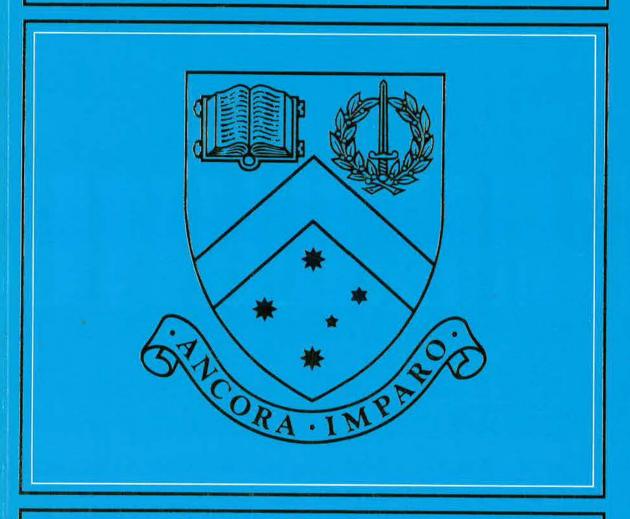
Monash University



Annual Report 1985



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The Report of the Council of Monash University for the period 1 January 1985 to 31 December 1985

In accordance with Section 41 of the Monash University Act 1958, as amended, I submit the report of the council for 1985.

For and on behalf of the council

G.H. Lush Chancellor

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THE COUNCIL

Members of council as at 31 December 1985

Members ex officio

The Honourable Sir George Hermann Lush, LLM Melb. — Chancellor

Raymond Leslie Martin, MSc Melb., PhD ScD Cantab., DSc ANU, FRACI, FRSC, FAA— Vice-Chancellor

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

The Honourable James Vincent Chester Guest, MA Oxon., MBA Melb., Barrister-at-Law of Lincoln's Inn, Barrister-at-Law Vic., MLC Edward James Hann, MP

Gerard Marshall Vaughan, ARMIT, DipEd SCV, BE MEngSc PhD, ARACI, MP

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

James Arnold Hancock, OBE, BCom Melb., FCA, AASA

Geoffrey Alistair Knights, MA PhD Cantab. Jan Eric Kolm, AO, EngChem Prague Tech. Uni., FRACI, FAIM, FTS

Rachelle Anne Lewitan, BA LLB(Hons) *Melb.*

Sir James Charles McNeill, CBE, HonDS N'cle, FASA, FAIM Nigel Wood, BEc NE

Elected by graduates of the University

Anthony Henry May, BEc LLB Kay Christine Lesley Patterson, BA Syd., PhD DipEd, MAPsS

Elected by the faculties

Marilyn Lee Lake, MA Tas., PhD (Arts)
June Margaret Hearn, MA PhD Melb.
(Economics and Politics)

Winifred McDonell, BA MEd DipEd, FACE (Education)

Robert John Neil Kinsman, BMechE Melb., CEng, FIMechE, MAustIMM (Engineering)

The Honourable Mr Justice Robert Clive Tadgell, LLB Melb. (Law)

Nigel John Gray, AM, MB BS Melb., FRACP, FRACMA (Medicine)

Hugh Alexander Grayson, FMTC, CChem, FRACI, FIDA, FAIM (Science)

Elected by the professors

David Alistair Kemp, BA LLB Melb., PhD Yale

Ian James Polmear, BMetE MSc DEng Melb., FTS, FIM, FIEAust

Clive Trevor Probyn, MA Virginia, BA PhD Nott.

Bruce Oswald West, BSc Adel., PhD Adel. and Cantab., FRACI

Elected by teaching staff other than the professors

Peter LePoer Darvall, BCE Melb., MS Ohio State, MSE MA PhD Prin., DipEd, MIEAust

Ian McCance, MSc Melb., PhD Jennifer Strauss, BA Melb.

Appointed by the Minister for Education

Ronald George Ritchie, BMechE DipEd Melb., DipMechE Caulfield TC, MAdmin, FIEAust, MACE

Co-opted

Keith Thomas Henry Farrer, OBE, MA La T., DSc Melb., CChem, FRIC, FRACI, FIFST (UK), FAIFST, FTS

Patricia Frances Hutson, MB BS Melb.

The Honourable Joseph Ezra Isaac, BA BCom Melb., PhD Lond., FASSA — Deputy Chancellor

Donald Graham Paech, FCIS, FASA, FAIM, FID

Co-opted from among the deans of the faculties

Graeme Calderwood Schofield, OBE, MD ChB NZ, DPhil Oxon., FRACP, FACMA William Angus Sinclair, MCom Melb., DPhil Oxon., FASSA

Elected by the non-academic staff

Geoffrey Steven Wilson, ALCM

Elected by the students of the University

Peter Antoni Clarke Ian Thomas Sheehy Susan Regine Thomson Secretary: Mr M.D. Watson

Changes in membership of council during 1985

Members who retired or resigned from office during 1985

Professor R. Baxt (co-opted dean) 1984-85; Mr H.C. Cameron (undergraduate and diploma students) 1983-85;

Mr D. Dissanayake (postgraduate students) 1983–85;

Mr C.B. Goode (Faculty of Economics and Politics) 1980–85;

Professor J.W. McCarty (professors) 1981–85;

Mr H.M. McKenzie (Governor in council) 1968-85:

Emeritus Professor D.H. Monro (Faculty of Arts) 1974–85;

Dr M.G. Sullivan (non-professorial teaching staff) 1982-85; and

Professor J.P. Whyte (professors) 1983-85.

Members re-elected or re-appointed for a further term of office during 1985

Dr P.F. Hutson (co-opted) 1985–86; and Mr R.J.N. Kinsman (Faculty of Engineering) 1985–89.

Members elected or appointed to council during 1985

Mr P.A. Clarke (undergraduate and diploma students) 1985–87;

Mr J.A. Hancock (Governor in council) 1985-89;

Dr J.M. Hearn (Faculty of Economics and Politics) 1985–89;

Professor D.A. Kemp (professors) 1985-89; Dr M.L. Lake (Faculty of Arts) 1985-89;

Mr D.G. Paech (co-opted) 1985–87;

Professor C.T. Probyn (professors) 1985–87;

Professor G.C. Schofield (co-opted dean) 1985–86;

Mr I.T. Sheehy (postgraduate students) 1985–87;

Professor W.A. Sinclair (co-opted dean) 1985–86; and

Mrs J. Strauss (non-professorial teaching staff) 1985–86.

Vacancies in the membership of council as at 31 December 1985

Nil

REPORT OF THE CHANCELLOR

THE HONOURABLE SIR GEORGE LUSH, LLM Melb.

The council of Monash University met on ten occasions in 1985, in the months of March to December inclusive. I chaired each of these meetings, and I hereby record my gratitude to all who served on council and its committees during the year. As is usual, a number of changes occurred in the membership of council in the course of the year, and these are listed at the beginning of this report. Of the nine members who retired, I should like to pay particular tribute to the contributions made by Emeritus Professor D.H. Monro and Mr H.M. McKenzie. In two separate terms since 1974, Professor Monro served for a total of nine years on council and contributed thoughtfully and constructively to its proceedings. Mr McKenzie retired as the longest serving member on council after a combined term of just under seventeen years. During this period, Mr McKenzie gave unstintingly of his time and considerable wisdom to further the interests of Monash University. A minute of appreciation adopted by council in August mentioned the steady hand of reason and understanding brought by Mr McKenzie to bear on the governance of the University which, coupled with his commercial experience and business acumen, resulted in a contribution of inestimable value. It is fitting that, at its November meeting, council resolved to confer the degree of Doctor of Laws honoris causa upon Mr McKenzie at its silver jubilee celebrations in May 1986. At the same ceremony, a similar honorary degree will be upon that other invaluable conferred stalwart on council, Sir James McNeill, who, despite health problems, continues to serve the University with distinction.

Several of the matters referred to in my last report attracted considerable continuing debate during the year. At its April meeting, council agreed on the terms of a licensing agreement with a newly established company, IVF Australia Limited, for the *in vitro* fertilisation services developed by Monash University to be made commercially available overseas. After making a somewhat late run for the post, Monash University became a participating institution in the Superan-

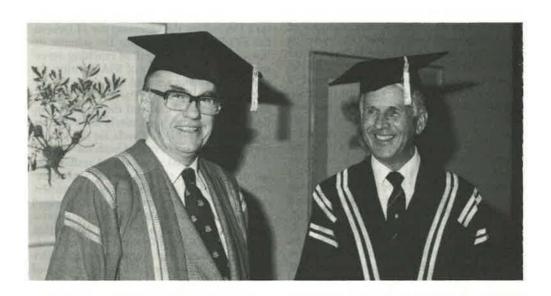
nuation Scheme for Australian Universities on 1 December, thus meeting the 31 December deadline for entry into the scheme on favoured terms. The task of reaching agreement with the directors of SSAU within the guidelines recommended by council's Superannuation Working Party was very demanding, and I commend the Superannuation Trustees and particularly their incoming chairman, Mr D.G. Paech, for the success they achieved, on behalf of both the University and individual members of staff. Legislation made by council at its September meeting finally gave effect to the recommendations of The Hon. Mr Justice R.C. Tadgell that the Union and the Sports and Recreation Association became separate entities. The minutes of that meeting record my comment that, what had commenced as a divisive issue, had concluded being resolved with a gratifying degree of accord.

