be looked on as a stepping stone to the coming years. It is hoped that efforts will be made to address both the Union's and the Association's more fundamental problems in the future.

### **Monash Association of Graduate Students**

1983 has been an unusual year for the

M.A.G.S Collective Committee. Most of the 1982 members had left the University and the new committee had to start virtually from scratch. Two Researchers/Organisers, both much appreciated, also left during the year and in addition the committee wrote its constitution in order to gain official recognition and therefore acquire necessary budget approval from the Union Board.

Issues that confronted M.A.G.S in 1983 covered fairly wide-ranging topics including sub-quotas on overseas students studying on campus, raising of library fines to a minimum of \$1.00 per book overdue, the borrowing of current journals from the Main Library by postgraduates and increasing the level of postgraduate interest in M.A.G.S. activities.

The Association continued to be concerned at the inadequate working space and facilities for postgraduates and at the low level of scholarships available to postgraduates. During 1983 the committee supported the Council of Australian Postgraduate Associations in asking the Federal Government to increase postgraduate scholarships, and welcomed the consequent seven per cent rise in the level of the awards announced in the Federal Budget.

Towards the end of the year, the M.A.G.S. Researcher/Organiser attended the inaugural C.A.P.A. 'Women's Conference' and a member of the M.A.G.S. committee attended C.A.P.A. Annual General Council Meeting which followed.

During 1983 M.A.G.S. continued to hold at least one social function each term and published the first edition of its newsletter, *Magnet* in addition to its handbook *Compass*.

### **Clubs and Societies**

1983 saw the continued growth of Clubs and Societies, both in the number of clubs and their diverse activities. Grant monies totalling \$101,850 were distributed amongst approximately 140 clubs upon the authori-



sation of the student elected Clubs and Societies Executive, the pertinent administration of these grant monies being efficiently undertaken by the Clubs and Societies office staff.

The staff of the office continue to provide a variety of services including photocopying, duplicating, electronic stencil cutting, typewriters, screen-printing as well as loaning urns, cups, games and photographic and video equipment.

The Clubs and Societies Executive and staff provide assistance to club office-bearers, both in response to queries about the allocation of funds and, more frequently, in helping newly-appointed club personnel to understand and carry out their duties in organising such projects as off-campus conferences and camps, and social functions. They also readily assist in providing information on how to form a new club.

Through the assistance available from the Club Liaison Officer, students were provided with information and advice pertaining to any facet of Clubs and Societies activities.

### **Union Tuition and Summer School**

The Arts and Crafts Centre continued to offer a wide variety of courses throughout the year. The 1983 annual Summer School program (which was the forerunner to the present year-round four program format) has been quite successful. One hundred and two courses were offered in Summer School, covering arts, crafts, music, languages, sports, dance, drama, creative writing, gardening, car maintenance, first aid, interior decorating, stress management, relaxing massage, yoga, and study skills.

The spring, autumn, and winter programs for 1983 were very popular. The weekend and one-day workshops introduced in 1982 are now becoming quite well-known with response to them increasing steadily. These workshops have proven attractive to persons unable to commit themselves to

courses running over a number of weeks, and afford them an opportunity to gauge whether or not they wish to become more involved in pursuing a particular field of learning.

Competition continues to increase via community houses, council financed centres, T.A.F.E. colleges, schools, and individual Arts/Crafts instructors offering their services. However, despite this very keen competition, Monash Arts and Crafts Centre still attracts more and yet more participants, as attested to by the fact that in 1983 a total of 4,077 persons undertook a total of 397 courses. This high involvement is attributable to the careful selection of courses that will attract the prospective users, an extremely high standard in the quality of equipment provided, attractive and well-serviced venues, and the very careful scrutiny and eventual selection of tutors who are not only suitably qualified and trained, but who have the ability to pass on their knowledge and skill in a personable and enjoyable way. The administrative staff continue to provide the efficient day-to-day running of the Centre, and their warm welcome, courtesy, and genuine interest in the continued efficiency and growth of the Centre cement together the many facets which make up the attractive whole.

### **Sports and Recreation Association**

The first full year of operation of the swimming pool saw it very well patronised by the University population. Besides catering for the serious swimmer, the pool provides time and space for a number of alternative recreational pursuits, such as sessions for therapeutic treatment, pre- and post-natal classes and exercise programs in the water. A very pleasing aspect has been the demand for pool time by neighbouring schools. The design of the pool with its leisure-oriented section and broad concourses has made it an excellent teaching facility. Solar heating provides much of the energy for pool operation and has assisted in reducing costs.



John Bertrand (left), skipper of the America's Cup winner, *Australia II*, and the syndicate head, Alan Bond. John Bertrand earned a distinction in 1969 for his fourth-year thesis in the Department of Mechanical Engineering entitled *Investigations into the performance of a 12 metre yacht sail*.

— Photo *The Sun*



An increased awareness of the many benefits associated with physical fitness has been apparent through a significant increase in the number of members taking advantage of the fitness programs run by the Association. Aerobic dance was one such area which proved to be extremely popular. Personalised fitness and weight training programs were provided for many members, although this caused overcrowding during periods of peak usage within the weight training room. This surge of interest in physical fitness underlined the necessity for the modernised fitness-oriented weight room which is currently being built.

Re-design of the sports control area has considerably reduced congestion of the 'nerve centre' of the complex.

Vandalism, theft and unauthorised use of the entire sports area are continuing problems but it is hoped the newly installed

alarms and cameras will help overcome this. The cameras, especially those in the pool, are an added safety measure.

Monash was well represented in the inter-varsity competitions during 1983, taking the honours in athletics (women), badminton (men), rogaining (women), softball (women), and volleyball (women).

The number of graduates and other subscribing members seeking membership of the Union through the Sports and Recreation Association continues to increase. The current membership is now around 1,000. This increase, coupled with the presence of many former Blues winners at the annual Blues presentation night, emphasised the link that has grown between the Sports and Recreation Association and graduates. The Association was delighted that John Bertrand, himself a Monash Blue, was guest speaker for this year's dinner.

## GIFTS AND GRANTS

### The following gifts and grants were received by the University:

Abrams, Mrs I. D. for the Student Assistance Fund		130
ACI Australia Limited 1983 ACI-ASEAN Scholarship for Mr Adirek Ratirattananont (Economics)		7,550
ACI Fibreglass for the project: Heat flow through ceilings and roofing of buildings, Associate Professor A. Williams (Mechanical Engineering)		5,833
Adams, The Estate of the late George to Visiting Lecturers' Scheme in Geriatric Medicine, Professor G. C. Schofield (Medicine)	37,300	
for dermatology research, Dr R. Marks (Medicine, Alfred Hospital)	500	37,800
Adams, John and Maguire, Shane for the Law School Library (Law)		25
AHS/Australia Pty Ltd for research project: Ingrowth into Impira and Goretex vascular grafts, Clinical Associate Professor D. F. Scott (Surgery, Prince Henry's Hospital)		
stipend for Mr P. Mackinnon, AINSE Studentship (Chemistry)		3,000
Alcoa of Australia Limited for use in Careers and Appointments Service		200
Alexander Mrs Ruth fourth instalment Geoffrey Alexander Postgraduate Research Scholarship in Hydrology, Professor E. Laurenson (Civil Engineering) \$2,000		
instalment Ruth Alexander Room, Robert Blackwood Hall \$1,000		3,000
Alexander Foundation, The George travel grants for Ph.D. students Mr L. Brewin and Mr M. S. Hickman to attend Tenth International Conference on General Relativity and Gravitation, Dr C. B. G. McIntosh (Mathematics) \$1,200 each	2,400	
towards cost of science exhibit to encourage school children to continue studies in science subjects at secondary level, Professor T. White (Education)	2,000	4,400
Alfred Hospital for the projects: Research into colorectal cancer, Professor Sir Edward Hughes, Associate Professor F. T. McDermott, Clinical Associate Professor E. Pihl and Mr W. R. Johnston (Surgery, Alfred Hospital)	18,860	
Immunoregulation with Synovial joint in rheumatoid arthritis, Dr W. G. Kimpton (Pathology and Immunology)	5,241	
Colorectal carcinoma: immunodiagnosis and prognosis, Professor R. C. Nairn (Pathology and Immunology)	17,500	
Healing of stapled colorectal anastomoses, Mr A. L. Polglase (Surgery, Alfred Hospital)	3,000	

Ringland Anderson Research Scholarship Trust Fund for the project: Ocular toxicity of Kosso and allied naturally occurring anthelmintics, awarded to Dr S. Brumley (Alfred Hospital); Dr L. Rogers (Pharmacology), Dr D. Ehrlich (Anatomy), Dr A. McLean (Alfred Hospital)	10,000	54,601
American Museum of Natural History Frank Chapman Memorial Fund for ornithological research, Dr P. V. Rich, (Earth Sciences)		1,130
Andrew Foundation, Aileen S. second instalment Aileen S. Andrew Foundation Scholarship program for 1983, Mr John Richards (Chemistry)		9,000
Angliss (Victoria) Charitable Fund, The William for Orthopaedic and Traumatic Surgery Research, Associate Professor J. Clarke McNeur (Surgery, Alfred Hospital) \$4,000 for the Krongold Centre \$4,000		8,000
Anisman, Professor P. for the purchase of books relating to Jewish Law, in memory of the late Mr M. Adler (Law Library)		100
Anti-Cancer Council of Victoria payments for research grants: Dr P. J. M. Tutton and Dr D. H. Barkla (Anatomy) \$21,737 Professor Neil E. Carson (Community Medicine) \$7,500 Dr D. R. Smyth (Genetics) \$10,749 Dr T. E. Gan and Associate Professor M. B. van der Weyden (Medicine, Alfred Hospital) \$20,494 Associate Professor H. K. Muller \$18,010 Professor R. C. Nairn and Dr E. Pihl \$55,213 Clinical Associate Professor B. H. Toh and Dr J. S. Pedersen \$20,000 (Pathology and Immunology) Professor Sir Edward Hughes, Associate Professor F. T. McDermott and Mr W. R. Johnson (Surgery, Alfred Hospital) \$21,521 to reimburse shortfall in research grants awarded 1982: (Anatomy) \$1,441 (Pathology and Immunology) \$2,910	175,224 4,351	179,575
Apex Foundation for the project: The effect of reduced placental transfer on the development of the cardio-respiratory system in the foetus and newborn, Dr J. E. Maloney (Research Centre for Early Human Development)		30,112
Apollo International Minerals No Liability to assist Mr M. MacLennan to undertake geological investigations in the Cassilis area, towards M.Sc. thesis, Mr V. Wall (Earth Sciences)		1,000
Arthur Andersen and Company towards operating costs in Careers and Appointments Service		400
Arthur Young and Company for use in Careers and Appointments Service		150
Association of Ukrainians in Victoria to fund lectureship in Ukrainian (Slavic Languages)		20,000



Asthma Foundation of Victoria, The		
for the project: Changes in histamine binding lymphocytes in allergy assessed by the fluorescence activated cell sorter, Associate Professor H. Muller, Dr D. Czarny (Pathology and Immunology)	5,000	
Australasian Institute of Metals		
for use in Materials Engineering	3,767	
Australia Council		
towards costs of poetry readings 1983 (English)	600	
Australia-Japan Foundation, The		
for student travel to Japan (Japanese)	800	
Australian Associated Brewers, The		
for project on the effects of alcohol on bowel cancer — do alcoholic beverages have any contributory or protective effects? Clinical Associate Professor E. A. Pihl (Pathology and Immunology)	17,000	
for the project: Brain peptides in alcoholism, Dr R. D. Helme (Medicine)	10,500	27,500
Australian Bank Employees Union		
to complete all aspects of the current study into the Australian private banking industry's labour market, Dr J. Hill (Administrative Studies)		6,000
Australian Ceramic Society, The		
to establish in the Department of Materials Engineering for one year in the first instance, the Frank Bailey Memorial Scholarship, in recognition of the contribution to ceramic technology in Australia made by the late Frank Bailey, CSIRO Division of Chemical Physics. The scholarship is to be awarded to a final year Materials Engineering student who is undertaking a project in the field of ceramics as part of the fourth year course		300
Australian Institute of Nuclear Science and Engineering		
to cover purchase of equipment and consumables AINSE Studentship, Mr P. Mackinnon (Chemistry)	1,615	
AINSE Studentships		
Mr M. Irving (Physics) \$2,111		
Mr P. Mackinnon (Chemistry) \$5,701		
Mr J. C. Osborn (Physics) \$4,270	12,082	
stipend for AINSE scholars:		
Mr J. C. Osborn (Physics) \$6,452		
Mr P. Mackinnon (Chemistry) \$1,501	7,953	21,650
Australian Kidney Foundation, The		
grants-in-aid:		
Mechanisms of glomerular inflammation, Dr S. R. Holdsworth (Medicine, Prince Henry's Hospital) \$10,000		
Role of Vasopressin in vascular lesions of malignant renal hypertension, Professor C. I. Johnston (Medicine, Prince Henry's Hospital) \$6,250		
The kallikrein-kinin system in acute renal failure, Dr P. G. Matthews (Medicine, Prince Henry's Hospital) \$7,500		
Renal transplant progress studied by rapid mixed lymphocyte assay		

using fluorescent cell probes, Dr J. M. Rolland, Professor R. C. Nairn (Pathology and Immunology) \$10,000	27,000	33,750
Australian Liliun Society for liliun research, Dr D. R. Smyth (Genetics)		325
Australian Mineral Industries Research Association Limited for the project: The condition monitoring of mineral processing machinery, Dr R. J. Alfredson (Mechanical Engineering)		50,000
Australian Museum, The — Sydney for the projects: Familial and genetic relationships within the Australian Meliphagid assemblage, Mr R. F. Baird (Earth Sciences) \$971 Breeding ecology of 40 spotted Pardalotes, Mr J. Woinarski (Zoology) \$1,000		1,971
Australian National University, The support for Bicentennial History project, Dr M. Aveling (History) towards field expenses incurred during the Early Vertebrates Symposium held in February 1983, Professor J. W. Warren (Zoology)	2,200	
	220	2,420
Australian Road Research Board to Careers and Appointments Service for the project: Vehicle lateral displacement in the presence of on-coming vehicles, Dr T. J. Triggs (Psychology)	50	
	49,093	49,143
Australian Timken Pty Ltd in support of the work of Careers and Appointments Service		50
Australian Tobacco Research Foundation for the project: Interactions between nicotine and diazepam, caffeine and alcohol, being conducted by Dr J. M. White (Psychology)		11,375
Australian Universities Centres in Japan for student travel to Japan (Japanese)		5,245
Australian Vice-Chancellors' Committee — Australian Universities' International Development Program for the study visits of Dr N. Valera of the Ateneo de Manila University \$882, Dr A. Trance \$7,060, and advisory visit to Thailand by Dr E. H. M. Ealey \$4,300 (all Graduate School of Environmental Science)	12,242	
incentive grant in recognition of the contribution of Associate Professor A. Williams to the AUDP as consultant for technical services (Mechanical Engineering)	1,600	
to postgraduate students Mr J. Melville and Mr G. Terrens \$1,500 each (Graduate School of Environmental Science)	3,000	16,842
Australian Welding Research Association extension of grant by Sir William Hudson Memorial Awards Committee, Miss Gillian Heintze (Materials Engineering) for the projects: Trace elements and the elevated temperature embrittlement of low alloy sheets \$7,615 Microstructural stability of innershield weld steels in high temperature service, Dr R. A. Jago \$7,865	3,301	

Structure and adhesion of plasma and flame sprayed coatings, Associate Professor R. McPherson (Materials Engineering) \$5,045	20,525	
for the project: Hydrogen stress cracking susceptibility of line pipe steels, Associate Professor B. W. Cherry (Materials Engineering)	4,721	28,547
Australian Wheat Board to muscular dystrophy research, Dr L. Austin (Biochemistry)		81
Australian Wool Corporation for postgraduate scholarship, Mr S. B. Hooper, supervisor Professor G. D. Thorburn (Physiology)	4,725	
for continuing project: Studies on the physiological mechanism by which EGF alters the normal production of fibre within the wool follicle, Professor G. D. Thorburn (Physiology)	4,244	
for the project: Studies on foetal growth and skin development, Professor G. D. Thorburn (Physiology) \$22,682		
reimbursement of expenditure for project: Treatment of wool with N-acyl isatin derivatives (Chemistry) \$10,522		
for the project: An investigation of the influence of cutaneous electric fields and currents on fibre formation in the follicles of sheep, Professor D. G. Lampard (Electrical Engineering) \$9,766	42,970	51,939
Austrian Embassy donation for Austrian Conference (German)		300
Baker, Thomas (Kodak) Alice Baker and Eleanor Shaw Benefactions to Krongold Centre \$6,000 for Interferon research (Biochemistry) \$20,000		26,000
Baxter Charitable Trust, Percy for research into neuromuscular diseases, Dr L. Austin (Biochemistry)		5,000
Bell Park North Primary School to Spina Bifida Research Fund, Associate Professor R. A. MacMahon (Paediatrics)		30
Bongiorno and Company Pty Ltd for use in Community Medicine		994
British Petroleum Company p.l.c., The for the project: Kinetic and mechanistic studies on liquefaction of low rank coals particularly using synthetic gas, Professor W. R. Jackson, Dr F. P. Larkins (Chemistry)		161,980
Brockhoff Foundation, The Jack to fund the continuing Brockhoff Visual Therapy Program (Krongold Centre)	6,000	
for the project: Matrix protein synthesis and regulation by cyclically stretched vascular smooth muscle cells in culture, Dr B.W. Oakes (Anatomy)	2,750	8,750
Broken Hill Associated Smelters Pty Ltd, The scholarship stipend for Miss Loo Ai Choo to March, 1984 (Chemical Engineering)		7,900
Broken Hill Proprietary Company Ltd, The		



for research into the problem of thermal cracking (graduate scholarship), Dr J. R. Griffiths (Materials Engineering)	7,448	
towards research in the area of residual stresses in metals, Professor T. F. Smith (Physics)	2,000	
for the project: Groote Eylandt manganese ores, Dr L. A. Frakes (Earth Sciences)	2,965	
for the Sturzelecki project, Professor B. E. Hobbs (Earth Sciences) \$3,000; for preparation of geological samples and data cataloguing, Dr L. A. Frakes (Earth Sciences) \$2,000	5,000	
postgraduate scholarship project, Mr G. R. Bryan: Finite element modelling of eddy currents in steel, Dr G. Cambrell (Electrical Engineering)	6,000	23,413
Buckland Foundation, The William		
to assist with urgent development programs and staffing (Krongold Centre) \$10,000		
for a study of non-melanotic skin cancer in Victoria, Dr R. Marks (Medicine, Alfred Hospital) \$5,500		15,500
Burchill, Sister Elizabeth		
to the Elizabeth Burchill Fund (Arts)		5,000
Callister, Mrs W.		
to establish a prize in the Faculty of Arts, of the value of at least \$100, to be awarded annually on the recommendation of the Chairman of the Department of Visual Arts		2,000
Catholic Education Office of Victoria		
to the work of Careers and Appointments Service	150	
for use in Education	100	250
Celanese Research Company		
for the project: Development of a suicide plasmid for Celanese's MW strain of Pseudomonas Putida, being conducted by Professor B. Holloway (Genetics)		39,674
Chambers, Mrs G.		
to purchase a dual slab gel apparatus to be used specifically for muscular dystrophy research, Dr L. Austin (Biochemistry)		1,100
C.I.G. Medishield — Ramsay		
Ramsay (Surgical) Limited 1982 Prize for Obstetrics and Gynaecology		100
Clark, Professor A. C. L.		
for use in Paediatrics		594
College of Nursing, Australia		
for the project: Comparative study of characteristics of entrants into various branches of nursing, Professor R. P. Tisher, Ms A. Walsh, Ms N. Bruni (Education)		12,000
Collier Charitable Fund		
infra-red radiating stethoscope (Medicine) \$2,400		
ore and rock samples (Earth Sciences) \$1,000		
copies of the Australian Law Journal 1950-1980 (Law) \$1,000		
two Esterline-Angus Event Recorders (Pharmacology) \$1,800		
videotape recorder (Social and Preventive Medicine) \$1,432		

publication of booklet on careers in mathematics (Careers and Appointments Service) \$368	8,000	
Comalco Limited		
to Careers and Appointments Service	200	
Commemorative Association for the Japan World Exposition: towards the costs of constructing the Japanese Studies Centre	60,342	
Connective Tissue Society of Australia and New Zealand		
for use by Professor D. A. Lowther (Biochemistry)	2,000	
Coopers and Lybrand (A.C.T.) Pty Ltd		
for use by Careers and Appointments Service	400	
Cottman, Estate of the late W. T.		
to be used specifically for charitable medical research (Medicine)	4,362	
Council for Chaplaincies in Tertiary Institutions, The		
annual contribution towards costs of Chaplain's office at Monash	750	
CRA Services Limited		
to Careers and Appointments Service	150	
additional support for the project: Research into the genetics and physiology of micro-organisms associated with the microbiological leaching of ore deposits, Professor B. W. Holloway (Genetics)	1,730	1,880
Criminology Research Council		
for the project: Implications of memory research for criminal law procedure, Dr D. M. Thomson (Psychology)		6,500
CSIRO		
for the project: Studies of morphology and histochemistry of wheat kernels, Dr T. P. O'Brien (Botany)	10,190	
for the projects:		
Ceramic coatings using plasma spraying, Associate Professor R. McPherson (Materials Engineering)	23,329	
Novel insecticide compositions, Professor W. R. Jackson (Chemistry)	4,105	
for CSIRO/Monash collaborative research in 1983:		
Enhanced removal of phosphorous compounds in sewage treatment plants: Microbiology of process function and its relevance to treatment plant design and operation, Dr R. C. Bayly and Dr J. W. May (Microbiology) \$4,404		
An investigation of ion-beam-assisted deposited thin films for integrated optics, Dr L. N. Binh (Electrical Engineering) \$750		
Pharmacological investigation of effects on the mammalian nervous system of potential insecticides, Professor A. L. A. Boura, Dr J. E. Olley (Pharmacology) \$4,318		
The neutron and Gamma-ray Kossel and Kikuchi effects, Dr J. D. Cashion, Professor T. F. Smith, Ms S. Town (Physics) \$1,250		
Electrolytic effects of corrosion of reinforcing steel in concrete, Associate Professor B. W. Cherry, Ms N. Quach (Materials Engineering) \$4,045		
Support of well defined metal clusters on high surface area solids:		

Synthesis, characterization and catalytic activity, Associate Professor R. S. Dickson, Mr M. Liddell (Chemistry) \$3,029		
Absciscic acid content and the induction of tolerance (to complete desiccation) in resurrection plants, Dr D. F. Gaff (Botany) \$4,000		
Natural convection heat transfer in closed cavities, Mr R. Gani, Associate Professor A. Williams, Mr C. W. Ambrose (Mechanical Engineering) \$4,318		
Genetic stability of genetically engineered plasmids in pseudomonas strains growing under continuous fermentation conditions, Professor B. W. Holloway, Dr A. F. Morgan, Associate Professor V. Krishnapillai (Genetics) \$8,438		
Analysis of the Southern Hemisphere stratospheric circulation using satellite data, Dr D. J. Karoly (Mathematics) \$2,500		
Yeast expression vectors, Professor A. W. Linnane, Dr P. Nagley (Biochemistry) \$9,950		
Mechanism of chelation by sirorez polymers, Dr K. S. Murray, Dr J. K. Yandell, Ms B. Spethman (Chemistry) \$3,000	45,684	
CSIRO Australian Computer Research Board for the projects:		
Multimicroprocessor systems for parallel concurrent and distributed processing for real time applications, Dr K. E. Forward and Dr T. S. Dillon (Electrical Engineering) \$4,500		
IFIP Working Party 10.4, Dr K. E. Forward (Electrical Engineering) \$5,000	9,500	
CSIRO Radio Research Board for the project: Rain cell structure for microwave propagation from 4GHz to 33GHz, Dr J. A. Bennett (Electrical Engineering)	1,500	94,308
Dan, Mr G. for use in Medicine, Alfred Hospital		10
Deafness Foundation (Victoria) for the project: Prevention of congenital rubella syndrome — a cost-benefit analysis, Mrs H. Owens (Administrative Studies) \$5,000		
for the project: A study of educational, behavioural and audiological consequences of fluctuating conductive hearing loss in young children, Dr G. F. Best (Education) \$2,500		
for the project: Otitis Media — educational complications, Mrs D. Moore, Dr G. Best (Education) \$2,500		10,000
Dean, Lady to Elizabeth Eggleston Memorial Appeal		30
de Boer, Associate Professor W. G. R. towards Interferon research \$15,400,		
towards Biochemical research, \$4,800, Professor A. W. Linnane (Biochemistry)		20,200
de Kretser, Professor D. M. towards the costs of Dr P. Temple-Smith's field trip to South America, for the project: Studies on sperm structure and reproductive anatomy of the Chilean marsupial Dromiciops Australis (Anatomy)		500



Deutscher Akademischer Austauschdienst		
Departmental allowance postdoctoral fellow, Dr W. Schilf (Genetics)	507	
Dow Chemical (Australia) Limited		
for the Dow Scholarships shared between Mr M. P. Head and Mr K. T. Nelson (Chemistry)	1,000	
Downing, Dr B. G.		
for use in in vitro fertilization program (Obstetrics and Gynaecology)	2,520	
Duncan, Dr J. S.		
towards publication costs of book: Ferns and Allied Plants of Victoria, Tasmania and South Australia (Botany)	500	
Duval Mining (Australia) Limited		
to assist with honours thesis: Mt Ararat and surrounds, Ararat, Victoria, Mr V. Wall (Earth Sciences)	200	
Eggleston Estate, Elizabeth		
being the balance of income of the Trust for Aboriginal Natives, to be applied for the purposes of the Aboriginal Research Centre	5,462	
Eggleston, Lady		
to the Elizabeth Eggleston Memorial Fund (Aboriginal Research Centre)	500	
Electrical Research Board		
for the projects:		
Measurement and prediction of power system impedance at harmonic frequencies, Associate Professor W. J. Bonwick \$9,600		
Planning and design of controls on an overall system basis to achieve small and large disturbance stability, whilst properly accounting for load characteristics, Dr T. Dillon and Dr C. Berger \$13,357 (Electrical Engineering)	22,957	
Ellis, Miss J. E.		
for the Department of Surgery Research Fund, Professor Sir Edward Hughes (Surgery, Alfred Hospital)	500	
Eso Australia Limited		
as assistance to honours geoscience students (or postgraduates where honours students are not available) towards living, travel, drafting, reproduction costs, etc. \$2,000, to meet high priority needs of the department \$2,000 (Earth Sciences)	4,000	
towards the purchase of a Mass Spectrometer \$15,000		
to assist with teaching aids or excursions for students as an aid to the advancement of geological sciences \$1,000, Professor B. E. Hobbs (Earth Sciences)	16,000	
further support for project: Diagenesis of sediments, Mr V. Wall (Earth Sciences)	10,000	
to Faculty of Engineering \$7,000		
to the five departments within the Faculty — Chemical, Civil, Electrical, Materials, Mechanical \$4,000 each	27,000	57,000
Evans, Mr M.		
for use in Careers and Appointments Service	25	

Fawkner Park Community Health Centre towards the maintenance of the interdisciplinary studies programme for which the Department of Community Medicine is responsible in conjunction with the Lincoln Institute	1,000
Federation of Polish Organizations of Victoria towards running costs of Polish Language Course (Slavic Languages)	1,000
Felton Bequests' Committee, The for the project: Pathogenesis and cancer development in ulcerative colitis, Professor Sir Edward Hughes (Surgery, Alfred Hospital) \$8,000	
to assist with the purchase of a plate reader, Professor A. Linnane (Biochemistry) \$8,000	16,000
Fensham, Professor P. for use in Education	500
Flinders University of South Australia, The transfer of balance of consulting fund for Professor W. A. Sinclair (Economics and Politics)	4,846
Ford Foundation, The Ford Foundation Scholarship, South East Asian Studies, Mr P. Songprasert (History)	4,233
Forests Commission of Victoria for the projects: Control of wallaby damage in commercial forests, Associate Professor A. K. Lee (Zoology) \$3,000 Studies of nematodes and anthropods in forest litter, Ms R. Coy (Zoology) \$500	3,500
French Embassy to the Australian Journal of French Studies	731
Gantner, Mrs N. for the work of the Krongold Centre	500
Glaxo Australia Pty Ltd for the project: Clinical measurement of breathlessness, Dr R. A. Westerman (Physiology)	3,000
Gleeson, Dr J. to the L. J. Gleeson Memorial Prize Fund for Applied Mathematics	50
Great Barrier Reef Marine Park Authority to augment 1983 grant for research, Ms E. Gyuris (Zoology)	593
Griffiths, Dr M. to assist Dr P. Temple-Smith with his field trip to South America to study the reproduction in some of the marsupials of Chile (Anatomy)	2,000
Hallenstein, R. S., Charitable Fund for in vitro fertilization program (Obstetrics and Gynaecology)	3,000
Hecht Trust, H. and L. for equipment to be used in interferon research, Professor A. W. Linnane (Biochemistry)	10,000