At its December meeting, council gave cautious approval to proposals from two faculties to offer courses to full-fee paying overseas students in accordance with guidelines set down by the Commonwealth Government. There are many questions still to be resolved in regard to these initiatives, and I am sure they will be debated further in

1986.

Council appointed a new Comptroller, Mr P.B. Wade, and Registrar, Mr A.L. Pritchard, to succeed Mr L.W. Candy and Mr J.D. Butchart respectively following their retirement at the end of the year. At its December meeting, council also approved the unanimous recommendation of the Vice-Chancellorship Search Committee that the Pro-Vice-Chancellor, Professor M.I. Logan, be offered appointment as the University's fourth Vice-Chancellor to succeed Professor R.L. Martin following his retirement at the end of January 1987. Professor Logan will serve as Deputy Vice-Chancellor (Staff) during 1986.

Faced with the impending personnel changes made necessary by the retirements of the Vice-Chancellor, Registrar, and Comptroller as well as that of the Deputy Vice-Chancellor (Research), Professor K.C.



Westfold, council took steps in May to review the senior management structure of the University by establishing a three-man committee of inquiry chaired by Sir James McNeill. After four months of sustained investigation, this committee reported to council in September with a total of twentysix recommendations aimed at providing a workable infrastructure for the University's central administration as Monash enters its second quarter-century. council — sensibly in my view — received this report with interest, and referred it to the Vice-Chancellor to act upon as opportunity offered. As a result, the first recommendations of the McNeill report were implemented by council on the request of the Vice-Chancellor at its December meeting, and further action is expected during the following year.

In December, council conferred the title of Emeritus Professor upon Professor K.H. Hunt and Professor P.W. Musgrave to mark their retirements from the University as of the end of the year. In addition, council adopted a minute of appreciation of the contribution made to the University by Professor Hunt since his initial appointment as

Professor of Engineering in 1960, which included a term of fourteen years as foundation dean of the faculty from 1961 to 1975.

As a result of a proposal put forward by a student member of council, the University will in 1986 hold a careers week, the aim of which is to assist senior secondary school students in their choice of careers. Also upon a student proposal in council, a night bus service between points on the campus has been set up in the interest of security.

At graduation ceremonies held during the year, the honorary degrees were conferred upon Mr Roger Kemp (Doctor of Laws) and Mr Harrison Bryan (Doctor of Laws). The degrees conferred and diplomas awarded at seven public ceremonies during the year are referred to later in this report.

At the end of the year The Hon. Dr J.E. Isaac and myself were re-elected to further three-year terms as Deputy Chancellor and Chancellor respectively, commencing as of the first ordinary meeting of council in 1986.

REPORT OF THE VICE-CHANCELLOR

Professor R.L. Martin, MSc Melb., PhD, ScD Cantab., DSc ANU, FRACI, FRSC, FAA

At the end of 1985, Monash University completed its twenty-fifth year of teaching; a modest but significant milestone nonetheless. As we began planning our Silver Jubilee celebrations, it was a good time to reflect and take stock of what Monash had accomplished in its first quarter of a century. Without wishing to be complacent, I think Monash can be justifiably proud of its achievements to date. By most criteria, the University has earned a reputation of distinction for the high-standing of its research, the quality of its teaching programs, the cal-

ibre of its graduates and staff.

Monash will face the challenges of the next twenty-five years with virtually a complete new senior management team. The registrar, Mr J.D. Butchart, and comptroller, Mr L.W. Candy, retired at the end of the year after long periods of dedicated service to the University. They will be succeeded in 1986 by Mr A.L. Pritchard and Mr P.B. Wade respectively, who I have no doubt will bring new perspectives to the demanding task of supporting the University's scholarly and community objectives. The Deputy Vice-Chancellor, Professor K.C. Westfold, is due to retire at the end of 1986, and my own term as Vice-Chancellor will expire one month later, at the end of January 1987. I was delighted when council, at its December meeting, appointed the current Pro-Vice-Chancellor, Professor M.I. Logan to succeed me. Professor Logan is a man of great scholarship and experience who has served the University with distinction for many years. Given this unprecedented turnover of senior executives, council, at its April meeting, established a committee under the chairmanship of Sir James McNeill to investigate the University's senior management structure and report on ways it might be varied in response to the changing demands of the University. This committee reported in September with twenty-six recommendations aimed at providing a central administration more responsive to changing needs and circumstances. While generally supportive of this report, council left it to me as chief executive officer to consider its specific recommendations in detail and act as I see fit. Some of the recommendations can be responded to immediately; others will require further reflection and refinement. It has been a most positive exercise, and Sir James McNeill, and the other members of his committee, Dr G.A. Knights, and Mr H.M. McKenzie, are owed a considerable debt of thanks. In the face of these impending changes in senior personnel, the University was indeed fortunate that both the Chancellor and Deputy Chancellor were elected for further three-year terms at the end of the year. They will provide continuity in the University's leadership during the transition when their customary wise counsel will be at even more

of a premium.

As is usual, the University gained and lost friends in 1985. The incoming Dean of Science, Professor W.R.A. Muntz, commenced duty at the end of February. New professors were also appointed in Law, Anthropology, Electrical Engineering, and French. In turn, four members of staff left to take up chairs at other universities — Melbourne, La Trobe, James Cook, and Harvard. Monash was especially saddened by the death of Professor Sir David Derham on 1 September, after a long illness. Sir David was the foundation dean of the Monash Law School from 1964 to 1968 before returning to The University of Melbourne as its Vice-Chancellor. A foundation dean of the Monash Faculty of Engineering, Professor K.H. Hunt, retired at the end of the year after twenty-five years of distinguished service to the University. A former dean of the Faculty of Education, Professor P.W. Musgrave, also retired at the end of the year. Finally, council lost its longest serving member in July with the retirement of Mr H.M. (Mitch) McKenzie. Mr McKenzie gave unstintingly of his time, wisdom and friendship during seventeen years on council, and it is fitting that he will have the honorary degree of Doctor of Laws conferred upon him in 1986.

Against the background of sustained underfunding of higher education by successive governments since the mid 1970s, the 1985 federal budget gave some indication of a more supportive attitude by the Commonwealth. We witnessed the unusual occurrence of both the Australian Vice-Chancellors' Committee and the Federation of Australian University Staff Associations praising the budget for creating an additional 2 000 places for young people to engage in further study. Other welcome developments were the 150 per cent tax incentive for research and development which came into effect on 1 July and the boost in funding for the ARGS and NH&MRC research programs. The CSI-RO/Monash Collaborative Research Scheme continues to flourish and the two institutions provided \$120 000 in grants for 1985 which are supporting sixteen research projects undertaken jointly by scientists from the CSIRO and the University. Nevertheless, much more needs to be done and massive funding is required to overcome severe accommodation pressures, to maintain plant and buildings that have been allowed to deteriorate over many years, and to replace obsolete equipment. With the worsening of the national economy, however, indications are that funding for the remainder of the 1985-87 triennium will remain uncomfortably tight.

Monash University is doing all it can to broaden its funding base to supplement its operating budget and retain a measure of financial independence. Entrepreneurial ventures are being encouraged wherever such activity can be shown to be consistent with or complement the University's overall objectives in teaching and research. More programs are proceeding on a self-funding basis by recouping costs from the commercial or professional sectors being served. And plans are well advanced to establish a company wholly owned by the University that will spearhead a new era of liaison with industry — a development that should be welcomed by many who have called for universities to pay their way in the community to an increased extent. An example of this

new cooperation with industry is the establishment within the Monash Computer Centre of a \$100 000 Computing Research and Development Fund to support original ideas and promote innovations that are likely to benefit local industries or lead to the development of new products and markets. This fund was established under an agreement between the Victorian Government, the University, and Burroughs Ltd and involves the use of some \$4 million of Burroughs computing equipment acquired under the State Government's offset program. Another encouraging development is the creation of a new chair of industrial chemistry half funded by ICI Australia Limited. To be known as the Joint ICI Australia/Monash University Chair in Industrial Chemistry, the new professor will engage in scholarly activities of interest to both the company and the University for the mutual benefit of both parties. Such industry sponsored appointments are common in North America, and I hope this development at Monash will be the forerunner of others at Monash.

In terms of building developments, the University continues to grow despite the paucity of Government capital funding. A start was made during the year on the new Multi-discipline Building to help alleviate major accommodation pressures in the University. In particular, it will incorporate the University Art Gallery which will also provide an exciting venue for exhibitions and the University's Art Collection, which is growing in stature every year thanks to a wise buying policy and generous patronage from good friends. This building, designed by Daryl Jackson and costing some \$2.35 million is being funded entirely from non-government sources and, together with the new Computing Laboratory completed in 1984, is a good example of our firm resolve to confront problems, as far as is possible, on our own initiative. Just south of the main campus, construction of the new Queen Victoria Medical Centre is well advanced and on schedule for completion

early in 1987. The availability of a major teaching hospital close to the University will bring to fruition at long last the original concept of a campus hospital, and will be an important addition to health care delivery in the south-eastern region of Melbourne. Unfortunately, funding problems still bedevil this project. A shortfall of more than \$1.85 million still remains of the \$7.85 million cost of the new clinical medical school despite our best efforts to persuade both the Commonwealth and Victorian Governments to fulfil their obligations in this regard. A similar problem is looming in regard to Prince Henry's Hospital. If, as now seems likely, the hospital is relocated to the western or southeastern suburbs, firm funding commitments from the State and Federal Governments must be agreed to in advance on the costs of moving the University's medical departments attached to the hospital.

Some controversy surrounded the entering into a licensing agreement between Monash and IVF Australia Limited to market the University's internationally acclaimed expertise in in vitro fertilisation in the United States. Under this agreement, the world's best technology will be made available to meet the demands of a large market in North America. The operation of IVFA Ltd in this regard will be subject to pioneering Victorian legislation, acknowledged as being the toughest and most comprehensive in the world. The research programs of the University will benefit enormously from the royalties accruing from the agreement, which should ensure that Monash maintains its position at the leading edge in reproduc-

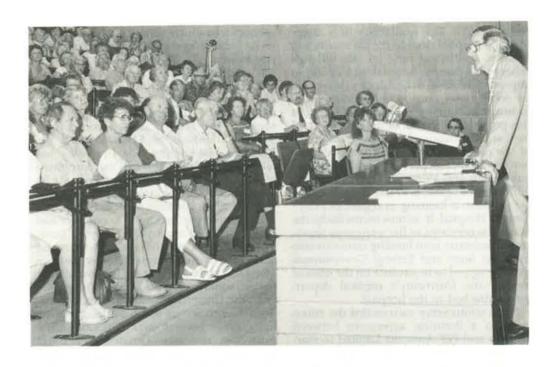
tive biology.

New teaching and research initiatives introduced during 1985 included the establishment of the Centre for Commercial Law and Applied Legal Research within the Faculty of Law, and the creation of the Joint Centre for Statistical Sciences in conjunction with La Trobe and Melbourne Universities and RMIT as part of the CTEC-sponsored Key Centres for Teaching and Research Program. council has approved the establish-

ment of a Graduate School of Management, to be located in the Faculty of Economics and Politics, which will give our administrative studies program greater visibility and autonomy and enable the University to compete more effectively with other management courses. The teaching of Ukrainian at Monash also received a boost from a most welcome donation of \$100 000 from the Ukrainian community. The University has taken the first steps towards the enrolment of full-fee paying overseas students. At its December meeting, council approved a proposal to admit a limited number of overseas students into the Faculty of Economics and Politics in 1986 on a full-fee paying basis. These students will be enrolled over and above the faculty's regular undergraduate quota and will be paying the full cost of their tuition, some \$6 000 per annum. During the year, the University established an Occupational Health Service which will be one of the most comprehensive units of its kind in any Australian university. The new service will be responsible for identifying and providing advice to staff on work-related health problems in the University. A major change in the condition of service for both academic and general staff occurred following council's decision that the University would become a participating institution in the new national superannuation scheme, Superannuation Scheme for Australian Universities, as from 1 December 1985.

The growing influence of State wages boards heralds a new era of industrial relations and changing of the traditional procedures for dealing with employment matters. Where once a cooperative collegiate approach to employment conditions prevailed, confrontation now too often develops as the universities have been dispossessed of their prerogative to deal with personnel matters. Another continuing area of concern is the growing amount of time and resources the University has to divert from the productive areas of teaching and research into increasing government regulatory activities, such as freedom of informa-

The Vice-Chancellor, Professor Ray Martin, speaking at the launch of a campus of the University of the Third Age at Monash in February this year.



tion, equal opportunity, and monitoring of animal experimentation. In addition, both the State and Federal Governments are requiring more and more information and statistical data from the University which is posing an increasing administrative burden on staff at all levels.

I cannot conclude my report for 1985 without mentioning the outstanding ANZ-AAS Festival of Science held at the University in August. This was one of the most successful congresses ever staged by the Australian and New Zealand Association for the Advancement of Science and did much to bring to the lay community — particularly

young people — the excitement of science and its relevance to everyday life. Much of the success of this festival was attributable to the drive and enthusiasm of Emeritus Professor John Swan, who retired from the University in 1984 as Dean of the Faculty of Science. In other areas related to the community, the excellent sporting and accommodation facilities of the University were utilised in August when Monash hosted the XXVIII World Modern Pentathlon Championships and, in February, a campus of the University of the Third Age was launched at Monash, with the promise of new educational frontiers for retired people in the south-eastern region of Melbourne.

DEVELOPMENT AND ADMINISTRATION

Site and buildings

Construction projects completed in 1985 include the Computer Centre air conditioning — stage 3, and extensions to the Department of Community Medicine at Moorabbin Hospital. The major construction project completed in 1985 for the Students' Union was the alterations and additions to the University ski lodge at Mount Buller.

Projects which commenced during the year with completion anticipated in 1986 include the new Multidiscipline Centre, extensions and alterations to the Alexander Theatre and alterations to Medical 'A' Block — stage 3. Work on alterations to the sports amenities for the Students' Union will also

be completed in 1986.

Funds for minor building works, site works and services were applied principally to the road safety program, treating of asbestos, upgrading and modifications to lifts and escalators, fume cupboard modifications, with contributions to Medical 'A' Block — stage 2 and the Multidiscipline Centre.

Legislation

Three new and six amending statutes, and thirty new or amending regulations were made in 1985.

One of the new statutes approved by the Lieutenant Governor in council related to the appointment of honorary professors, and another to conjoint appointments to professorial chairs made in conjunction with other institutions.

The third new statute established the University Sports and Recreation Association as an organisation separate from the University Union. This move followed a decision by council to adopt the recommendations of an inquiry conducted by Mr Justice R.C. Tadgell into the relationship between these two areas of activity.

New regulations establishing a Diploma in Environmental Studies were among those

made during the year.

University publishing

The Monash University Publications Committee met on three occasions during 1985. It considered sixteen requests for financial assistance towards the publication of works by Monash authors, agreeing to support thirteen of them. The total funds thereby committed came to just over \$16 000. Actual payments made in 1985 (including \$15 495 in commitments from previous years) amounted to \$19 782.

The Publications Section produced the customary offical publications of the University and provided Monash authors with a variety of publishing services including copy editing, book design and production, and advice on matters relating to negotiations with commercial publishers and printers.

Safety

Initiatives from within the University saw more groups and individuals become involved in the development and maintenance of preventive and corrective measures and these together with established practices enabled satisfactory standards to be maintained.

An exception occurred with certain classes of overuse injuries which were the focus of some concern. However, the resources of specialist members of staff and selected outside consultants were directed toward this problem and some very encouraging results have been obtained.

Late in the year speed deterrents (road humps) were constructed on the major roads around the campus. Their effectiveness will

be monitored early next year.

The emergency vehicle was required on fewer occasions in 1985 than in the previous two years (1985 — 40, 1984 — 52, 1983 — 57). As usual the Central Services staff have been instrumental in the success of this service.

Nineteen eighty-five saw the adoption of supplementary guidelines on radiation safety which set out the local procedures which would ensure compliance with the Victorian Health (Radiation Safety) Regulations promulgated in 1984. The emphasis on instruction of new research students and staff on radiation safety has continued with major lectures at the beginning of the year. The Radiation Protection Officer presented a paper on microcomputer applications in the radiation protection laboratory at the Tenth Conference of the Australian Radiation Pro-

tection Society, highlighting the current work in the integration of all the personal radiation monitoring records. During the year there were 187 thyroid monitoring sessions for laboratory users of radioactive iodine, of which fifty-nine showed detectable radioiodine in the thyroid. However, all levels were well within the acceptable occupational limit.

STAFF

The recruitment of staff in 1985 continues at the low level of previous years. Under current economic conditions mobility of all 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, ie, 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 1985 was:

	Professor	Reader/ Associate Professor	Senior Lecturer	Lecturer	Principal Tutor	Senior Tutor	Tutor	Total
Arts	20	13	84	42	3	10	33	215
Economics								
and Politics	13	11	36	22	2	6	33	123
Education	5	4	33	8	2	2	5	59
Engineering	9	17	39	11	_	9	1	86
Law	6	7	24	11		9	6	63
Medicine	18	20	59	28	1	25	4	155
Science	20	37	64	23		13	8	165
Other		2		4		-	1	7
Total	91	121	339	149	8	74	91	873

The pattern of teaching-staff recruitment in 1985 was:

	Continuing Appointment	Fixed Term	Short Term or Temporary
Professors	6	_	-
Senior			
Lecturers	_	2	3
Lecturers	7	8	15

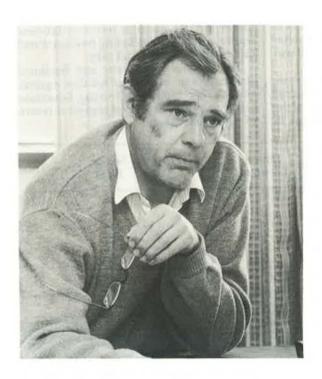
and eighteen senior tutors and thirty tutors, many being employed as a fraction of full-time, took up their first appointments in 1985. Professors J.W. Goding, Pathology, R.A. Jarvis, Electrical Engineering, Yew-Kwang Ng, Economics (Personal), W.R.A. Muntz, Dean of Science, M.C. Pryles, Law, M.B. van der Weyden, Medicine (Honorary), and M.A.J. Williams, Geography, took up their posts during 1985.Dr M.T.W. Hearn, Biochemistry, Dr J.S. Kahn, Anthropology, Dr J.J. McNeill, Social and Preventive Medicine, Dr B. Nelson, French, and Associate

Professor P.E. O'Brien, Surgery (Alfred Hospital) were appointed during 1985 but will not take up their chairs until 1986. Professor J.W. Freebairn will take up the post of Deputy Director of the Centre of Policy Studies during 1986.