Helme, Dr R. D. for use in Medicine, Prince Henry's Hospital	500
Herald-Sun T.V. Pty Ltd in support of the children and television project being conducted by Dr M. Nixon until 1985 (Education)	19,299
Hicks Foundation, The George for cancer research, Sir Edward Hughes (Surgery, Alfred Hospital)	25,000
Hiscock, Dr I. D. for advertising purposes, Brahms Festival, April 10 to May 7, 1983 (Robert Blackwood Hall)	180
Honeywell Pty Ltd for use in Careers and Appointments Service	500
Horn, Mrs J. for cystic fibrosis research (Paediatrics)	10
Hornsey, Mrs M. for research, Dr R. Marks (Medicine, Alfred Hospital)	50
Human Rights Commission consultancy: Survey of guardianship law, Professor P. Singer (Centre for Human Bioethics)	6,700
Hungerford Hill Vineyards Pty Ltd for the project: Growth of yeast contaminates at low temperatures, Dr G. Cross and Dr J. May (Microbiology)	5,400
ICI Australia Limited 1983 ICI Vacation Work Report Prize, awarded to Mr M. P. Oettinger, final year student (Chemical Engineering)	100
Imperial Chemical Industries Australia Operations Pty. Ltd for use by Professor W. R. Jackson (Chemistry)	750
Imperial Chemical Industries plc (United Kingdom) being three quarters of grant payment for the project: The genetics and biochemistry of the organism used in the I.C.I. single cell process, Mr P. Kearney (Genetics)	2,794
Infertility Medical Centre scholarship costs Mrs M. Thavarajah (Obstetrics and Gynaecology)	6,850
Ingram Trust, M. A. for the project: Aspects of the ecology of native mammals, Associate Professor A. K. Lee (Zoology)	1,800
Inner Wheel Club of Prahran for muscular dystrophy research (Biochemistry)	1,100
Japan World Exposition Commemorative Association towards the cost of constructing the Japanese Studies Centre	60,342
Jungalwalla, Mr J. B. for use in the Library	30
Kirsop, Associate Professor W. towards the cost of producing the Australian Journal of French Studies	1,000
Kovacs, Dr G. T. to be used for in vitro fertilization program (Obstetrics and Gynaecology)	960



Labtest Equipment Company (S. E. Asia) Pty Ltd for the project: Mineral power analysis, Associate Professor R. McPherson (Materials Engineering)		3,450
La Trobe University towards cost of Professor R. Hidaka's visit to Monash and La Trobe Universities (Japanese)	800	
annual subsidy for Australian Journal of French Studies (French)	100	900
Legal Aid Commission of Victoria granted to Monash/Oakleigh Legal Service for 1983 by the Commonwealth and State Governments (Law)		6,500
Leith Charitable Trust, Flora and Frank for the work of the Krongold Centre		1,000
Life Insurance Medical Research Fund of Australia and New Zealand, The postgraduate research scholarship for 1983, Dr L. Arnolda (Medicine, Prince Henry's Hospital) \$11,460, consumables \$300 grant-in-aid for one year for research on: Inflammatory mediation systems in vascular injury (first instalment of a two year award of \$34,000) Dr S. R. Holdsworth (Medicine, Prince Henry's Hospital) \$17,000 second instalment for one year, for further research on: Factors influencing the formation of extracellular products by smooth muscle cells in tissue culture, Dr B. W. Oakes (Anatomy) \$17,500 grant-in-aid for one year (being first instalment of a two year award of \$28,000) for the project: Adenosine receptors and adrenergic receptors in experimental cardiac hypertrophy, Professor C. I. Johnston and Dr E. A. Woodcock (Medicine, Prince Henry's Hospital) \$13,500	59,760	
to meet increases in 1982 LIMRF award salaries: Anatomy \$2,144 Medicine, Prince Henry's Hospital \$3,368 Medicine, Alfred Hospital \$1,535	7,047	66,807
Lolatgis, Dr N. for use in in vitro fertilization program (Obstetrics and Gynaecology)		600
Long, Mrs E. S. for the research work of Professor G. D. Thorburn (Physiology)		1,000
Marks, Dr R. for research (Medicine, Alfred Hospital)		12
Martin, Mr T. for use in Anatomy		50
McKinnon High School to Careers and Appointments Service		35
Medical Research Council of Canada 1982-83 research allowance MRCC Fellowship Dr A. D. Bocking \$415 allowance supervisor Professor G. D. Thorburn \$913 (Physiology)		1,328

Medicine Journal Pty Ltd, The		
for Dermatology research (Medicine, Alfred Hospital)		350
Menzies Foundation, The		
for the project: Students' perceptions of the concept of health, Dr M. N. Brumby (Education)		10,000
Merck Sharp and Dohme (Australia) Pty Ltd		
for use in Medicine, Alfred Hospital	2,832	
for the project: Hypertension and heart failure, Professor C. I. Johnston (Medicine, Prince Henry's Hospital)	29,000	31,832
Merrell, Wm S. Pty Ltd		
for in vitro fertilization research (Obstetrics and Gynaecology)		2,000
M.I.M. Holdings Limited		
to Careers and Appointments Service		100
Miot, Mr and Mrs G.		
to the work of the Krongold Centre		25
Monash Ex Committee Club		
for the purchase of duplicate reference books for students (Main Library)		200
Monash Medical Mothers' Auxiliary		
for the purchase of books for the Biomedical Library \$1,200		
for use in Community Medicine \$500		1,700
Monash University Parents' Group		
annual distribution of funds:		
to the University Library \$3,000		
to the Hargrave Library \$1,000		
secondhand first year text books (Chemistry) \$260		
Digital Phase Meter (Electrical Engineering) \$300		
microfiche reader (English) \$300		
towards Sony cassette recorder (Music) \$500		
coffee table, Robert Blackwood Hall \$100		
portable daylight projection screen, University Union \$40		5,500
Monier Limited		
for the project: Wind loading studies on roof tiles, Professor W. H. Melbourne (Mechanical Engineering)		10,000
Moore, Mrs J.		
for use in Medicine, Alfred Hospital		1,000
Moore, Mrs Vera		
second and final payment for Brahms Festival (Robert Blackwood Hall)	16,500	
for the purchase of a Korg Chromatic Tuner for harpsichord (Religious Centre)		134
for Vera Moore Curriculum Officer in Economic and Commercial Education, Mrs S. Pinchen (Education)	20,000	
travel grant for Mr N. Perry (Physics)	500	37,134
Mt Eliza High School		
to Careers and Appointments Service		20
Multiple Donations		
to embryo transfer fund (Obstetrics and Gynaecology)	6,900	

to the Arthur Brown Memorial Prize Fund (English)	70	
to Visiting Fellowships Scheme (Law)	2,000	8,970
Murdoch, Dame Elisabeth		
for Professor M. Balson's special study of children (Education)		
\$4,000		
to the Library Fund \$500		4,500
Muscular Dystrophy Association of Victoria		
in support of muscular dystrophy research, Dr L. Austin		
(Biochemistry)		8,627
Myer Foundation, The		
part payment of \$12,707 grant towards the cost of appointing a		
community liaison officer (Centre for Human Bioethics)		6,000
Nairn, Professor R. C. and Colleagues		
for use in Pathology and Immunology		125,000
National Heart Foundation of Australia		
1983 grant-in-aid: to investigate a platelet aggregating factor		
observed in the blood of patients who die suddenly, Professor B.		
G. Firkin (Medicine, Alfred Hospital)	15,000	
for the projects:		
Vasodepressor mechanism in hypertension, Professor C. I. Johnston		
(Medicine, Prince Henry's Hospital) \$22,499		
The relationship between electrical activity of vascular smooth		
muscle and blood flow regulation, Dr E. Zelcer (Physiology)		
\$36,597		
An investigation of the nature of vascular adrenoceptors, Associate		
Professor G. A. Bentley and Mr I. Copeland (Pharmacology)		
\$15,000		
Neurohormonal influences on peripheral resistance in congestive		
heart failure, Dr B. P. McGrath, Professor C. I. Johnston (Medicine,		
Prince Henry's Hospital) \$30,357		
Research Fellowship:		
Dr R. D. Arnott (Medicine, Prince Henry's Hospital) \$17,288		
Cardiovascular risk in migrants from Levkas (Greece) compared to		
non-migrants, Dr J. Powles, Dr D. Ktenas (Social and Preventive		
Medicine) \$10,000		
Research Projects (Medicine) \$7,192		153,933
Neurochemistry Symposium		
for muscular dystrophy research (Biochemistry)		250
Nilsen Sintered Products (Australia) Pty Ltd		
travel grant to permit attendance at the International Symposium		
Plastic Deformation of Ceramics, University of Pennsylvania, and		
6th International Symposium of Plasma Chemistry Chemistry,		
Montreal, Associate Professor R. McPherson (Materials		
Engineering)		2,000
Ottrey, Mr and Mrs D. T.		
for use in Krongold Centre		500
Pacemaker Set		
for use in Pathology and Immunology	79	



for the purchase of a Kodak slide projector (Pathology and Immunology)	500	
for the purchase of an Electrophoresis Gel Dryer (Pathology)	1,120	1,699
Paver, Dr K.		
for Dermatology research (Medicine, Alfred Hospital)		200
Peat Marwick, Mitchell and Company		
for use in Careers and Appointments Service		200
Petroleum Refineries (Australia) Pty Ltd		
to the work of Careers and Appointments Service		200
Pharmacy Guild of Australia, The		
second payment of research grant for the project: Pharmacy manpower in Australia, Dr John McArthur (Education)		4,000
Phillip Island, Shire of		
additional support for koala research, Associate Professor A. K. Lee (Zoology)	3,000	
to enable continuation of project: Control of wallaby damage in commercial forests, Associate Professor A. K. Lee (Zoology)		
\$3,000		
additional grant for the project: Studies of nematodes and anthropods in forest litter, Ms R. Coy (Zoology) \$500	3,500	6,500
Pierce Centre, John		
to cover costs of Handicapped Persons Welfare Program (Education)		300
Pitts, Mrs G.		
for in vitro fertilization research, Professor C. Wood (Obstetrics and Gynaecology)		1,000
Potter Foundation, The Ian		
travel grants:		
Dr A. Ord (Earth Sciences) \$800		
Dr R. A. Skurry (Microbiology) \$1,000		
Dr T. Sridhar (Chemical Engineering) \$500		
Associate Professor B. W. Cherry (Materials Engineering) \$1,000		
Mr P. Higgins (Mathematics) \$1,000		
Mr V. J. Wall (Earth Sciences) \$1,000		
Dr D. Miller (Anthropology and Sociology) \$500		
Ms H. McCormack (Student Counselling Service) \$1,000		
Mr J. C. Lattanzio (Mathematics) \$1,000		
Dr U. Proske (Physiology) \$600		
Associate Professor W. Veit (German) \$500		
Dr D. J. Karoly (Mathematics) \$500		
Mr P. J. Cassidy (Chemistry) \$1,000		
Professor J. Garagnon (French) \$500		
Mr B. J. O'Loughlin (Psychology) \$500		
Professor I. J. Polmear (Materials Engineering) \$1,000		
Dr K. S. Murray (Chemistry) \$600		
Dr W. Comper (Biochemistry) \$500		
Dr R. K. Smith (Mathematics) \$500		