Those leaving the University in the year due to resignation, retirement or expiry of fixed- or short-term appointments were:

	Continuing Appointment	Fixed Term	Short Term or Temporary
Professors	3	_	<u> </u>
Readers	3		_
Associate			
Professors	3	-	_
Senior			
Lecturers	12	_	2
Lecturers	5	4	5

and thirty senior tutors and forty-eight tutors. Included amongst those who resigned during 1985 was Professor D.E. Allan, Law.



Academic staff employed solely for research projects, expressed in full-time equivalent staff, comprised 256 research fellows, officers, and assistants.

With a strength of 3 004 equivalent fulltime staff at end April 1985, total staffing is the same as the 1984 total of 3 003, and remains at approximately the same level as for the past six years.

The 1985 distribution of staff over the various fields of activity was:

Teaching and research		Total
Teaching staff	965	
reaching stair		
Support staff	699	1 664
Research		
Academic staff	256	
Support staff	76	332
Library		181
Computing		67

Other academic services	53
Student services	21
Central administration	202
Buildings, grounds, cleaning,	
services	239
Continuing education	11
Independent operations — Student Union, Bookshop,	
Student Union, Bookshop,	
etc.	237

The University records with regret the deaths of Mr D.V.A. Campbell, Dr Chia Shong Chen, Mr A.C. Scott, and Mr L. Sleith.

At the end of 1985 Professors K.H. Hunt and P.W. Musgrave, both former deans, retired and were granted the status of Emeritus Professor.

The University remains within the CTEC 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 1985, the final column indicating the total number of degrees and diplomas awarded since the foundation of the University.

			1985	1961-85
	Male	Female	Total	Total
Bachelor of Arts	147	424	571	9 932
Bachelor of Arts with honours	30	57	87	1 615
Bachelor of Social Work	8	23	31	149
Bachelor of Social Work with honours	1	5	6	175
Master of Arts	8	12	20	376
Master of Librarianship	5	3	8	33
Master of Social Work	1		1	14
Bachelor of Economics	244	161	405	6 102
Bachelor of Economics with honours	10	12	22	565
Master of Administration	34	16	50	518
Master of Economics	10	3	13	180
Bachelor of Education	28	29	57	1 682
Bachelor of Special Education	4	23	27	225
Master of Education	5	9	14	417
Master of Educational Studies	49	31	80	389
Bachelor of Engineering	75	6	81	1 221
Bachelor of Engineering with honours	104	11	115	1 471
Master of Engineering Science	40	2	42	331
Bachelor of Jurisprudence	9	8	17	1 079
Bachelor of Laws	166	86	252	2711
Bachelor of Laws with honours	12	9	21	200
Master of Laws	6	3	9	175
Bachelor of Medical Science	3	1	4	16
Bachelor of Medical Science with honours	6	4	10	155
Bachelor of Medicine, Bachelor of Surgery	68	47	115	1 962
Bachelor of Medicine, Bachelor of Surgery with	20	18	38	609
honours				
Master of Psychological Medicine				3
Master of Public Health	3	2	3	3
Master of Surgery		•:		3
Bachelor of Science	182	184	366	4 605
Bachelor of Science with honours	116	82	198	2 746
Master of Environmental Science	10	1	11	154
Master of Science	13	8	21	354
Doctor of Philosophy — Arts	11	10	21	232
— Economics	3		3	38
 Education 	9	6	15	115
— Engineering	21	1	22	262
— Law	1		1	23
— Medicine	7	5	12	116
— Science	48	9	57	814

Doctor of Engineering				1
Doctor of Letters		22	100	1
Doctor of Medicine	2	1	3	35
Doctor of Science	₽	4		10
Honorary Master of Science		*		4
Honorary Doctor of Letters	¥		1000	10
Honorary Doctor of Economics	€.			2
Honorary Doctor of Engineering				9
Honorary Doctor of Laws	4		4	38
Honorary Doctor of Medicine	•			5
Honorary Doctor of Science			(5)	12
Total degrees	1 523 1 310	2 88	33 418	97

			1985	1961-85
	Male	Female	Total	Total
Diploma in Commercial Law	3	1	4	35
Diploma in Computer Science	2	1		25
Diploma in Education	142	182	324	6 892
Diploma in Educational Psychology	9	18	27	277
Diploma in Engineering Geology	-	9		9
Diploma in English	2	*	2	39
Diploma in Family Law	1	3	4	17
Diploma in General & Comparative Literature	*1	1	1	1
Diploma in Immunology	*:			15
Diploma in International and Comparative Law	43		-	2
Diploma in Japanese Studies	1		1	9
Diploma in Librarianship	2	4	6	29
Diploma in Linguistics		*	-	4
Diploma in Materials Engineering			-	2
Diploma in Microbiology	-			5
Diploma in Migrant Studies	-			22
Diploma in Operations Research	3	5	8	43
Diploma in Slavic Languages			-	1
Diploma in Taxation Law	3		3	36
Total diplomas	166	214	380	7 463

1985 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)	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Arts	88	83	87	86	87	84	84	88	87	84	87
Economics and Politics	80	75	83	85	82	83	80	81	82	81	84
Law	94	91	90	93	97	92	95	90	95	95	95
Science	87	85	80	83	86	87	88	91	92	93	93
Group (b)	95	95	95	98	87	93	95	93	95	99	98
Diploma in											
Education*											
Engineering	64	67	71	73	74	75	83	80	84	87	89
Medicine	90	99	95	95	88	92	92	92	94	90	98

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.

^eCalculated from enrolments in Diploma in Education and Diploma in Educational Psychology.

STUDENT ENROLMENT

The net total undergraduate population decreased from 10 360 in the previous year to 10 077. Higher degree enrolments increased from 2 305 to 2 296 and total enrolments of all students from 13 809 to 13 586. Full details of enrolments are given in the table below.

Of the total of 13 586 students, 1 839 (13.5 per cent of the total) were from overseas as follows: Oceania — Papua New Guinea 3, Fiji 6, New Zealand 13, other Pacific Islands 2; Africa — Ghana 4, Malawi 3, Mauritius 5, Nigeria 1, Zimbabwe 1, Tanzania 1, Uganda

2, other Africa 1; America — Canada 10, Mexico 1, USA 15, West Indies 2, South America 2; Asia — Brunei 9, Hong Kong 121, India 10, Malaysia 1 335, Singapore 97, Sri Lanka 29, Israel 1, other Mid East 1, Bangladesh 7, Burma 2, China 10, Indonesia 50, Japan 22, Korea 10, Pakistan 2, Philippines 2, Taiwan 2, Thailand 14, Turkey 2, Vietnam 1; Europe — UK and Eire 13, France 2, Germany 6, Italy 1, Malta 1, Netherlands 4, USSR 1, Nordic Lands 1, other Europe 10. A total of 1 081 males and 758 females.

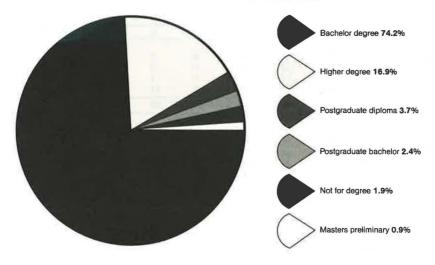
Net enrolments by degree/faculty 1985 (as at 30 April)

	Full-time			P	art-time		Total			
Faculty and Year	M	F	Т	M	F	Т	M	F	Т	
Higher degree										
Higher doctorate	0	0	0	6	0	6	6	0	6	
PhD	320	157	477	115	62	177	435	219	654	
Masters	229	108	337	782	517	1 299	1 011	625	1 636	
Total	549	265	814	903	579	1 482	1 452	844	2 296	
Master preliminary	22	17	39	41	42	83	63	59	122	
Postgraduate diplomas										
Arts:										
DipEngl	0	0	0	1	8	9	1	8	ç	
DipJapStud	1	0	1	0	3	3	1	3	4	
DipApSoc	2	3	5	0	1	1	2	4	6	
DipLibr	0	1	1	1	5	6	1	6	7	
Economics & Politics:										
DipOpsRes	6	3	9	6	3	9	12	6	18	
Education:										
DipEd	88	166	254	35	58	93	123	224	347	
DipEdPsych	9	19	28	9	15	24	18	34	52	
Engineering:										
DipMatEng	0	0	0	2	0	2	2	0	2	
Law:										
DipComLaw	0	0	0	19	6	25	19	6	25	
DipInt&CompLaw	0	0	0	3	1	4	3	1	4	
DipTaxLaw	3	1	4	10	6	16	13	7	20	
DipFamLaw	0	0	0	2	4	6	2	4	6	
Medicine:										
DipImm	2	0	2	0	0	0	2	0	2	
Total	111	193	304	88	110	198	199	303	502	
Postgraduate										
Bachelors degrees										
Education:										
BEd	4	3	7	86	103	189	90	106	196	
BSpecEd	0	3	3	21	106	127	21	109	130	
Total	4	6	10	107	209	316	111	215	326	

	_		Full-time		P	art-time			Total	
Faculty and Ye	ear	M	F	T	M	F	T	M	F	Г
Bachelor degr	rees									
Arts: BA	I	277	577	854	53	207	260	330	784	1 114
DA	II	190	389	579	60	185	245	250	574	824
	III	143	404	547	116	314	430	259	718	977
	IV	32	75	107	12	35	47	44	110	154
	Sub-total	642	1 445	2 087	241	741	982	883	2 186	3 069
BSocWk	III IV	2	37 29	39 36	0	0 3	0	2	37 32	39 39
	Sub-total	9	66	75	0	3	3	9	69	78
Economics and	pine .		-							
BEc	I Tohtics.	210	164	374	23	15	38	233	179	412
	II	202	195	397	33	11	44	235	206	441
	III	228	150	378	152	70	222	380	220	600
	IV	9	6	15	0	0	0	9	6	15
	Sub-total	649	515	1 164	208	96	304	857	611	1 468
Economics & F Engineering	Politics/									
BEc/BE	I	22	0	22	0	0	0	22	0	22
	Sub-total	22	0	22	0	0	0	22	0	22
Engineering:										
BE	I	206	30	236	0	0	0	206	30	236
	11	237	29	266	1	0	1	238	29	267
	III IV	205 234	19	224	4	1	5	209	20	229
	Sub total	882	98	254 980	14	2	15	901	100	1 001
Law:	Sub-totai_	004	30	300	13		21	301	100	1 001
LLB	I	0	0	0	0	2	2	0	2	2
	II	2	2	4	8	11	19	10	13	23
	III	13	10	23	10	11	21	23	21	44
	IV/V_	44	25	69	22	16	38	66	41	107
	Sub-total_	59	37	96	40	40	80	99	77	176
BJuris/LLB	I	3	8	11	2	0	2	5	8	13
	II	5 19	9 14	14 33	1 0	3 3	4 3	6 19	12 17	18 36
	IV/V	15	9	24	9	5	14	24	14	38
	Sub-total	42	40	82	12	11	23	54	51	105
BJuris	ī	1	0	1	0	0	0	1	0	1
3	III	0	0	0	1	0	1	1	0	1
	Sub-total_	1	0	1	1	0	1	2	0	2
Law/Arts: BA/LLB	I	33	49	82	0	3	3	33	52	85
DA/LLD	ıı	35	56	91	2	3	5	37	59	96
	III	44	67	111	ī	7	8	45	74	119
	IV/V	84	110	194	10	17	27	94	127	221
	Sub-total_	196	282	478	13	30	43	209	312	521
Law/Economics Politics:	s &c									
BEc/LLB	I	60	25	85	0	0	0	60	25	85
	II	63	40	103	1	0	1	64	40	104
	III	76	33	109	4	1	5	80	34	114
	IV/V_	80	39	119	18	5	23	98	44	142
	Sub-total	279	137	416	23	6	29	302	143	445
Law/Science:	v	10	o	01	0	^	0	10	0	0.1
BSc/LLB	II	13 18	8	21 27	0	0	0	13	8 9	21 27
	III	10	11	21	0	1	1	18 10	12	27
	IV/V	29	17	46	3	2	5	32	19	51
	Sub-total	70	45	115	3	3	6	73	48	121
	-								.,	

Medicine:								0.1	0.0	148
MB,BS	I	81	66	147	0	0	0	81	66	147
	II	84	65	149	0	0	0	84	65	149
	III	82	61	143	0	0	0	82	61	143
	IV	96	64	160	0	0	0	96	64	160
	v	86	56	142	0	0	0	86	56	142
	VI	92	69	161	0	0	0	92	69	161
	Sub-total	521	381	902	0	0	0	521	381	902
BMedSc	-	11	2	13	0	0	0	11	2	13
	Sub-total	11	2	13	0	0	0	11	2	13
Science:	-									
BSc	I	313	243	556	6	7	13	319	250	569
	II	262	232	494	27	20	47	289	252	541
	III	267	222	489	82	63	145	349	285	634
	IV	100	95	195	2	2	2	102	97	199
	Sub-total	942	792	1 734	117	92	209	1 059	884	1 943
Science/Engineer	ring:									
BSc/BE	I	58	9	67	0	0	0	58	9	67
	II	54	3	57	1	0	1	55	3	58
	III	57	8	65	1	0	1	58	8	66
	IV	18	2	20	0	0	0	18	2	20
	Sub-total	187	22	209	2	0	2	189	22	211
	Total	4 512	3 862	8 374	679	1 024	1 703	5 191	4 886	10 077
Not for degree		5	9	14	91	158	249	96	167	263
Total other than higher degree		4 654	4 087	8 741	1 006	1 543	2 549	5 660	5 630	11 290
Total net enrolments		5 203	4 352	9 555	1 909	2 122	4 031	7 112	6 474	

Total net enrolments as at 30 April 1985: 13586



Faculty of Arts

Dean: Professor J.D. Legge, MA Melb., DPhil Oxon., FASSA

Student enrolment

In 1985 the faculty was set a student load target of 2 880 EFTS (equivalent full-time students) of which 2 380 EFTS was allocated to the undergraduate area. As this figure was marginally smaller than actual load at the census date in 1984 it was anticipated that the intake of new bachelor degree candidates in 1985 would remain at the 1984 level. Reductions in intakes in 1983 and 1984 had, however, a significant impact on progression and retention rates and it proved necessary to expand the intake in 1985 to compensate. Despite the increase in the size of the intake the minimum score for entry for HSC candidates increased from 252 in 1984 to 265 in 1985. This is assumed to have been the consequence both of a reduction intake into the Faculty of Arts at the University of Melbourne and a variation to 1984 HSC pass rates implemented by VISE. Student load at 30 April 1985 was some 28 EFTS short of the control figure. A slight growth in enrolments is anticipated in 1986.

Departmental changes

The budgetary constraints mentioned in the last report continue to operate. Partly in response to this, but mainly as part of a long term plan, the faculty has decided to amalgamate the departments of French and Spanish. This will enable a coherent approach to the study of closely related languages and literatures and may also provide a framework for the introduction, in due course, of some teaching of Italian. Jointly planned courses will also enable economies to be introduced into what has been, in recent years, an over-staffed area judged in terms of student enrolment.

Staff

Professor M.I. Logan, who, since 1982, had served for part of his time as Pro-Vice-Chancellor, was appointed to that position on a full time basis. The faculty congratulates him on his selection, at the end of 1985, as Vice-Chancellor-Designate. In January, Professor Martin Williams took up the chair of Physical Geography to which he had been appointed during the previous year.

Two other chairs were filled during the course of the year. Dr Joel S. Kahn of University College London, was appointed to the chair of Anthropology made vacant by the death of Professor Michael Swift. Like Professor Swift, Professor Kahn has a major research interest in Western Sumatran society. Professor Brian Nelson of the University College of Wales at Aberystwyth, has been appointed to the chair of French in succession to Professor Jean Garagnon who returned to France to take up a position at the University of Corsica in 1984.

Dr Joan Beaumont took up a lectureship in History; Dr Thea Brown was appointed to a senior lectureship and Mrs Janet Allen and Mr Christopher Goddard to lectureships in Social Work. Mrs Allen's appointment strengthens the fieldwork side of the Social Work course and, in particular, enables the development of student fieldwork placement strategies in country areas. Dr Richard Stayner resigned from the Department of Librarianship to take up a position as Project Director in the Rural Development Centre at the University of New England. Dr Len Grant, of the Department of Philosophy, retired after twenty-four years of service. Dr P. de Dekker was appointed to a senior research fellowship in Geography under Professor Williams ARGS Program Grant.

Dr Conrad Hamann and Professor Margaret Plant contributed to the lecture program organised by the Australian Academies of the Humanities and Social Sciences for the Victorian Sesquicentennial celebrations. Professor Plant continues as a council member for the Australian National Gallery, Canberra. Ms Memory Holloway was Commissioner for Australia at the Sao Paulo Biennial, Brazil. Associate Professor Bolitho left to take up the Edwin O. Reischauer Chair in the Department of East Asian Languages

and Civilisation at Harvard University. He is the fifth member of the Department of Japanese to be appointed to a chair elsewhere. Professor Leslie Bodi, Dr Pavel Petr, Dr David Roberts and Dr Philip Thomson gave papers at the VIIth International Congress of Germanists at Gottingen in August.

Dr Harold Love has been invited to the Munby Fellowship in Bibliography, Cambridge University Library, for 1986. During 1985 Mr Bruce Knox held a visiting fellowship at Magdalen College, Oxford. Mr Michael Godley held a fellowship at the Centre for Chinese Studies at Berkeley.

Professor Margaret Plant was elected as a Fellow of the Academy of the Humanities and Professor G. Davison and Dr J. Powell were elected as Fellows of the Academy of the Social Sciences. Professor J.D. Legge has served as Chairman of the State Library/Museum Buildings Advisory Committee.