Dr C. S. Berger (Electrical Engineering) \$500		
Dr G. Troup (Physics) \$500	15,000	
the George Rude Seminar (History)	2,000	
to cover cost of overseas research experience, Dr D. Copolov (Psychological Medicine)	2,000	
for the project: The age structure of the Antarctic krill, Dr G. Ettershank (Zoology)	2,000	
to assist with the publication of the book, <i>Ferns and Fern Allies of Victoria</i> , Mrs B. Duncan and Mrs G. Isaac (Botany)	1,000	
towards cost of science exhibit to encourage school children to continue studies in science subjects at secondary level, Professor T. White (Education)	2,000	24,000
Potter, Professor O. E. for use in Chemical Engineering		625
Prince Henry's Hospital — Medical Research Centre joint program payments 1982/83 NH & MRC project: Reproductive endocrinology, Professor H. G. Burger, Professor D. M. de Kretser, Dr J. K. Findlay (Anatomy)	253,522	
scholarships:		
Dr A. Y. Wu \$15,178		
Miss M. Cheng \$6,850		
Mr S. Setradi \$6,850	28,878	282,400
Prince Henry's Hospital, Full time staff members (Medicine) — Dr Hansky, Dr Holdsworth, Dr Helme, Dr Johnston and Dr McGrath:		
to the Medicine Research Fund, Prince Henry's Hospital		4,217
Psychological Medicine, Staff, Department of for use in Psychological Medicine		4,900
Ramaciotti Foundations, Clive and Vera for the project: A study of birth — radiotelemetry of biological data from the foetus 'in utero', Dr J. E. Maloney (Research Centre for Early Human Development)		16,895
Reckitt and Colman — Pharmaceutical Division for use in Pharmacology	1,000	
to be used for travelling expenses at the Chairman's discretion (Pharmacology)	500	1,500
Renou, Dr Peter M. for in vitro fertilization research (Obstetrics and Gynaecology)		60
Research Centre for Early Human Development, Staff of for use in Centre for Early Human Development	227	
for the purchase of small items of equipment required by research teams, (Research Centre for Early Human Development)	826	1,053
Research Fund for Early Human Development for the purchase of Neotrace 800ZF Physiological Recorder (Research Centre for Early Human Development)	39,045	
for use in Medicine, Alfred Hospital	2,000	
to be applied towards air fares, registrations and per diem		

subsistence relating to international and interstate scientific meetings, Dr G. Bowes (Medicine, Alfred Hospital)	2,000	
donation to Research Centre for Early Human Development	10,000	53,045
Reserve Bank of Australia		
to the work of Careers and Appointments' Service	150	
supplementary grant to cover national wage increase project: The underground economy, Professor M. G. Porter (Centre of Policy Studies)	1,509	
for the project: Use of cell markers to investigate chicken immune system development and leukaemias and lymphomas, being conducted by Dr H. A. Ward (Pathology and Immunology)	3,420	5,079
Rheumatism and Arthritis Association of Victoria, The		
covering projects:		
Tissue degradation by proteolytic enzymes in experimental animals, Professor D. A. Lowther \$4,500		
The turnover of proteoglycans in adult articular cartilage in culture, Dr C. J. Handley (Biochemistry) \$4,500		9,000
Richardson, Mr R.		
to further the work of Dr P. Gorman (Education)		47
Road Traffic Authority		
evaluation of the drink driving warning system, Clinical Associate Professor F. McDermott (Surgery, Alfred Hospital)		4,808
Roder, Miss L. A.		
to University's Students' Loan Fund		48
Rose, Dr and Mrs N. R.		
towards the work of the Krongold Centre		250
Rotary Club of Clayton		
towards the purchase of equipment for muscular dystrophy research, Dr L. Austin (Biochemistry)	1,100	
for the purchase of equipment for muscular dystrophy research: standard power supply, \$2,500		
polyacrylamide gel dryer, \$1,100, Dr L. Austin (Biochemistry)	3,600	4,700
Royal Australian College of General Practitioners, The (Victoria Faculty)		
travel subsidies for student attachment to country practices (Community Medicine)	2,400	
to the Library \$25		
for continuation of the RACGP-MUCAPS project (Monash University computer assisted practice systems) for a further year from 1st September, Professor N. E. Carson (Community Medicine) \$4,890	4,915	7,315
Royal Automobile Club of Victoria (RACV) Limited		
donation towards Master of Engineering Science course (Civil Engineering)		1,250
Royal Melbourne Hospital, The		
for use in Psychological Medicine		50
Royal Southern Memorial Hospital, The		
for biochemical research, Professor A. W. Linnane (Biochemistry)		4,800



Ryan, Dr G. A.	
for use in Social and Preventive Medicine	500
Sacred Heart Girls' College	
for use in Zoology	50
St John Ambulance Association	
part payment grant for first aid research: Dr R. L. Anker, Professor D. De Kretser (Anatomy)	7,000
Scott, Ms M. — M.S.Z. Harvard University	
in appreciation of assistance and co-operation with her work (Physiology)	100
Shepherd Foundation	
second half-yearly contribution for MUCAPS project (Community Medicine)	2,500
Skin and Cancer Foundation	
to Dermatology Research Fund (Medicine, Alfred Hospital)	3,352
Skin and Psoriasis Foundation	
to the Dermatology Research Fund, Dr R. Marks (Medicine, Alfred Hospital)	2,927
Small Business Development Corporation	
to assist with direct costs of promotion for 'Update' business training program for 1983 Dr J. A. McDonnell (Centre for Continuing Education)	9,000
Smith, Mr. R.	
for Dr G. B. Deacon's research (Chemistry)	100
Soham Pty Ltd	
for research in diabetes mellitus, Professor J. Bornstein (Biochemistry)	8,800
Springvale Legal Service	
towards the salary of Miss M. Tehan, who is assisting with the Clinical Legal Education Program (Law)	5,368
Squibb, E. R. and Sons Pty Ltd	
for year 4 of study of captopril in essential hypertension, Professor C. I. Johnston (Medicine, Prince Henry's Hospital)	6,900
State Employed Psychiatrists' Association	
prizes awarded 1980-1982 (Psychological Medicine)	300
Stocks, Mr and Mrs P. G.	
for use in Krongold Centre	250
Stuart Simson Educational Trust	
to be applied to the Stuart Simson Scholarship	1,200
Sunshine Foundation	
towards the purchase of a 'Peach' microcomputer for the research project: The age structure of the Antarctic krill, Dr G. Ettershank (Zoology)	2,000
Tate, Mr I.	
for use in Medicine, Alfred Hospital	300
Tiller, Dr J. W. G.	
for use in Psychological Medicine	9,060

Toyota Motor Corporation		
to assist with the building costs of the Japanese Studies Centre		60,000
U.S. Geological Survey		
for the project: Recrystallized grain size in ductile fault (Mylonite) zones as an indicator of palaeostress magnitudes during faulting, Dr M. A. Etheridge, Dr B. E. Hobbs (Earth Sciences)		7,927
Uniting Church in Australia, The		
for the project: Study of the ownership patterns of nursing homes, Dr L. J. Opit (Social and Preventive Medicine)		2,000
University of Alberta, The		
transferred from research trust account, for continuation of research during her stay at Monash, Professor H. Kass (Education)		1,438
University of British Columbia, The		
being transfer of funds from the Natural Science and Engineering Research Council grant awarded to Dr P. Hochachka for his research (Zoology)		2,947
University of Melbourne		
subsidy for the Australian Journal of French Studies	400	
balance of 1982 ARGS transferred grant to Dr G. R. Gates and Dr L. M. Aitken, for the project: Auditory pathways and function in Australian mammals (Physiology)	665	1,065
University of New England, The		
for Topic 4 (internal migration) of the project: Rural labour market study, Mr J. McKay (Geography)		1,600
University of Tasmania		
share of maintenance allowance, joint NH & MRC project: Biological behaviour of mercury compounds, Dr G. B. Deacon, Dr A. J. Canty (Chemistry)		650
Utah Foundation		
1983 research grant for the project: Immunological factors in in vitro fertilization, Dr M. A. Barnett (Pathology and Immunology)	16,000	
for the project: Cardiac energy production, Dr C. L. Gibbs (Physiology)	17,623	33,623
Victoria Law Foundation		
to assist in the purchasing of legal library materials (Law Library)		21,000
Victorian Academy for General Practice Limited, The		
for Medical Manpower Survey, Professor N. E. Carson, Dr I. L. Rowe (Community Medicine)		7,300
Victorian Adult Literacy Council		
for use in Higher Education Advisory and Research Unit		25
Victorian Institute of Marine Sciences		
to cover costs associated with the project: Biological production studies in Bass Strait Dr R. Congdon (Botany)		3,650
Warman International Limited		
1983 Warman International Postgraduate Scholarship, Dr G. B. Deacon (Chemistry)		7,300
Water Research Foundation of Australia		
for the projects: The production of corrosive materials by bacterial		

slimes in contact with sulphate containing waste water, Dr G. A. Holder (Chemical Engineering)	10,700	
Improved flood routing for flood forecasting and design, Professor E. M. Laurenson, Dr R. G. Mein (Civil Engineering)	5,000	15,700
Watts, Mr and Mrs K. for muscular dystrophy research (Biochemistry)		5,000
Wellcome Foundation Limited, The for the project: Growth hormone fragments showing potential antidiabetic properties, Professor J. Bornstein (Biochemistry)		10,000
Wenner-Gren Foundation for Anthropological Research to aid research on faunal evidence as indication of first culture contact by Polynesians to Norfolk Island, South Pacific, Mr C. W. Meredith, Ph.D. student, under the supervision of Dr J. W. Warren (Zoology)		752
Were, J. B. and Son for use in Krongold Centre		1,000
Westall Primary School for use in Monash Teachers' Centre (Education)		300
Western Mining Corporation Limited for the project: Metal transport and deposition in sediment-hosted ore deposits, being conducted by Dr M. S. Bloom (Earth Sciences) in association with Dr D. W. Haynes, Western Mining Corporation Limited		3,000
Westmore, Mrs A. for in vitro fertilization research (Obstetrics and Gynaecology)		344
White Bequest, Joe to the Main Library		1,500
Wiberg, Mrs E. for research into colorectal cancer, Professor Sir Edward Hughes (Surgery, Alfred Hospital)		500
Wilson, Trustees of the late Edward for Edward Wilson Lectureship in Dermatology (Medicine, Alfred Hospital)		5,000
Windermere Hospital Foundation Limited for Centre for Early Human Development, Queen Victoria Medical Centre		7,500
Wisewoulds — Solicitors to the Visiting Fellowship Scheme (Law)		600
Wood Professor E. C. for in vitro fertilization research (Obstetrics and Gynaecology)		360
World Health Organization to cover cost of preparing teaching material for workshop on Audiology, Professor D. De Kretser (Anatomy)	511	
contribution for W.H.O. trainee in reproductive biology, Dr K. Arsyd, Professor D. de Kretser (Anatomy)	2,021	
for the project: Core support for infertility studies, Professor D. M. de Kretser (Anatomy)	30,176	



for consumables, WHO research trainee Dr Zhang Guei-Yuan, Republic of China, Professor D. de Kretser (Anatomy)	1,141	33,849
World Wildlife Fund Australia for koala research, Associate Professor A. K. Lee (Zoology)		9,112
Yooralla Society of Victoria for muscular dystrophy research, \$4,500, travel grant \$500, Dr L. Austin (Biochemistry)		5,000
<b>Commonwealth Government</b>		
Aboriginal Affairs, Department of for operating costs of Aboriginal Research Centre	37,400	
supplementary to 1982/83 award for the running costs of the Aboriginal Research Centre	2,470	
for the project: Social indicators of the Aboriginal community in Melbourne, Ms E. Fesl (Aboriginal Research Centre)	10,000	49,870
Australian Water Resources Council (Department of National Development and Energy) for the project: Ecology of the yabby Cherax destructor and assessment of its potential as a heavy metal indicator, Dr P. S. Lake (Zoology)		19,326
Commonwealth Schools Commission for the project: Summary of appointment procedures of principals in Australian schools, Dr J. D. Chapman (Education)	12,750	
for the project: Descriptive profile of principals in Australian schools, Dr J. D. Chapman (Education)	14,500	27,250
Commonwealth Serum Laboratories Commission part payment of grant for interferon research, Professor A. W. Linnane (Biochemistry)	131,000	
balance of 1982/83 research grant for interferon project, Professor A. W. Linnane (Biochemistry)	71,000	202,000
Defence, Department of for the project: Human factors requirements in the procurement of R.A.N. combat data systems, Dr T. J. Triggs (Psychology)	18,550	
for the project: Adhesive bonding, Associate Professor B. W. Cherry (Materials Engineering) \$24,388		
for the project: Synthesis and characterisation of chelate compounds, Professor B. O. West (Chemistry) \$30,000		
to the work of Careers and Appointments Service, \$100	54,488	737,038
Foreign Affairs, Department of Australian Development Assistance Bureau: to assist with English language, Mr Zhang Jefu (Dr Chang Je-Fu) from Peoples Republic of China (Microbiology)	5,000	
AUIDP grant for V. Prasertpunt and S. Dilokwanich, Dr E. H. Ealey (Graduate School of Environmental Science)	1,500	
for the project: Development of semi-language computer translation encoder systems, being conducted by Dr P. Rich (Earth Sciences)	5,000	
travel assistance for Dr C. J. Huang to attend and present papers at		

the Australian College of Paediatrics and Australian Association of Paediatric Surgeons Meetings, Surfer's Paradise, May, 1983 (Paediatrics)	722	12,222
Health, Department of		
for the project: Repetition injuries for keyboard workers, Dr G. A. Ryan (Social and Preventive Medicine)		11,375
Marine Sciences and Technologies Grants Scheme (Department of Science and Technology)		
for research projects:		
Wave prediction in the southern ocean and Bass Strait, Associate Professor J. Hinwood (Mechanical Engineering) \$10,450		
Study of the kelp <i>durvillea potatorum</i> in Bass Strait, Dr M. N. Clayton, Dr N. D. Hallam, Dr G. A. M. Scott (Botany) \$3,907		
Swell dissipation in Bass Strait, Dr D. R. Blackman, Associate Professor J. B. Hinwood, Dr G. T. Leonart (Mechanical Engineering) \$6,380		20,737
National Energy Research Development and Demonstration Program (Department of National Development and Energy)		
for the projects:		
The use of rotary regenerative heat exchangers for conservation of energy in buildings, Mr C. W. Ambrose (Mechanical Engineering)	24,668	
Modelling of coal liquifaction reactions, Associate Professor J. B. Agnew (Chemical Engineering)	20,863	
Flow improvers for waxy crudes and middle distillates, Dr G. A. Holder (Chemical Engineering)	16,778	
Predicting outcomes of energy conservation policies applicable to households, Dr E. H. M. Ealey, Dr J. Crossley (Graduate School of Environmental Science)	42,308	
The direct hydrogenation of brown coal in a continuous flow catalytic conversion system, Associate Professor J. B. Agnew, Professor W. R. Jackson (Chemistry)	60,813	
Hydrogen production from coal. New catalysts for the water gas shift reaction, Professor W. R. Jackson, Dr F. P. Larkins (Chemistry)	21,327	
Drying, energy conservation, Professor O. E. Potter, Dr W. E. Albrich (Chemical Engineering)	7,800	
Solar measurement studies, Associate Professor W. J. Bonwick (Electrical Engineering)	7,157	
Design of a low energy indoor heated swimming pool, Professor T. F. Smith, Dr J. L. A. Francey (Physics)	28,263	
Design of thermal outfall diffusers, Associate Professor J. Hinwood (Mechanical Engineering)	2,567	
Australian policies in the liquid fuels and transportation sectors, Professor M. G. Porter (Centre of Policy Studies)	57,022	
The regeneration of catalysts for use in continuous flow coal hydrogenation, Professor W. R. Jackson and Dr F. P. Larkins (Chemistry)	1,741	
Demonstration of a rotary regenerative heat exchanger in an industrial drying process, Mr C. W. Ambrose (Mechanical Engineering)	17,900	309,207

National Health and Medical Research Council for the project: Foetal growth, functional development and parturition, Professor G. D. Thorburn (Physiology)		321,090
Primary Industry, Department of Australian Chicken Meat Research Committee: for the project: Associations between the chicken major histocompatibility complex and disease resistance, Dr H. A. Ward (Pathology and Immunology)	3,500	
1983/84 projects: Control of ovarian function in cyclic, pregnant and anoestrous sheep, Mr S. B. Hooper \$3,925		
Studies of foetal skin development and foetal growth \$23,052 supervisor's project \$800	27,777	
for the project: Studies on the physiological mechanisms by which EGF alters the normal production of the fibre within the wool follicle, Professor G. D. Thorburn (Physiology)	12,198	43,475
Schools Commission, Commonwealth for the project: Descriptive profile of principals in Australian schools, Dr J. D. Chapman (Education)		14,500
Science and Technology, Department of for the project: National centre for corrosion prevention and control, Associate Professor B. W. Cherry (Materials Engineering)	19,500	
Queen Elizabeth II Fellowship Scheme Fellowship, \$30,628; research support grant Dr S. E. Cox, (Earth Sciences) \$3,000		
Senior Queen Elizabeth II Fellowship, Professor P. K. Hochachka (Zoology) \$31,494	65,122	84,622
Social Security, Department of salary subsidy (Krongold Centre)	12,450	
to subsidise cost of converting existing female toilet to joint disabled use at Krongold Centre	2,496	14,946
Telecom Australia for the project: A study into the feasibility of fault tolerant microcomputer systems for telecommunications applications, Dr K. E. Forward and Dr T. S. Dillon (Electrical Engineering)	23,050	
for the project: Research and development for the determination of early indicators of electrical deterioration of polyethylene spacers in coaxial cable, Dr R. J. Fleming, (Physics)	5,000	28,050
Tertiary Education Commission for Research Centre of Excellence (Centre of Policy Studies)	450,000	
for the projects: The cost effectiveness of alternative library storage programs, Professor P. J. Whyte (Graduate School of Librarianship)	660	
Evaluation of basic nurse education in Victoria, Dr J. McArthur (Education)	42,770	493,430
Transport, Department of final payment of research grant for the project: Driver response times on rural roads, Dr T. J. Triggs (Psychology)		2,850



### State Government

Conservation, Ministry for		
for book: <i>Biology of Dingoes in Victoria</i>	\$25	
part payment of grant for kangaroo research, Dr G. Sanson (Zoology)	2,500	
Soil Conservation Authority: second payment 1983 grant for the project: Catchment hydrology research, Dr R. G. Mein, Professor E. M. Laurenson (Civil Engineering)	17,018	19,543
Crown Lands and Survey, Department of		
Port Phillip Authority: for the project:		
Management of recreational conflicts in Port Phillip Bay, Dr D. Mercer and Dr J. Peterson (Geography)		3,730
Education Department, Victoria		
additional grant for Bandjatang Language Program (Aboriginal Research Centre)		3,500
Planning and Environment, Ministry for		
for the project: Status of Mallee Fowl in Mallee shrubland with particular reference to Wyperfeld National Park, Professor J. M. Cullen (Zoology)		4,000
Premier and Cabinet, Department of the		
balance of costs associated with the selection training and employment of Aboriginal interviewers for the project: Social indicators of the Aboriginal community in Melbourne, Ms E. Fesl (Aboriginal Research Centre)		5,000
Victorian Brown Coal Council		
for the project: Catalytic hydroliquefaction of Victorian brown coal, Professor W. R. Jackson and Professor F. P. Larkins (Chemistry)		
\$58,901		
for the project: Mossbauer effect study of iron and tin compounds associated with brown coal, Dr J. D. Cashion (Physics)	\$15,966	74,867

### Commonwealth Government Research Grants

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

Investigator	Project Title	Grant \$
<b>ARTS</b>		
Anthropology & Sociology		
Dr D. Ryan	Rural-urban interaction in Papua New Guinea	6,280
English		
Ms B. Niall	Australian children's literature, 1841-1980	12,092

Investigator	Project Title	Grant \$
Geography		
Dr A. P. Kershaw	The vegetation history of north-east Queensland	20,420
Dr C. Maher	Alterations of inner city environments	10,710
German		
Associate Professor M. Clyne	Cross-cultural comparison of academic discourse	8,000
History		
Dr M. Aveling,	Australia in 1838	17,100
Dr A. Atkinson		
Professor G. Davison,	Australia in 1888	37,759
Professor J. W. McCarty		
Dr J. D. Rickard	Australian leisure activities in 1938	3,000
Librarianship		
Dr B. McMullin	Australia and New Zealand early imprints project (Victoria)	21,682
Linguistics		
Dr G. Mallinson	The Arumanian language of Northern Greece	3,380
Associate Professor J. Platt	A cross-cultural investigation of some basic communicative strategies	10,346
Music		
Dr M. J. Kartomi	Sumatran music cultures	16,173
Philosophy		
Professor P. Singer	Life or death choices for defective newborns	17,851
ECONOMICS & POLITICS		
Econometrics & Operations Research		
Professor N. Hastings	Production, scheduling, planning in medium scale manufacturing	9,800
Dr M. King	Specification error in econometric models	8,739
Dr K. McLaren,	Financial modelling in continuous time	7,200
Dr M. Upcher		
Economics		
Professor M. Brunt,	Economic analysis of law with special initial reference to class actions	10,696
Dr A. H. M. Fels		
Dr Y-K Ng	Synthesis of micro and macro economics	7,450

Investigator	Project Title	Grant \$
Politics Dr A. Davidson	The creation of consensus in the Modern State	4,232
ENGINEERING		
Chemical Engineering Associate Professor F. Lawson	Leaching mechanism of metal oxides	17,500
Associate Professor F. Lawson	Removal of trace amounts of copper from liquid metals using elemental sulphur	13,300
Associate Professor F. Lawson, Dr G. Troup	Application of laser speckle photography to mineral processing investigations	11,890
Professor O. Potter	Fluidization for reaction and other applications	37,028
Professor O. Potter, Dr T. Sridhar	Liquid-phase organic oxidations — chemical engineering aspects	20,000
Civil Engineering Dr R. Melchers Dr G. Rozvany	Human error in structural reliability Optimization of structural layouts by analytical methods	9,000 20,292
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	6,000
Materials Engineering Associate Professor B. W. Cherry Dr G. H. Edward	The structural basis of polymeric friction Deformation mechanism mapping of polymers	11,500 22,182
Associate Professor R. McPherson Dr B. A. Parker	Metastable phases in ceramic systems	9,600
Dr P. L. Rossiter	The effect of micro-structure on the strain rate sensitivity of alloys Effects of co-existing atomic and magnetic clustering on electrical resistivity	20,419 7,600
Mechanical Engineering Dr G. Lleonart,	Wave energy transfer mechanisms	16,275



Investigator	Project Title	Grant \$
Dr D. R. Blackman, Associate Professor J. B. Hinwood Professor W. Melbourne	Aerodynamic instabilities, loading and response of bluff bodies in a turbulent flow	24,579
Dr T. T. Nguyen, Associate Professor J. B. Hinwood	Kinematic properties of breaking waves	7,155
LAW		
Mr A. Farran, Professor D. E. Allan, Professor R. Baxt Mr P. Hanks, Dr H. P. Lee	Legal problems concerning Australia and the GATT National security and civil liberties in Australia	11,750 18,514
MEDICINE		
Anatomy Dr M. B. Renfree, Professor R. V. Short	Pregnancy and parturition in the marsupial <i>Macropus eugenii</i>	23,216
Biochemistry Dr L. Austin, Dr D. Bates Professor A. Linnane, Associate Professor H. B. Lukins	The role of the cell body in the renewal of axonal components Biogenesis of mitochondria	8,700 33,000
Professor D. Lowther, Dr R. I. Brinkworth Dr S. Marzuki, Professor A. Linnane Dr P. Nagley, Professor A. Linnane Associate Professor B. Preston Dr H. Robinson	Neutral proteinases and inhibitors in chondrocytes and PMN leucocytes Structure and function of mitochondrial membranes Informational macro-molecules in nucleocytoplasmic interactions Macromolecular transport through porous systems Structural studies on connective tissues: factors involved in the maintenance of cartilage	3,000 45,167 30,853 23,000 10,500
Microbiology Dr R. Skurray	Molecular and genetic analysis of the conjugative Plasmid F	13,000
		93

Investigator	Project Title	Grant \$
Pathology & Immunology Dr H. Ward	Differentiation of chicken lymphocytes and reticular epithelial cells studied by monoclonal antibodies to cell membrane antigens	15,000
Pharmacology Professor A. Boura, Dr L. J. Rogers	Learning retardation produced by the action of antibiotics and amino acid neurotransmitters on the developing brain	12,140
Physiology Dr L. Aitkin	Brain mechanisms and binaural hearing	15,710
Dr I. McDonald	Endocrine functions in Australian marsupials	24,560
Dr U. Proske	Mammalian muscle receptors: development reflex responses and central actions	16,000
Dr M. Weiss	Biogenesis of adrenal steroids in possum ( <i>Trichosurus vulpecula</i> ) with specific reference to the 'special' zone of the female	11,600
Dr R. Westerman	Developmental and pathological interactions between nerve and muscle	14,000
SCIENCE		
Botany Dr M. N. Clayton	Studies on the reproductive biology of brown algae	13,848
Dr N. Hallam	Fine structure of plants adapted to desiccation	17,800
Chemistry Dr D. St.C. Black	New ligand systems containing indole rings	23,814
Professor R. D. Brown, Dr. B. A. W. Collier	Theoretical galactochemistry	12,800
Professor R. D. Brown, Dr P. D. Godfrey, Dr D. C. McGilvery	Molecules in space — Phase 2	70,442
Dr R. F. C. Brown, Dr F. W. Eastwood	High temperature pyrolysis of organic compounds: Generation of cumulenones	11,340

Investigator	Project Title	Grant \$
Dr D. Collins	Studies of enolic ortho esters	19,722
Dr G. Deacon	Lanthanoid and actinoid chemistry	13,419
Dr B. Gatehouse	Crystal chemistry of the solid state	28,519
Dr P. D. Godfrey, Dr S. R. Wilson	Molecular structures in electronically excited states	2,150
Professor W. R. Jackson	Syntheses of biologically important molecules involving metal catalysis	9,000
Dr F. Larkins	Photoelectron studies of adsorbates on catalyst surfaces	2,000
Dr F. Larkins	Auger and photoelectron spectra of atoms and molecules	27,090
Dr K. Murray	Magnetochemistry and oxidative reactivity of transition metal complexes	12,371
Professor B. West	Sulfur and nitrogen coordination to metals. Influence on metal spin states, reactivity and oxygen atom transfer	21,024
Earth Sciences		
Dr M. Bloom	Experimental study of mineral-solution equilibria: molybdenum complexing in hydro-thermal solutions	10,758
Dr R. A. Cas	The stratigraphy, sedimentology, palaeogeography and tectonic significance of the Ordovician rock sequence in Victorian segment of the Lachlan Fold Belt	14,290
Professor B. Hobbs	The use of high pressures to determine the rate controlling process in olivine plasticity	12,890
Professor B. Hobbs, Dr M. A. Etheridge Dr I. Nicholls	The defect chemistry of minerals and its influence on deformation Geochemistry and petrology of Silurian-Devonian volcanic rocks in the south-eastern Lachlan mobile belt	40,089
Dr P. V. Rich, Dr M. Rowley, Dr T. H. Rich	Palaeocollagen and the phylogeny of the tetrapods	25,578
Mr V. J. Wall	Biotite phase equilibria and thermodynamics	1,330
Genetics		
Professor B. Holloway, Dr A. F. Morgan,	Genetic analysis of pseudomonas and its application in the genetic	29,615



Investigator	Project Title	Grant \$
Associate Professor V. Krishnapillai	exploration of selected gram negative bacteria	49,257
Associate Professor V. Krishnapillai	Molecular genetics of transfer of <i>pseudomonas aeruginosa</i> R plasmids	10,600
Dr S. McKechnie, Dr K. Lavery	Genetic variation in alcohol tolerance and alcohol dehydrogenase in a winery population of <i>Drosophila Melanogaster</i>	17,250
Dr D. Smyth	DNA organization in chromosomes of <i>Lilium</i>	8,900
Mathematics Dr C. Ash	Recursive model theory	5,000
Professor J. Crossley	Recursive content of algebra and analysis	9,500
Dr J. G. Kupka	Factorization of operators from Banach spaces into spaces of measurable functions	5,000
Dr J. Monaghan	Numerical simulation of star formation in the presence of rotation and magnetic fields	4,200
Professor B. Morton, Dr R. K. Smith	Dynamics of tropical cyclones	10,000
Physics Dr J. Cashion	A study of the structure and magnetic properties of solids using the Mossbauer effect	24,609
Dr R. Fleming	Thermally stimulated conductivity/ luminescence studies of charge carrier trapping and transport in organic polymers	1,000
Dr T. Hicks, Dr J. R. Davis	Polarisation analysis of diffuse neutron scattering	28,725
Dr J. Pilbrow	Electron spin resonance of transition ions in biological and model systems	12,000
Associate Professor J. Smith, Dr. T. J. Hicks	Magnetism in atomically random systems	5,412
Professor T. F. Smith, Dr J. D. Cashion, Dr T. R. Finlayson, Dr F. Ninio	Vibrational modes and lattice stability in solids	29,306
Dr R. Tobin	Room temperature metal vapour lasers	17,251
Psychology Dr A. Bowling	Spatio-temporal interactions in human vision	6,635

Investigator	Project Title	Grant \$
Dr D. C. Bradley, Dr R. J. Wales	Language processes in listening and reading	16,000
Dr J. Bradshaw, Mr N. C. Nettleton	Hemisphere and intermodality interpretation and conflict in decision making and learning	16,000
Dr S. Crossley	Behaviour genetic studies of naturally occurring populations of <i>Drosophila</i>	16,750
Professor R. Day	The components of geometrical visual illusions	17,000
Dr K. Forster	Visual processing of sentences	19,800
Dr D. Irvine	Organization of acoustic input to association cortex	6,700
Dr D. Irvine	Auditory spatial coding in deep layers of cat superior colliculus	7,200
Dr D. M. Thomson	Recall and recognition processes	17,000
Dr W. Webster	Neural systems in the primate involved in auditory and visual spatial localization: a 2-(14C)-deoxyglucose study	17,000