Undergraduate studies

A number of new courses were offered for the first time in 1985. An innovative course, Text and Context, was offered by the Centre for General and Comparative Literature and attracted its full quota of students. Using both literary and non-literary material from different periods and countries, it is designed to introduce students to reading as a critical practice and to introduce them to problems of language and meaning. 1985 was also the first full year of operation of a computer-assisted language teaching program developed in the Department of French by Dr J. Burston. The Department of History offered a new first year course in European Society since 1915. Faculty Board approved the introduction of an honours degree in Classical Civilisation.

Three students of German received scholarships from the German Academic Exchange Service (DAAD) to enable them to study at the University of Cologne and a fourth studied at Trier with the assistance of faculty funds.

The courses in Ukrainian, funded by the Australian Ukrainian community, have continued. The program has been assisted by a gift of \$100 000 and the contract has been renewed to continue the Ukrainian lectureship for a further three years.

Graduate studies and research

Four hundred and fifty-six students were enrolled as postgraduates in 1985. During the year, twenty-two students completed the requirements for the degree of Master of Arts, eight for the degree of Master of Librarianship and one for the degree of Master of Social Work. Nineteen students, enrolled in Arts departments, completed the requirements for the degree of Doctor of Philosophy and seven qualified for the award of Diploma in Arts. The new Diploma in Applied Sociology was available for the first time.

The inter-disciplinary centres of the faculty continued to flourish. The Centre of Southeast Asian Studies sponsored thirtythree Thursday morning seminars, twentytwo of which were by visitors to the centre and the remainder by students and staff of the centre. The centre also sponsored two weekend seminars, one dealing with Development in Sarawak and one dealing with Wage Labour and Social Change in Asia. Four working papers were published and four monographs are now at various stages of production. The Centre for Migrant Studies changed its name to the Centre for Migrant and Intercultural Studies and its committee has become a Standing Committee of the Professorial Board. The centre, together with the Department of German, hosted the visit of this year's Monash Visiting Professor, Professor Joshua Fisham, Distinguished Research Professor at Yeshivah University, New York, who contributed to the centre's regular seminar program, conducted an all-day research seminar on immigrant language maintenance and maintained close contact with colleagues and graduate students. The Journal of Intercultural Studies is now published by the centre and a series of working papers, the first two issues of which have appeared, has been established.

Dr Conrad Hamann has been joint editor of the architectural journal Transition and Professor Margaret Plant is editor of the Australian Journal of Art. 1985 saw the appearance of the first volume of a new international journal, I Tatti Studies: Essays in the Renaissance, under the joint editorship of Dr F.W. Kent, reader in History and two overseas historians. Members of the Department of History played a central role in encouraging academics to engage in scholarly public controversy by taking part in a volume of essays entitled Surrender Australia? Geoffrey Blainey and Australian Immigration, edited by Professor M.C. Ricklefs and Dr A. Markus.

Dr Philip Ayres of the Department of English has been commissioned to prepare the official biography of Malcolm Fraser and Ms Brenda Niall has been invited to write the authorised biography of Martin Boyd. The Department of German has prepared for publication a volume of essays commemorating German contributions to the development of Victoria and the volume, The German Contribution: Sesquicentenary Essays on German-Victorian Crosscurrents, 1935-1985, edited by Leslie Bodi and Stephen Jeffries, has now gone to press. A comprehensive bibliography of German Australiana prepared by S. Radvansky, L. Bodi and S. Jeffries is nearing completion. A paper entitled 'Weakness of Will' by Professor F.C. Jackson of the Department of Philosophy, was selected for inclusion in volume seven of the Philosopher Annual as one of the best ten papers of 1984. Professor Peter Singer has been invited to write the article on ethics for the new edition of the Encyclopaedia Brittanica.

The faculty, in collaboration with other institutions, has taken the initiative in creating an institute for the study of French-Australian relations.

MOSA

The Monash Orientation Scheme for Aborigines has now developed the two programs planned for it: the orientation year to prepare candidates for university study and the counselling and tutoring program for those who have moved on into the undergraduate stream. Of the five students who passed the orientation course in 1984, two were forced to withdraw for personal reasons and the remaining three completed successfully their first year of university study. Eleven students enrolled in the orientation course in 1985 and of these nine were successful in gaining provisional matriculation and obtained places in the faculties of Arts, Law and Economics and Politics.

Exhibitions, conferences, the creative and performing arts

During 1985 the Department of Visual Arts mounted five major exhibitions in the Monash Gallery: Northern Lights — European and American Contemporary Art from a Melbourne Private Collection; School Ties Early Works on Paper by Ian Armstrong, Russell Drysdale, Peter Purves Smith, Harry Rosengrave and Fred Williams; Australian Visions — 1984 Exxon International Exhibition, organised by the Guggenheim Museum, New York and sponsored by Esso Australia Ltd and the Visual Arts Board of the Australia council; Irreverent Sculpture, including work by Barry Humphries, Colin Lanceley, Mike Brown and others; Etching and Collecting, consisting of prints from the Burnell bequest of Monash University combined with selected works from other public galleries.

The Department of Music hosted the Ninth National Conference of the Musicological Society of Australia. The conference, convened by Dr Margaret Kartomi, attracted a strong national and international attendance. In connection with the conference, the department, in association with the

Marie Maclean of the Department of French who was this year appointed to chair the Board of Interdisciplinary Studies.



Indonesian Arts Society, presented an exhibition of musical instruments of Indonesia at the Gryphon Gallery, Melbourne College of Advanced Education. Dr Kartomi also convened a session on Conservation of the Traditional Arts of ASEAN, Australia and New Zealand for the ASEAN Interaction program arranged by the ANZAAS Festival of Science.

The distinguished English film director, Peter Watkins, well known for his production of *The War Game*, was film-maker in residence during third term. Mr Watkins led seminars in the Department of Visual Arts and also participated in teaching at the Footscray Institute of Technology.

Once again, the Writer-in-Residence program took the form of inviting individual poets and writers to the University to discuss or give renderings of their work, rather than of appointing a single writer-in-residence. Participants in the program included Harry Kemp and E.A. Markham (Britain), Paul

Kane (USA) and A.D. Hope, David Constantine, Fay Zwicky, Noel Rowe and Barbara Giles (Australia). In this form the program has continued to be successful and to attract a more varied student participation than the conventional nine weeks residency.

Readings of new Australian plays by the Playbox Theatre Company continued with support from the faculty and the Vera Moore Fund. *The Caucasian Chalk Circle* by Bertold Brecht was the subject of a student production directed by Peter Fitzpatrick.

The Department of Indonesian in 1985 staged its third successive Indonesian language play *Kuda-Kuda* (Horses). This production was made possible by the support of the Vera Moore Fund and proved to have enormous appeal to secondary schools and the resident Indonesian community.

Visitors

Visitors to the faculty included Professor H. Schaller of Marburg University and a dele-gation of three Soviet educationalists headed by Mr V.K. Sidorov, the Deputy Minister of Education of Kazakh (Slavic Languages), Professor Joshua Fishman, Distinguished Research Professor at Yeshivah University, New York (Migrant and Intercultural Studies — German), Professor J.B. Sullivan of Santa Barbara and Professor L. Mooren of the Catholic University at Leuven (Classical Studies), Professor Gerald Dworkin of the University of Illinois, Professor Joel Feinberg of the University of Arizona. Professor David Lewis of Princeton University and Dr D.H. Mellor of the University of Cambridge (Philosophy), Professor Earl Miner of Princeton University, Professor Xavier Pons of the University of Toulouse, Professor Edwin Thumboo of the University of Singapore, Professor Rod Lyall of the University of Glasgow, Dr Alan Hughes of the University of British Columbia, and Professor Robert Ross of the University of Texas (English) and Mr Puta Oka Sukanta, the Indonesian poet (Indonesian and Malay).

Faculty of Economics and Politics

Dean: Professor W.A. Sinclair, MCom Melb., DPhil Oxon., FASSA

One of the faculty's major concerns for many years has been management education. In 1985 an internal review of the Master of Administration course was undertaken and as a result a Graduate School of Management was established. Professor A.H.M. Fels was appointed Director. The aims of the new development are to achieve greater coherence in the planning of the Master of Administration program, to give it a greater degree of autonomy, and to make it more visible outside the faculty. An immediate task for the Graduate School will be to consider the implication of changes in the Master of Administration degree suggested by the internal review. The intention will be to maintain the existing strength of the faculty in management education, the Master of Administration being the largest single graduate program in the faculty with an enrolment of 240 out of a total higher degree enrolment of 289 in 1985.

This was the first year of admission of students into the combined course for the degrees of Bachelor of Economics and Bachelor of Engineering. A quota of twenty students was set and the initial intake confined to students taking Civil Engineering. The faculty agreed during the year to extend the course to include the students in Mechanical Engineering and increase the quota to thirty.

The Centre of Policy Studies continued its major role in the research activity of the faculty. In accordance with a strategy of maintaining the considerable momentum built up by the centre, Professor J.W. Free-bairn, formerly of La Trobe University and the Business council of Australia, was appointed as Deputy Director of the centre in 1986.

The faculty was pleased to receive a donation of seven personal computers from IBM and was able to use these as a nucleus for the establishment of a laboratory of personal computers to be used for teaching purposes. Although the expansion of technical facilities has unfortunately not been matched by the Donald Cochrane Library, owing to the

static funding of the past several years, the library continues to perform an important ancillary function in the faculty. Both the computer facilities and the library have become increasingly important to the Master of Administration program in particular.

Undergraduate courses

The continued higher demand for the Bachelor of Economics degree was indicated in the jump in the Higher School Certificate score required for entry from 280 to 296. Although some of the rise should be attributed to changes in methods of assessment made by the Victorian Institute of Secondary Education as the body responsible for the Higher School Certificate, its sharpness also reflects increased competition for admission to the degree. There was a fall in the number of students taking other than higher degrees from 2 032 to 1987 resulting from the uncertainties associated with the system of making offers to new students. Nevertheless, the student to staff ratio continued to be exceptionally high at 18.16. The problem underlying this adverse ratio are exceptionally severe in the area of Accounting and Finance. This department is experiencing great difficulties in maintaining staff levels as a result of the financial attractions of alternative employment for suitable qualified persons. As in previous years, Monash graduates in 1985 had a higher pass rate in the professional year examinations of the Institute of Chartered Accountants than any other university and it is essential to the maintenance of this pre-eminence that we retain our high quality staff.

Visitors

The faculty continued to attract a large number of distinguished academic visitors in a wide range of areas. Among them may be noted that Mr Masel, who had recently retired as Chairman of the National Companies and Securities Commission, was with

The faculty was pleased to receive a donation of seven personal computers from IBM. From left to right are Dr Rob Willis (Econometrics and Operations Research), Mr Gordon McAuslan (IBM Australia), the Vice-Chancellor, Professor Ray Martin and Professor W.A. Sinclair, Dean of the Faculty of Economics and Politics.



us as a Visiting Fellow in the second half of the year. He was attached to the Department of Accounting and Finance to teach a graduate course in Securities Regulation and the faculty generally derived great benefit from the knowledge he was able to bring from having held his former position. The faculty was also pleased to have the services of Emeritus Professor D.C. Corbett for another year. Although his principal task was to teach a graduate course in Public Administration, Professor Corbett was also responsible for the organisation of a conference on education for public sector management.

Staff

Professors R.R. Officer and D.E.A. Giles resigned, Professor Giles to take up an appointment at the University of Canterbury. Mr Burns, from the Department of Economics, also resigned to take up a chair at Flinders University. Professor C.G. Peirson was elected President of the Victorian Divison of the ASA.

Many members of staff continued to serve on committees and tribunals advising government and industry, while other staff maintained editorial roles on journals and other publications.

Faculty of Education

Dean: Professor Peter J. Fensham, MSc Melb., PhD Brist. and Cantab., FRACI, ABPsS, AAPsS

1985 has been a year in which a number of notable events occurred in the Faculty of Education. It is likely, I believe, that some of these will also be very significant for the development of the faculty over the next decade. Among these notable events were the reorganisation of the academic staffing, a major attempt at forward planning, and the early retirement of two senior members of the academic staff. I wrote last year about the range of effects that long-term financial constraints cause in a faculty like ours which has more than 95 per cent of its budget committed to staffing. The most stark reminder of this in 1985 was the count of staff (sixty-three academic, thirty general) compared with seventy-seven and thirty-six res-

pectively in 1980.

After much careful planning, including a staffing review in 1983 and considerable discussion at all levels in 1984, it was decided to regroup the academic staff into four groups. This replaces the seven divisions which had essentially been the form of organisation we had had since the early 1970s when there seemed every prospect that we would by now be a faculty of about 100 staff. The nature of the new groupings is that they bring together scholars with similar disciplinary background and interest. Thus there is a group with psychological or behavioural science backgrounds, and one with social science, humanities, and science/mathematics backgrounds. I believe these new groupings, together with our continuing strong commitment to a single department will be a sound and flexible base for teaching initiatives and for a new sense of responsibility for aspects of our work, such as the methods and practice of teaching in the Diploma in Education.

If this new organisation is to have a positive and creative effect, it is important that these constituent groups have a confidence about their future. Accordingly, we are now in the process of developing staffing and teaching policies that will give some sort of guarantee to each group about their staffing complement and still provide flexibility to meet the surges that occur in student de-

mands for certain subjects and courses.

The University's requirement that each faculty produce a five-year development plan was a useful spur in mid 1985 for a much more considered view of where the faculty is, where it has come from and where and how it wishes to go. The first decade of the faculty's existence (1964-1985) can be characterised by an applied emphasis that was concentrated on the initial preparation of secondary teachers. Very quickly the faculty was the largest supplier of secondary teachers in Victoria, helping to meet the State's desperate need as its secondary schooling system expanded at an unprecedented rate. More than 600 graduate students took the Diploma of Education in 1975. The second decade (1975-1985) can now be characterised as the period in which the faculty became established in Australia as having a pre-eminent and quite distinctive role in research. As the expansion of the school system slackened, the faculty swiftly redirected its teaching resources. Initial teacher education was halved to its present level of about 300 and a number of courses for the further professional training of teachers developed to engage a student load of about 600 of whom more than 400 are undertaking a masters degree based on advanced course work and a substantial independent project of investigation. A further student load of about 200 are engaged in the research degree at the masters or doctorate level. The perspective of the faculty for its third decade is that it should be one in which its position in research and scholarship should be maintained while the applied contribution at the post-initial stage should be both broadened and sharpened to meet the very different needs that are emerging in the schools and in the wider educational scene in Victoria.

Staff

The two retirements (Professor Peter Musgrave and Dr Margaret Gilchrist, both early retirement arrangements) mentioned above, make 1985 the first of a continuous succession of years in which there will be at least one retirement of an academic staff member. The faculty, like the rest of Monash, has an age spectrum among its staff that it tilted towards an ageing profile. This makes, on the one hand, for a mature band of scholars who are producing a good quality and quantity of research. On the other hand, it brings certain problems such as morale in the face of limitations on further personal promotion, or gaps between staff and students, and staff and the educational scene in practice, to which their teaching and research is addressed.

The retirement of Professor Musgrave in 1985 is of particular note because he was for five critical years, 1977–1981, the dean of the faculty. We owe him a great debt for his leadership in that period when, as indicated above, the shape of the faculty had to change rapidly. Not only were these changes made in a most successful way but he enabled the staff of the faculty as a whole to identify with and be responsible for how the changes occurred.

Dr John McArthur, another senior staff member in the field of educational administration, also resigned during the year. There were also several resignations among the general staff. Another notable staffing event was the retirement at the end of 1985 of Mr Lindsay Shaw who was the faculty's secretary throughout the last eleven critical years. Once again, we owe much to him for his great administrative skills and judgement and for his willingness to serve the faculty in so many ways.

Our development plan argues a case for no further reductions in staff since the replacement of the more senior retirees by persons at the lecturer level should be accepted as sufficient to provide financial flexibility rather than by continuing the damaging staff losses of the last eight years. Such stability in the number of staff together with several other steps that are aimed at the morale problem could, I believe, make for a continuance and improvement of the quality of teaching, research and professional leadership the faculty offers.

Visitors

The faculty welcomed many scholarly visitors in 1985. These visitors have worked closely with staff and research students. We have also continued to share these wellknown scholars with other tertiary centres in Australia. Dr Jon Nichol (History Teaching, Exeter University), and Professor Richard Shavelson (Education Psychology, UCLA) completed a three-year plan in which each academic division was able to have a visiting lecturer. Among a number of special projects in 1985, many other scholars were also supported as visiting lecturers. Professor Sigurdson (Mathemathics Education, University of Alberta) was with us for six months on sabbatical leave and he was heavily involved with the Mathematics Education Centre and several other projects. Ongoing and developing relations and projects had already been established with other overseas scholars.

Special projects

A relatively small outlay of funds from salary savings and outside earnings was used very effectively in 1985 to support a number of special projects suggested by staff.

As a result of my own visit to the University of Alberta at the beginning of 1985, we have activated a dormant relation with the Faculty of Education there in the form of a teaching exchange. Dr Andrew Spaull and Dr Glen Rowley spent a month in November-December teaching in the faculty in Edmonton and investigating how their counterparts plan and carry out their teaching and research roles. In exchange, the faculty at Monash will play the host role in mid-1986 to Professor Carney and Professor Maguire of the Edmonton faculty.

Other projects include the trialling of distance education by Dr Edwards, a workshop on meta-analysis by Dr Sharpley, the establishment of a weather station by Mr Gipps and access to a data bank for children with disability by Dr Bartak. These innovations,

along with our visitor program are proving effective means of maintaining morale and drive.