#### 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:

Anatomy		
Dr F. H. Guldner	Plasticity of synapses in the central nervous system	20,287
Biochemistry		
Professor J. Bornstein	Post-pituitary modification of growth hormone at the target organ	36,804
Dr M. K. Gould, Dr J. H. Aylward	Regulation of the insulin receptor by a phosho/dephosho mechanism	24,498
Dr P. L. Jeffrey, Dr J. A. Rostas	Specific cell surface markers for neurons and muscle	38,295
Professor D. A. Lowther	Biochemistry of the inflammatory response in arthritis	26,948
Professor D. A. Lowther, Dr C. J. Handley	Recovery of cartilage biosynthetic activity following proteolysis	30,849
Professor D. A. Lowther, Dr R. C. Oppenheim	Effect of particle bound anti-inflammatory agents on experimental arthritis	22,944
Dr F. M. Ng	Insulin-potentiating action of human growth hormone fragments	24,827

Investigator	Project Title	Grant \$
Genetics Professor R. W. Holloway, Dr A. F. Morgan, Dr L. V. Asche	A molecular genetic approach to the study of pseudomonas infections	20,833
Medicine Dr J. M. Butler, Dr R. Marks Dr J. Hansky, Dr J. R. Lambert Dr S. Holdsworth	Control of histamine release from mast cells and basophils in atopic dermatitis Control of pancreatic exocrine secretion in the dog Detection and regulation of anti-glomerular basement membrane antibodies	21,825 19,956 23,267
Dr S. Holdsworth	Experimental glomerulonephritis in the isolated perfused kidney	22,596
Dr M. A. Howard, Professor B. G. Firkin Dr B. Jackson, Professor C. I. Johnston Professor C. I. Johnston	Role of factor VIII and Von Willebrand antigen II in haemostasis Angiotensin converting enzyme: regulation in health and disease Vasopressin in blood pressure haemostasis and hypertension	59,145 55,895 36,585
Professor C. I. Johnston, Dr P. L. Nolan Dr P. G. Matthews	Vascular receptors and reactivity The kallikrein kinin system in cardio-vascular regulation	22,596 29,741 + 2,600.50
Dr S. L. Pfueller, Professor B. G. Firkin	Platelet membrane reaction with specific antibodies and immune complexes	48,679
Dr S. L. Pfueller, Dr I. Sloan	Mechanism of drug induced autoimmune thrombocytopenic purpura	42,381
Associate Professor M. Van der Weyden, Dr H. Cole-Goodwin Associate Professor M. Van der Weyden, Dr G. J. Young	Development of selective biochemical-therapy in haematological malignancies Role of adenosine deaminase in immune function	33,383 47,756
Microbiology Professor S. Faine	Pathogenesis and immunity in leptospirosis	82,329
Dr R. A. Skurray, Dr J. W. May Dr E. G. Westaway	Analysis of plasmids from multiple antibiotic-resistant staphylococci Nucleotide sequence of the flavi-virus genome	20,138 46,798



Investigator	Project Title	Grant \$
Dr E. G. Westaway, Dr P. J. Wright	Replication and immunochemistry of togaviruses	48,950
Dr E. G. Westaway, Dr P. J. Wright	Translation of arbovirus proteins	38,187
Obstetrics and Gynaecology		
Dr A. O. Trounson, Associate Professor J. F. Leeton	A study of male infertility by in-vitro fertilization	24,270
Dr A. O. Trounson, Ms L. H. Mohr	Cellular aspects of cryopreservation of mammalian embryos	26,036
Paediatrics		
Dr T. M. Adamson, Dr V. Y. Yu	The maturation of cardio respiratory patterns in the human infant	29,349
Dr A. A. Orgill, Dr J. E. Maloney	Very high frequency ventilation in the fetal lamb	28,805
Pathology and Immunology		
Associate Professor H. K. Muller	Langerhans cells solar damage and skin cancer	16,859
Dr J. S. Pedersen, Associate Professor B. H. Toh	Quantification of autoantibodies to the cytoskeleton by ELISA	10,827
Pharmacology		
Professor A. L. Boura	Studies on the closure of the human umbilical vein	28,502
Dr J. N. O'Neil	The effect of altered thyroid state on adreno — and cholinceptors	19,559
Dr J. N. O'Neil	Steroid modulation of adrenoceptors in uterine smooth muscle	19,559
Dr J. N. O'Neil, Dr G. M. Handberg	The effects of altered thyroid state on sympathetic neurones	26,597
Physics		
Dr P. P. Phakey, Professor W. A. Rachinger	Ultrastructure of ion-beam thinned carious enamel	23,812
Physiology		
Dr C. L. Gibbs	Energy studies in daunomycin induced cardiac myopathy	22,932
Dr C. L. Gibbs, Dr I. R. Wendt	Comparative studies of basal and active smooth muscle metabolism	45,477
Professor M. E. Holman	Innervation of smooth muscle	52,644
Professor M. E. Holman, Dr T. O. Neild	Electrophysiology of arterioles in living animals	54,610

Investigator	Project Title	Grant \$
Professor M. E. Holman, Professor G. D. Thorburn Dr J. A. Rawson	Control of myometrium during pregnancy and parturition Organization and functions of the cerebro-cerebellar projection in the primate	31,705 25,793
Dr G. S. Taylor, Dr R. A. Bywater Professor G. D. Thorburn	An electrophysiological investigation of colonic motility Fetal growth, functional development and parturition	4,474 321,090
Psychological Medicine Dr G. C. Smith	Amines and peptides in psychoneuroendocrine responses	63,321
Dr J. W. Tiller	Studies of generalised anxiety disorder	25,617
Psychology Dr W. R. Webster	Functional 2-Deoxyglucose mapping of auditory and visual systems	23,244
Research Centre for Early Human Development Dr J. E. Maloney	A study of respiratory system development 'in utero'	56,298
Dr A. M. Walker, Dr J. E. Maloney	Perinatal cardiovascular control in normal and growth retarded lambs	67,428
Dr M. H. Wilkinson, Dr J. E. Maloney	Optimisation of gas exchange in very high frequency ventilation of the mature lung	34,868
Social and Preventive Medicine Dr J. W. Powles, Dr D. Ktenas	Cardio-vascular risk in migrants from Levkas (Greece) compared to non-migrants	22,374
Surgery Professor V. C. Marshall, Dr P. Jablonski	Pharmacological protection of renal function from ischaemic damage	18,598 + 9,061
		<u>1,761,441.50</u>

## Gifts in kind

From Dr Joseph Brown, gift of works of art for the Monash Collection:

Henry van Raalte, *An Australian Summers Day*.  
Etching, 41.5×44 cm

Mervyn Napier Waller, *Study For Peace After Victory*. c.1926. Watercolour,  
41×40 cm

Sybil Craig, *Lillies*. c.1935. Oil on board,  
45×46 cm

Horace Brodzky, *Seated Nude*. 1919. Pencil,  
ink and wash drawing, 31.5×20 cm

Teisutis Zikaras, *Untitled*. 1966. Wash  
drawing, 50.5×34 cm

Guy Stuart, *Study for Cone Interior*. c.1967.  
Chalk, 104×69 cm

Robert Klippel, *Structures in a Landscape*.  
1965. Lithograph, black and white,  
57×80 cm

From Sister Elizabeth Burchill:

Portrait of Sister Burchill, painted by Iris Hill  
(Archibald Prize entry 1975)

## Sources of Grants and Donations

	\$000	%
Private donations and indirect Government research grants	3,937	50.02
Australian Research Grants Scheme	1,546	19.72
National Health and Medical Research Council	<u>2,356</u>	<u>30.01</u>
	<u>7,839</u>	<u>100.00</u>

In addition to the gifts and grants listed above, 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 to departmental museums.

## Appeal Funds

The University conducts a number of appeals for specific purposes; some are for capital funds such as the Russell Drysdale Memorial Fund, for research such as the Embryo and Egg Transfer Fund, for endowment such as the Arthur Brown Memorial Prize, and for recurrent expenditure such as the Library Fund.

Sums contributed this year include:

	\$
Centre for Human Bioethics	9,650
Arthur Brown Memorial Prize	70
Development Fund	468
Elizabeth Eggleston Memorial Fund	530
Embryo and Egg Transfer Fund	37,037
Law Visiting Fellowships	4,118
Library Fund	41,945
Muscular Dystrophy Research	29,888
Monash Art Gallery including Russell Drysdale Memorial Fund	<u>64,404</u>
Total Appeal Funds:	<u>188,110</u>

The Library Fund Appeal reached a total of \$480,891.00



## FINANCE

The following salient points from the audited accounts of the University for the year 1983 are set out for ready reference.

### Funds Available

**Recurrent** Commonwealth Government funds available for expenditure on recurrent items during the year ended 31 December 1983 were as follows:

		\$000
University — 1983 Grant	79,083	
Less Balance brought forward from 1982	486	78,597
Teaching Hospitals		305
Halls of Residence		280

Expenditure for recurrent purposes during the year 1983 was:

	University		Teaching Hospitals		Halls of Residence	
	\$000	%	\$000	%	\$000	%
Academic activities	55,894	70.6	305	100.0		
Academic services	7,093	9.0				
Student services	1,805	2.3				
General services	14,180	17.9				
Public services	105	0.1				
Other	88	0.1			280	100.0
	<u>79,165</u>	<u>100.0</u>	<u>305</u>	<u>100.0</u>	<u>280</u>	<u>100.0</u>

**Capital** Commonwealth Government funds received in 1983 for expenditure on capital projects (buildings and furniture) on the University site totalled \$340,000.

**Research** Commonwealth Government funds available for expenditure on special research projects in 1983 totalled \$1,010,000.

**Equipment** Commonwealth Government funds received in 1983 for expenditure on equipment totalled \$2,940,000.

### Union Fees

Union fees payable by students enrolled for the year 1983 were as follows:

Students studying on campus — full-time \$198; part-time \$126 or \$88.

Students studying off campus in Victoria — full-time \$50; part-time \$36.

### Accounts

The audited accounts of the University for

the year 1983 are appended to this Report, and provide further details of the year's activities.

### General

During 1982, the first year of the current triennium, there was an indication of pleasing trends in relation to some areas of finance available to the University, which have continued to 1983.

The increase in funds made available by

the Commonwealth Government for the purchase of equipment, whilst falling very short of the levels recommended by the Universities Council and the Commonwealth Tertiary Education Commission, has permitted the University to replace some of its obsolete equipment. This University has a particular problem in this respect having developed very rapidly during the 1960s. This necessitated considerable expenditure to equip seven faculties over the space of a few short years, with the resultant ageing and obsolescence factors occurring almost simultaneously for a large number of items. The modest increase in the equipment grant has been most welcome.

Similarly, the University has appreciated the increase in the order of ten per cent (money terms) in the Special Research Grant provided by the government. This has helped to relieve pressure for research expenditure from the Recurrent Grant. The University is very pleased to note that an even larger increase can be expected for this purpose in 1984.

Most pleasing has been the University's success in attracting increased sponsorship for research projects generally. Whilst the level of support to the University under the Australian Research Grants Scheme has remained constant, the University has seen grants from other areas (including some government-sponsored bodies such as the National Health and Medical Research Council) rise from some \$3,700,000 in 1981 to over \$5,750,000 in 1983. A similar increase occurred in the level of general donations made over the same period, these rising from some \$590,000 in 1981 to over \$1,000,000 in 1983. The confidence demonstrated by this support is most gratifying to the University.

This University, along with most others, still has a real concern about the level of Recurrent Grants made available because any restrictions on these funds makes more difficult the maintenance of adequate academic standards. As a result of trends in

these grants over recent years, the student/staff ratio at Monash has deteriorated; in 1982 Monash had the highest ratio of all Australian universities despite allocating next to the lowest percentage of funds for administrative costs. The difficulties associated with the reduced funding level are exacerbated by the increased level of charges for services provided by State instrumentalities and the liability recently imposed on the University to pay the new State Financial Institutions Duty. Extra costs are constantly being incurred to meet obligations necessitated by other recent legislation, for example, Industrial Safety Health and Welfare Act, Freedom of Information Act, etc.

The basis of funding universities with grants advised at 'out-turn cost levels', introduced by the current 1982-84 triennium, was discontinued in 1983 and replaced by a return to the previous, more satisfactory, arrangements for retrospective cost supplementation. Whilst there is no apparent or readily identifiable variation in the funds granted to the University between the two bases, budgetary planning is facilitated and can be much more positive under the latter arrangements; accordingly Council applauds the return to retrospective cost supplementation. However the arrangements are still not entirely satisfactory as supplementation is not provided for increases in non-staffing costs which occur during the budget year — a further factor which contributes to the already referred to strain of maintaining academic standards.

During 1983 Council created the Monash University Foundation. The Foundation was set up as a separate Trust and donations to it are tax deductible for the donors. The proceeds of unspecified grants and donations, general appeals to graduates, industry and the public, and special earnings will be paid into the Foundation. In this way it is hoped to establish a sound capital base which will give the University an independent source of income to supplement funds received from government grants.

## ACCOUNTS FOR THE YEAR 1983

### **Certificate by Monash University**

In our opinion the attached financial statements correctly record the transactions of Monash University for the following periods:

- Statements numbered 1 to 18 for the year ended 31 December 1983; and
- Statement number 19 for the five month period ended 31 December 1983.

**R. L. Martin**  
Vice-Chancellor

**L. W. Candy**  
Comptroller

9 August 1984

### **AUDITOR-GENERAL'S REPORT**

The books and accounts of Monash University for the year ended 31 December 1983 have been audited as required by sub-section (2) of Section 36 of the Monash University Act 1958.

As stated in note 7 to the accounts, investments of the Superannuation and Pension Schemes are held in the name of fund managers. These investments totalling \$78,076,645 have been included in the accounts on the basis of statements furnished by the fund managers and have not been independently verified by audit.

Subject to the above, in my opinion, the attached statements of account correctly summarise the financial transactions of Monash University for the following periods:

- Statements numbered (1) to (18) for the year ended 31 December 1983; and
- Statement numbered (19) for the five month period ended 31 December 1983.

**B. J. Waldron**  
Auditor-General

10 September 1984



## Notes to and Forming Part of the Accounts — 1983

1. The accounts are maintained on an accrual and historical cost basis.
  2. Funds are received from Governmental and other sources for a variety of purposes. Each column in the Summary Statement, for which a supporting statement is attached, records income and expenditure in respect of each purpose. This identification of funds is maintained throughout the accounting system, thus providing the control necessary to ensure that each type of fund is used only for the purpose for which it is received. This presentation also facilitates the production of separate financial statements for the Government and other external bodies.
  3. The University does not operate for the purpose of making a profit which can be expressed in monetary terms. For this reason, and in common with some Governmental forms of accounting, the conventional distinction between capital and recurrent expenditure is not maintained in the accounting system. Funds used for the purchase of consumable stores, equipment and the construction of buildings during each accounting period, are recorded as expenditure in that year's accounts, the only assets shown in the Statement of Balances being those which are in the form of, or which will or may be converted into, cash or its equivalent, viz. investments, debtors and stocks on hand.
  4. Separate commercial accounts are maintained for management purposes for income-producing activities within the University, e.g. Halls of Residence, Union Catering, Bookshop.
  5. The classifications of income and expenditure used throughout the accounting system conform to the instructions issued by the Tertiary Education Commission in relation to the annual collection of financial statistics.
  6. The University's liability in respect of long service leave and accumulated recreation leave is not included in the financial statements on the basis that the expenditure is charged in the accounts in the year in which the leave is taken or the staff member retires or resigns.
  7. Superannuation and Pension Schemes — Statement (18)

During 1981, a new benefit promise superannuation scheme called the "M" Scheme was introduced, a large part of the initial contribution coming from the surrender and transfer of endowment policies formerly held in the "A" Superannuation Scheme.

Fund investments are managed by fund managers and are included in the accounts on the basis of statements from the fund managers. Investments held in the names of the fund managers at 31 December 1983 are recorded in the accounts at fund allocation prices reflecting the underlying market values of the investments. Other investments of the Scheme are valued at cost.

During 1983 the Trustees of the "M" Scheme called for an actuarial review of the Scheme as at 31 December 1982. This review showed the Scheme to be financially sound. The Trustees will arrange such actuarial reviews at appropriate times but not more than five years apart.
  8. During the year the University created a Trust entitled the "Monash University Foundation". This involved the transfer of \$10,266,579 from columns 7 and 11 of the Summary Statement.
- The Trust will receive the proceeds of general public appeals conducted by the University, unspecified gifts and bequests and part of the funds earned by the University. The University will be the sole beneficiary of the Trust.

(1) **Summary Statement showing Income and Expenditure for all general purposes for the year ended 31 December 1983**

	Recurrent Grant	Building Projects Grant	Equipment Grant	Teaching Hospitals Recurrent Grant	Special Research Grant
	\$	\$	\$	\$	\$
<b>Income</b>					
Commonwealth Government Grants	79,082,700	340,000	2,940,000	305,000	1,010,000
Other					
<b>Total Income</b>	79,082,700	340,000	2,940,000	305,000	1,010,000
<i>Less</i>					
<b>Expenditure</b>					
Academic Activities	55,894,284		2,132,657	305,000	996,906
Academic Services	7,092,471		843,635		12,237
Student Services	1,805,322		15,354		
General Services	14,180,377	346,250	38,016		857
Public Services	104,823		11,798		
Other	87,680				
<b>Total Expenditure</b>	79,164,957	346,250	3,041,460	305,000	1,010,000
Surplus (Deficit) for the year	(82,257)	(6,250)	(101,460)	—	—
Transfer to Monash University Foundation					
Surplus (Deficit) at 1 January 1983	(485,647)	(15,750)	203,381	—	—
<b>Accumulated Surplus (Deficit) at 31 December 1983</b>	<b>(567,904)</b>	<b>(22,000)</b>	<b>101,921</b>	<b>—</b>	<b>—</b>

Private and Indirect Gov't Research Grants	General Donations	Union Activities	Student Assist. Fund	Union Develop't Fund	General Auxiliary Activities	Fire Ins'ce Fund	Total	1982 Total
\$	\$	\$	\$	\$	\$	\$	\$	\$
1,545,752					280,500		85,503,952	80,454,616
5,783,558	1,038,994	2,049,142	887	841,135	7,529,857	22,793	17,266,366	17,526,650
7,329,310	1,038,994	2,049,142	887	841,135	7,810,357	22,793	102,770,318	97,981,266
6,951,401	561,029						66,841,277	62,546,334
(852)	45,034						7,992,525	7,674,822
385,658	49,009		950				2,256,293	1,716,388
24,141	141,552			400,030	595,147		15,726,370	15,451,086
	5,558						122,179	103,047
	38,727	1,977,224		238,248	4,816,973		7,158,852	6,104,328
7,360,348	840,909	1,977,224	950	638,278	5,412,120	—	100,097,496	93,596,005
(31,038)	198,085	71,918	(63)	202,857	2,398,237	22,793	2,672,822	4,385,261
	(266,579)				(10,000,000)		(10,266,579)	
1,129,057	1,347,129	253,830	10,908	(836,856)	16,201,594	196,954	18,004,600	13,619,339
1,098,019	1,278,635	325,748	10,845	(633,999)	8,599,831	219,747	10,410,843	18,004,600



(2) **Recurrent Grant**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
74,350,000	Commonwealth Government Grant	79,080,000
6,000	Commonwealth Government Grant — Community Language	2,700
<u>74,356,000</u>	<b>Total Income</b>	<u>79,082,700</u>
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>Academic Activities</i>	
	Teaching and Research —	
47,609,440	Salaries and Related Items	50,405,183
2,824,091	Maintenance	2,972,881
941,615	Computing Services	1,067,303
370,960	Equipment	380,282
167,717	Outside Studies Programme	190,497
82,582	New Appointments	81,298
756,480	Other Items	796,840
<u>52,752,885</u>		<u>55,894,284</u>
	<i>Academic Services</i>	
	Libraries —	
3,672,365	Salaries and Related Items	3,927,709
1,705,401	Books and Journals	1,560,423
234,445	Maintenance	255,221
68,038	Computing Services	72,141
25,136	Equipment	—
3,241	Other Items	26,931
<u>5,708,626</u>		<u>5,842,425</u>
	Computing —	
1,150,530	Salaries and Related Items	1,267,178
137,989	Maintenance	200,654
8,983	Equipment	16,076
1,129,141 Cr.	Recoveries	1,256,414 Cr.
1,214	Other Items	411
<u>169,575</u>		<u>227,905</u>
	Other Academic Services —	
953,039	Salaries and Related Items	978,509
38,445	Other Items	43,632
<u>991,484</u>		<u>1,022,141</u>
<u>59,622,570</u>	<i>Sub-total carried forward</i>	<u>62,986,755</u>

(2) **Recurrent Grant**  
**Statement of Income and Expenditure for the year ended 31 December 1983**  
**(continued)**

1982		1983
\$		\$
59,622,570	<i>Sub-total brought forward</i>	62,986,755
	<i>Student Services</i>	
648,343	Salaries and Related Items	686,874
706,939	Scholarships	1,099,786
17,749	Other Items	18,662
1,373,031		1,805,322
	<i>General Services</i>	
	Administration —	
5,176,726	Salaries and Related Items	5,199,852
122,126	Computing Services	121,076
92,627	Other Items	234,611
5,391,479		5,555,539
	Overheads —	
704,671	Postage, Telephone and Advertising	812,505
77,544	Furniture and Furnishings	102,273
1,137,807	Power, Lighting and Heating	1,334,589
729,015	Other Items	695,452
2,649,037		2,944,819
	Buildings and Grounds —	
3,891,665	Salaries and Related Items	4,071,742
1,346,984	Maintenance	1,425,486
206,504	Other Items	182,791
5,445,153		5,680,019
	<i>Public Services</i>	
	Continuing Education —	
96,702	Salaries and Related Items	104,190
1,241	Other Items	633
97,943		104,823
83,311	<i>Union Administration</i>	87,680
74,662,524	<b>Total Expenditure</b>	79,164,957
306,524	Deficit for the year	82,257
179,123	Deficit at 1 January 1983	485,647
485,647	<b>Accumulated Deficit at 31 December 1983</b>	567,904

(3) **Building Projects Grant**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
320,000	Commonwealth Government Grant	340,000
<u>320,000</u>	<b>Total Income</b>	<u>340,000</u>
	<i>Less</i>	
	<b>Expenditure</b>	
335,749	New Buildings	346,250
5,141	Site Development	<u>—</u>
<u>340,890</u>	<b>Total Expenditure</b>	<u>346,250</u>
20,890	Deficit for the year	6,250
5,140 (S)	Deficit at 1 January 1983	<u>15,750</u>
<u>15,750</u>	<b>Accumulated Deficit at 31 December 1983</b>	<u>22,000</u>



(4) **Equipment Grant**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
2,750,000	<b>Income</b>	
	Commonwealth Government Grant	2,940,000
<u>2,750,000</u>	<b>Total Income</b>	<u>2,940,000</u>
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>Academic Activities</i>	
	Teaching and Research —	
1,881,770	Equipment	<u>2,132,657</u>
	<i>Academic Services</i>	
	Libraries —	
10,643	Books and Journals	42,650
13,924	Equipment	<u>48,891</u>
<u>24,567</u>		<u>91,541</u>
681,501	Computing	<u>637,084</u>
<u>50,728</u>	Other Academic Services	<u>115,010</u>
<u>2,116</u>	<i>Student Services</i>	<u>15,354</u>
	<i>General Services</i>	
135,581	Administration	18,533
4,539	Buildings and Grounds	<u>19,483</u>
<u>140,120</u>		<u>38,016</u>
4,998	<i>Public Services</i>	<u>11,798</u>
<u>2,785,800</u>	<b>Total Expenditure</b>	<u>3,041,460</u>
35,800	Deficit for the year	101,460
239,181	Surplus at 1 January 1983	<u>203,381</u>
<u>203,381</u>	<b>Accumulated Surplus at 31 December 1983</b>	<u>101,921</u>

**(5) Teaching Hospitals: Recurrent Grant**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
280,000	Commonwealth Government Grant	305,000
280,000	<b>Total Income</b>	305,000
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>Academic Activities</i>	
280,000	Teaching and Research —	
	Maintenance	305,000
280,000	<b>Total Expenditure</b>	305,000
—	<b>Surplus for the year</b>	—

**(6) Special Research Grant**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
915,000	Commonwealth Government Grant	1,010,000
915,000	<b>Total Income</b>	1,010,000
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>Academic Activities</i>	
	Teaching and Research —	
680,088	Salaries and Related Items	760,877
198,859	Maintenance	208,955
31,526	Other Items	27,074
910,473		996,906
	<i>Academic Services</i>	
—	Salaries and Related Items	12,237
	<i>General Services</i>	
4,527	Postage, Telephone and Advertising	857
915,000	<b>Total Expenditure</b>	1,010,000
—	<b>Surplus for the year</b>	—

(7) **Private and Indirect Government Research Grants**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
1,566,985	<b>Income</b>	
	Commonwealth Government Grant	1,545,752
3,410,249	Grants and Donations	
1,906,894	Government-financed Bodies	3,958,350
	Other	1,825,208
5,317,143		5,783,558
6,884,128	<b>Total Income</b>	7,329,310
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>Academic Activities</i>	
	Teaching and Research —	
4,449,880	Salaries and Related Items	4,954,353
999,768	Maintenance	1,247,521
3,437	Computing Services	248
502,929	Equipment	480,716
247,904	Other Items	268,563
6,203,918		6,951,401
	<i>Academic Services</i>	
	Other Academic Services —	
111 Cr.	Salaries and Related Items	852 Cr.
456	Other Items	—
345		852 Cr.
	<i>Student Services</i>	
292,348	Scholarships	385,658
	<i>General Services</i>	
8,151	Postage, Telephone and Advertising	8,961
—	Furniture and Furnishings	275
1,911	New Buildings	—
37,262	Buildings Maintenance	14,905
47,324		24,141
6,543,935	<b>Total Expenditure</b>	7,360,348
340,193( \$)	Deficit for the year	31,038
788,864	Surplus at 1 January 1983	1,129,057
1,129,057	<b>Accumulated Surplus at 31 December 1983</b>	1,098,019



(8) **General Donations**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
	Donations	
106,634	Government-financed Bodies	65,771
564,684	Other	835,948
671,318		901,719
	Appeals	
41,099	Library Books	41,945
11,373	Other	998
52,472		42,943
107,164	Other Income	94,332
830,954	<b>Total Income</b>	1,038,994
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>Academic Activities</i>	
	Teaching and Research —	
264,766	Salaries and Related Items	293,193
79,273	Maintenance	123,135
41,487	Equipment	64,695
131,762	Other Items	80,006
517,288		561,029
	<i>Academic Services</i>	
	Libraries —	
5,657	Salaries and Related Items	14
14,095	Books and Journals	17,271
513	Other Items	—
20,265		17,285
	Other Academic Services —	
11,108	Salaries and Related Items	7,815
16,623	Other Items	19,934
27,731		27,749
565,284	<i>Sub-total carried forward</i>	606,063

(8) General Donations

Statement of Income and Expenditure for the year ended 31 December 1983  
(continued)

1982 \$		1983 \$
565,284	<i>Sub-total brought forward</i>	606,063
	<i>Student Services</i>	
34,181	Scholarships	43,875
14,712	Other Items	5,134
48,893		49,009
	<i>General Services</i>	
	Overheads —	
291	Furniture and Furnishings	8,977
2,650	Postage, Telephone and Advertising	4,112
2,941		13,089
	Buildings and Grounds —	
15,771	New Buildings	110,874
9,220	Maintenance	17,589
24,991		128,463
	<i>Appeals</i>	
100,275	Library Books	26,331
8,337 Cr.	Other Items	11,396
91,938		37,727
106	<i>Public Services</i>	5,558
	<i>Other Items</i>	
800	Union Activities	1,000
734,953	<b>Total Expenditure</b>	840,909
96,001	Surplus for the year	198,085
—	<i>Less</i>	
	Transfer to Monash University Foundation	266,579
96,001 (S)		68,494 (D)
1,251,128	Surplus at 1 January 1983	1,347,129
1,347,129	<b>Accumulated Surplus at 31 December 1983</b>	1,278,635

**(9) Union Activities**

**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
1,632,499	<b>Income</b>	
203,709	Union Fees	1,802,985
	Other	246,157
<u>1,836,208</u>	<b>Total Income</b>	<u>2,049,142</u>
	<i>Less</i>	
	<b>Expenditure</b>	
388,041	Sports and Recreation Association	412,750
303,446	Monash Association of Students	318,680
169,981	Clubs and Societies Council	197,937
222,048	Union Tuition and Courses	260,536
164,371	Union Building Management	173,778
562,359	Union Administration and Special Projects	617,597
	Business Activities	
27,183 (D)	Catering — Operating Deficit	29,111 (D)
20,623 (S)	Other — Operating Deficit	15,090 (D)
		<u>44,201</u>
<u>1,816,806</u>		<u>2,025,479</u>
43,680	<i>Less</i>	
<u>1,773,126</u>	Contribution by University for use of facilities by staff	48,255
	<b>Total Expenditure</b>	<u>1,977,224</u>
63,082	Surplus for the year	71,918
190,748	Surplus at 1 January 1983	253,830
<u>253,830</u>	<b>Accumulated Surplus at 31 December 1983</b>	<u>325,748</u>

**(10) Student Assistance Fund**

**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
1,180	<b>Income</b>	887
	<i>Less</i>	
	<b>Expenditure</b>	950
<u>1,180 (S)</u>	Deficit for the year	63
9,728	Surplus at 1 January 1983	10,908
<u>10,908</u>	<b>Accumulated Surplus at 31 December 1983</b>	<u>10,845</u>



(11) **Union Development Fund**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
538,008	Union Development Fees	591,078
286,476	Rentals and Other	250,057
<u>824,484</u>	<b>Total Income</b>	<u>841,135</u>
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>General Services</i>	
80,243	Site Development	599
731,407	New Buildings	263,735
98,150	Maintenance — Buildings	130,334
11,820	Furniture and Furnishings	5,362
<u>921,620</u>		<u>400,030</u>
	<i>Other Items</i>	
53,164	Equipment	51,016
90,640	Occupancy Expense	98,750
122,364	Other Items	88,482
<u>266,168</u>		<u>238,248</u>
<u>1,187,788</u>	<b>Total Expenditure</b>	<u>638,278</u>
363,304 (D)	Surplus for the year	202,857
473,552	Deficit at 1 January 1983	836,856
<u>836,856</u>	<b>Accumulated Deficit at 31 December 1983</b>	<u>633,999</u>

(12) General Auxiliary Activities  
Statement of Income and Expenditure for the year ended 31 December 1983

1982 \$		1983 \$
	<b>Income</b>	
266,631	Commonwealth Government Grant:	280,500
3,497,449	Halls of Residence	3,701,324
5,196,990	Outside Earnings	3,828,533
	Other Income	
<u>8,961,070</u>	<b>Total Income</b>	<u>7,810,357</u>
	<i>Less</i>	
	<b>Expenditure</b>	
	<i>General Services</i>	
	Overheads —	
13,261	Furniture and Furnishings	11,407
	Buildings and Grounds —	
326,267	New Buildings	199,951
23,678	Site Development	5,863
119,798	Maintenance	377,926
<u>483,004</u>		<u>595,147</u>
	<i>Other Items</i>	
11,685	University Bookshop	6,496 Cr.
153,559	Halls of Residence	344,511
34,774 Cr.	South East Flats	29,120 Cr.
1,171	Owned Houses and Transit Flats	15,583
3,755,263	Outside Earnings	4,558,386
2,081	Other	65,891 Cr.
<u>3,888,985</u>		<u>4,816,973</u>
<u>4,371,989</u>	<b>Total Expenditure</b>	<u>5,412,120</u>
<u>4,589,081</u>	Surplus for the year	<u>2,398,237</u>
	<i>Less</i>	
	Transfer to Monash University Foundation	10,000,000
<u>4,589,081 (S)</u>		<u>7,601,763 (D)</u>
<u>11,612,513</u>	Surplus at 1 January 1983	<u>16,201,594</u>
<u>16,201,594</u>	<b>Accumulated Surplus at 31 December 1983</b>	<u>8,599,831</u>

(13) **Fire Insurance Fund**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982		1983
\$		\$
22,242	<b>Income</b>	
	Income from Investments	22,793
	<i>Less</i>	
	<b>Expenditure</b>	
22,242	Surplus for the year	22,793
174,712	Surplus at 1 January 1983	196,954
196,954	<b>Accumulated Surplus at 31 December 1983</b>	219,747



(14) Statement of Balances for all General Purposes at 31 December 1983

\$	1982		\$	1983
	\$			\$
		<b>Accumulated Funds</b>		
485,647 Dr.		Recurrent Grant	567,904 Dr.	
15,750 Dr.		Building Projects Grant	22,000 Dr.	
203,381		Equipment Grant	101,921	
—		Teaching Hospitals Recurrent Grant	—	
—		Special Research Grant	—	
		Private and Indirect Government		
1,129,057		Research Grants	1,098,019	
1,347,129		General Donations	1,278,635	
253,830		Union Activities	325,748	
10,908		Student Assistance Fund	10,845	
836,856 Dr.		Union Development Fund	633,999 Dr.	
16,201,594		General Auxiliary Activities	8,599,831	
196,954		Fire Insurance Fund	219,747	
		<b>Total Accumulated Funds</b>		
	18,004,600			10,410,843
		<i>Represented by:</i>		
		<b>Investments</b>		
		Investments in Managed Fund —		
		Westpac Investment Management		
1,318,534		Pty Ltd	1,127,624	
		(Market Value:		
		31 December 1983 — \$1,374,317		
		31 December 1982 — \$1,408,402)		
	1,318,534			1,127,624

(14) Statement of Balances for all General Purposes at 31 December 1983 (continued)

\$	1982		\$	1983
	\$			\$
		<b>Current Assets</b>		
15,939		Cash at Bank and on Hand	23,187	
24,900,000		Cash on Secured Deposits	2,000,000	
17,700,000		Cash on Term Deposits	34,000,000	
100,000		Australian Savings Bonds	—	
—		Debtors —		
		Accrued Government Grants	17,000	
1,338,846		Other	1,605,562	
		Stocks on Hand, at cost less		
1,098,125		obsolescence	1,083,879	
36,880		Payments in Advance	39,861	
	45,189,790			38,769,489
	46,508,324			39,897,113
		<i>Less</i>		
		<b>Current Liabilities</b>		
687,609		Bank Overdraft	885,002	
		Sundry Creditors and Accrued		
5,903,306		Expenses	6,359,406	
1,010,432		Students' Fees Received in Advance	1,022,889	
		Government Grants Received in		
19,055,000		Advance	19,462,000	
			27,729,297	
26,656,347			1,756,973	
1,847,377		<b>Long-Term Liabilities</b>		
	28,503,724	Loans on Mortgage		29,486,270
	18,004,600	<b>Net Assets</b>		10,410,843

(15) Donor-Nominated Trust Funds

Statement of Income and Expenditure for the year ended 31 December 1983

1982		1983
\$		\$
8,036	<b>Income</b>	
	Income from Investments	8,518
8,036	<b>Total Income</b>	8,518
	<i>Less</i>	
	<b>Expenditure</b>	
—	Max Buxton Scholarship	450
1,288	Graham John Beard Memorial Fund	1,186
500	J.W. Dodds Memorial Scholarship	501
750	Vallejo Gantner Memorial Travel Fund	700
1,525	Oscar Mendelsohn Lecture	—
111	Monash University Rowing Club	111
280	W.P. and H.E. O'Shea Fund	290
50	The David B. Rosenthal Memorial Trust	50
2,000	Hume Turnbull Scholarship	800
2,260	William and Katherine Winter Foundation	2,000
8,764	<b>Total Expenditure</b>	6,088
728 (D)	<b>Surplus for the year</b>	2,430

Balance Sheet at 31 December 1983

1982		1983
\$		\$
106,837	<b>Accumulated Funds</b>	
728 (D)	Funds at 1 January 1983	106,109
	Surplus for the year	2,430
106,109	<b>Total Accumulated Funds</b>	108,539
	<i>Represented by:</i>	
	<b>Investments</b>	
1,000	Government Securities, at cost	1,000
63,500	Semi-government Securities, at cost	63,500
27,960	Fixed-interest Securities, at cost	27,960
3,785	Ordinary Shares, at cost	3,785
	(Market Value: 31 December 1983 — \$7,268 31 December 1982 — \$3,213)	
96,245		96,245
	<b>Current Assets</b>	
9,700	Fixed Deposit Stock	12,000
164	Cash at Bank	294
9,864		12,294
106,109	<b>Total Assets</b>	108,539



(16) Students' Loan Fund

**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
2,817	Interest on Loans	2,625
1,703	Interest on Investment	2,450
1,068	Bank Interest	554
55	Donations	215
<u>5,643</u>	<b>Total Income</b>	<u>5,844</u>
	<i>Less</i>	
	<b>Expenditure</b>	
<u>—</u>	Sundry Expenses	<u>13</u>
	<b>Total Expenditure</b>	<u>13</u>
<u>5,643</u>	<b>Surplus for the year</b>	<u>5,831</u>

**Balance Sheet at 31 December 1983**

1982 \$		1983 \$
	<b>Accumulated Fund</b>	
150,246	Fund at 1 January 1983	155,889
5,643	Surplus for the year	5,831
<u>155,889</u>	<b>Total Accumulated Fund</b>	<u>161,720</u>
	<i>Represented by:</i>	
	<b>Deposit held by University</b>	
20,000	Principal	20,000
1,703	Accrued Interest	2,450
<u>21,703</u>		<u>22,450</u>
	<b>Loans to Students</b>	
116,518	Principal	122,063
4,552	Accrued Interest	5,177
<u>121,070</u>		<u>127,240</u>
<u>13,116</u>	<b>Cash at Bank</b>	<u>12,030</u>
<u>155,889</u>	<b>Total Assets</b>	<u>161,720</u>

**(17) Assistance to Students in Need Fund**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
13,082	Interest on Investments	8,575
1,572	Interest on Loans	2,356
662	Bank Interest	549
10	Sundry Income	—
<u>15,326</u>	<b>Total Income</b>	<u>11,480</u>
	<i>Less</i>	
	<b>Expenditure</b>	
750	Grants to Students	—
106	Other	1,179
<u>856</u>	<b>Total Expenditure</b>	<u>1,179</u>
<u>14,470</u>	<b>Surplus for the year</b>	<u>10,301</u>

**Balance Sheet at 31 December 1983**

1982 \$		1983 \$
	<b>Accumulated Fund</b>	
210,810	Fund at 1 January 1983	225,280
14,470	Surplus for the year	10,301
<u>225,280</u>	<b>Total Accumulated Fund</b>	<u>235,581</u>
	<i>Represented by:</i>	
	<b>Deposit held by University</b>	
70,000	Principal	70,000
11,795	Accrued Interest	8,575
<u>81,795</u>		<u>78,575</u>
	<b>Loans to Students</b>	
128,999	Principal	145,414
2,289	Accrued Interest	3,795
<u>131,288</u>		<u>149,209</u>
12,197	<b>Cash at Bank</b>	7,797
<u>225,280</u>	<b>Total Assets</b>	<u>235,581</u>

**(18) Superannuation and Pension Schemes**  
**Statement of Income and Expenditure for the year ended 31 December 1983**

1982 \$		1983 \$
	<b>Income</b>	
2,397,715	Members' Contributions	2,523,786
4,735,628	University's Contributions	4,990,365
6,781,656	Appreciation of Managed Funds	15,379,475
199,167	Income from other Investments	163,598
<u>14,114,166</u>	<b>Total Income</b>	<u>23,057,224</u>
	<i>Less</i>	
	<b>Expenditure</b>	
1,975,649	Benefit Payments to Members	1,638,940
331,297	Payments on Withdrawal	261,640
137,084	Other Payments	175,403
<u>2,444,030</u>	<b>Total Expenditure</b>	<u>2,075,983</u>
11,670,136	Surplus for the year	20,981,241
221,119	Extraordinary Income —	—
45,939,074	Surrender of Endowment Policies	57,830,329
<u>57,830,329</u>	Surplus at 1 January 1983	<u>57,830,329</u>
	<b>Accumulated Surplus at 31 December 1983</b>	<u>78,811,570</u>



(18) **Superannuation and Pension Schemes**

**Balance Sheet at 31 December 1983**

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

1982 \$		1983 \$
57,830,329	<b>Accumulated Funds</b>	
	Accumulated Surplus	78,811,570
	<i>Represented by:</i>	
	<b>Investments</b>	
2,345,000	Term Deposits	—
69,100	Fixed-interest Securities, at cost	85,200
	Investments in Managed Funds —	
19,474,715	Australian Mutual Provident Society	27,806,007
19,054,174	National Mutual Life Association of Australasia Limited	27,645,238
16,291,261	Westpac Investment Management Pty Ltd	22,625,400
57,234,250		78,161,845
	<b>Current Assets</b>	
605,791	University Current Account	649,725
	<i>Less</i>	
	<b>Current Liabilities</b>	
	Members' Contributions on hand at 31 December (awaiting disbursement)	—
116	Accrued Charges	—
9,596		—
9,712		—
57,830,329	<b>Total Assets</b>	78,811,570

(19) **Monash University Foundation**  
**Statement of Income and Expenditure for the five months ended 31 December 1983**

	\$
<b>Income</b>	
Income from Investments	471,598
<b>Total Income</b>	<u>471,598</u>

*Less:*

<b>Expenditure</b>	
Grant to Monash University	163,000
Investment Adviser's Fee	3,915
Bank Charges	12
<b>Total Expenditure</b>	<u>166,927</u>

Surplus for the five months ended 31 December 1983	<u>304,671</u>
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**Balance Sheet at 31 December 1983**

	\$
<b>Accumulated Funds</b>	
Capital Funds from Monash University	10,266,579
<i>Add:</i>	
Surplus for five months ended 31 December 1983	304,671
<b>Total Accumulated Funds</b>	<u>10,571,250</u>

*Represented by:*

<b>Investments</b>	
Investment Portfolio —	
Australian United Corporation Limited	10,574,906
(Market Value at 31 December 1983 — \$10,659,236)	

**Current Assets**

Cash at Bank	259
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*Less:*

<b>Current Liabilities</b>	
Accrued Charges	3,915
	<u>(3,656)</u>
	<u>10,571,250</u>