Students and courses

The enrolment of students for the faculty's seven degree and diploma courses is a complex task. For example, in the Diploma in Education it is necessary to match them with schools for supervision. The great majority of those in the other courses are part-time students with varying degrees of availability for studies. The skill of our administrative staff was very evident in the April 30th report when our student load stood at 1 090.5 against a target of 1090. This load represents 1 368 persons. It may not be known to everyone that we do make double use of the faculty building and its resources. The 300 full'time students for the Diploma in Education are here during the day and around 900 students arrive after 4.00 pm to provide a second population of users through into the evening of each week

The special group of science/mathematics graduates completed their training in April and so another eighteen sorely needed teachers in these fields were available to the schools. Such an additional program, like the Bachelor of Education summer term which also concluded in March 1985, put considerable strain on staff although they are rewarding in many ways and have enabled us to try a number of teaching innov-

Further work has been done in 1985 on the ways in which our course work degrees interact. By the end of 1985 a proposal to rationalise the subjects that make these degree programs had been formulated. If this can be implemented in 1986 it could go a long way to overcoming problems that have arisen as our subject offerings outstretch our dwindling staff numbers and some subject fields come under intense student demand while others are not so popular.

Supervision of our many higher degree students is again very rewarding but also very strenuous and demanding on staff. One aspect of a largely part'time student body that adds to this pressure on staff is the fact that quite a large percentage of our research students will experience a change in supervisor. Late in 1984 the CTEC asked the faculty to undertake an evaluation of its programs (and those at Sydney University) for higher degrees. More than 700 graduates since 1969 have been surveyed during 1985 and a range of employers of such masters and doctoral graduates have been interviewed. The results of this study should be available during the firt half of 1986 in time for the Silver Jubilee celebrations.

Research

The continuing high profile of the staff's research is evident in a number of ways. The first and most direct are the products in the forms of books, journal articles and reports. The report for 1985 indicates that the quality and quantity of these are being well maintained. A second is the eagerness of established scholars from overseas and other parts of Australia to visit the faculty. A third are the calls on staff from the wider Australian and Victorian educational system for expert help in a variety of ways. Among examples in 1985, Dr Judith Chapman and Dr Diana Davis were engaged for special projects by the State Board of Education and the Australian Studies project respectively, and Dr Gerald Burke was invited to spend a semester in the Centre for Higher Education at the University of Melbourne.

Five staff were granted support from ARGS for continuing on new projects and five projects were individually supported by the Monash Special Research Fund. A consequential aspect of this research support and similar support from other bodies is the presence in the faculty of a number of full-time research fellows and assistants. The intensity of effort and sharp focus they bring

Professor Peter Musgrave who retired at the end of 1985. Professor Musgrave was Dean of the Faculty of Education from 1977 to 1981.



to their work helps to create an excellent atmosphere for research. In this regard, it is also pleasing to note that Dr Hannah Arzi from Israel took up her post-doctoral fellowship in May 1985 and in 1986 will be joined by Dr Marjorie Theobald. Only three such fellowships have yet been gained in the faculty, all by women.

Professional service

The extent and diversity of the faculty's links with the profession of education continues to surprise me. Each year I can only give a few examples of how this occurs.

Dr Jeff Northfield and Mrs Barbara Johnson became members of two of the Regional Boards of Education that were established for the first time in 1985. The former adds the heavy responsibilities of chairing the Westernport Board to his long record of professional involvement. Dr Judith Chapman was a key contributor to the National Conference of Secondary Principals. Dr Stewart Sykes is on the Ministry's Integration Task Force. Professor Tisher continues the involvement of former faculty members with the Australian College of Nursing. Dr

Richard Gunstone initiated a new network of teachers trying to use ideas of children's science in teaching, and Dr Don Hutton is now the chief examiner for Physical Sciences in HSC Group 1.

The Monash Teachers Centre continued its work facilitating access to the faculty's resources for large numbers of schools and teachers. It also extended its work with regional and more specialised staff with seminars on integration, multiculturalism and evaluation. Ms Lois Johnson, the centre's director, and its committee are to be congratulated on their efforts.

The Centre for Mathematics Education had a particularly lively first full year of existence in 1985. There was a good balance between scholarly activities and more practically oriented ones. Support for research projects, research seminars and the appearance of the first of the centre's publications for research findings for teachers were among the scholarly activities. More practically oriented ones included videos on the Mathematics of Diving, Critical Incidents in the Mathematics classroom, and the development of a Mathematics Trail around Melbourne for parents and children.

Faculty of Engineering

Dean: Professor L.A. Endersbee, AO, FTS, BCE, ME Melb., Hon.MEIC, FIE Aust., M Aust.IMM

Student entry

Because of the higher projected level of enrolments in second and later years of the courses, primarily arising from improving pass rates and higher quality students, the intakes to both the Engineering and Science/Engineering courses were reduced for 1985. At the same time, the imposition of a quota of 25'30 per cent of places for overseas students entering each course resulted in approximately the same overall intake of local students as in 1984. Actual EFTS (equivalent full-time students) for 1985 was 1093.

Undergraduate courses

The five-year consecutive degree Bachelor of Science/Bachelor of Engineering program continued to attract very able students with high demand especially for the program offering Bachelor of Science (Computer Science) with Bachelor of Engineering (Electrical and Computer Systems Engineering).

In conjunction with the Faculty of Economics and Politics, a five-year combined course was developed for the degrees for Bachelor of Engineering (Civil) and Bachelor of Economics. The course commenced in 1985 with a quota of twenty places, all of which were filled. A five-year combined course has also been developed for the degrees of Bachelor of Engineering (Mechanical) and Bachelor of Economics for implementation in 1986. In conjunction with the Faculty of Law, a six-year Bachelor of Engineering (Mechanical) and Bachelor of Laws has been developed, and will be implemented in 1987.

Up to and including 1983, one of the requirements of the Engineering course was completion of a two-week course of workshop practice training, provided by several technical schools in the metropolitan area. Due to budgetary limitations the faculty reluctantly agreed to suspend the formal requirement that students attend these

courses. The continuance of this suspension is a matter of concern to members of faculty.

Research consulting and continuing engineering education

The faculty maintains a wide range of contacts with Australian engineering industry and professional engineering groups; this is reflected in the extensive faculty research programs, a wide range of consulting activities of government and industry, and in continuing engineering education programs designed to present the latest engineering developments to the profession.

The research activities in the faculty are stimulated by contact with industry, and the focus on solutions to problems occurring in practice, but the faculty continues to be frustrated in its research by the very low level of public and private funding available for engineering research in Australian universities. There is nothing in engineering research comparable to the level of funds made available for medical research in Australian universities. Yet it is evident that technological advance in Australian universities is of vital national importance. We believe that there is need for an Australian Engineering Research council, with a level of funding to operate in much the same way as the National Health and Medical Research council. The low level of scholarship stipends, which are less than those in medical research, is a major factor in discouraging young Australian engineers from enrolling for research degrees in Australian universities. Two hundred and twenty-five research papers were published during the year.

Staff movements, honours and awards

Professor K.H. Hunt retired after nearly twenty-five years at Monash, fifteen of those years as founding Dean of the Faculty of Engineering and ten as Professor of Mechanism in the Department of Mechanical EngiAssociate Professor Reg McPherson (Materials Engineering) with Metglass. Professor McPherson convened a session called 'New frontiers in glass technology' for the ANZAAS Festival of Science.



neering. Professor L.A. Endersbee, who has completed ten years as dean, accepted reap pointment for a further period of two years. Professor R.A. Jarvis was appointed to the second chair in Electrical Engineering. Professor O.E. Potter was awarded the Arnold Greene Medal for 1985 by the council of the Institution of Chemical Engineers, London, in recognition of his contribution to the development of Chemical Engineering and the work of the Institution of Australia. Associate Professor W.J. Bonwick and Dr D.B. Giesner organised the 20th Residential School in Power System Electrical Engineering held at Normanby House. Lecturers were drawn from all over Australia with

fifty-six delegates, all practising engineers, two of whom came from overseas. Associate Professor B.W. Cherry has been appointed executive director of the board established by the Australian Corrosion Association to set up a National Referral Centre. Mr R. Evans retired after twenty-four years as technician-in-charge of the Engineering Services Workshop, Mr H.J. Tranter retired after fifteen years as chief technical officer in the Department of Mechanical Engineering workshops. Dr T.S. Dillon resigned to accept the chair in Computer Science at La Trobe University. Dr K.E. Forward resigned to accept readership in the Department of Electrical Engineering at the University of Melbourne.

Concluding comments

The shortage of funds continues to be of major concern. The level of funding from University sources is not sufficient to provide the basic services for our undergraduate and graduate teaching programs, and is being supplemented by outside earnings of the faculty. Thus some of the outside income of the faculty, which should be available for research, is being diverted to support basic teaching. In such circumstances, there is less incentive for staff to continue to attract such outside support. There is also concern about obsolete equipment, the shortage of modern equipment, and the difficulty in funding major new purchases.

Although the level of contact with Australian industry and government departments has increased, with funding provided for research projects, there continues to be a shortage in the number of research personnel. There is a need for a new system of research funding through an Australian Engineering Research council to enable major research projects to proceed. Finally, the continued suspension of the workshop practice course due to lack of funds is also a matter of concern to all members of fa-

culty.

Faculty of Law

Dean: Professor R. Baxt, BA, LLB (Hons) Syd., LLM Harv.

Introduction

I would first of all like to express my thanks to Professor C.G. Weeramantry who assumed the role of acting dean of the faculty from 1 September 1985, until the last week of January 1986, to enable me to take my outside studies program and research leave in North America. During that time I delivered the James L. Lewtas lecture on commercial law at Osgoode Hall Law School in Toronto, as well as undertaking some teaching at the law school.

This was also a year of sadness for the Monash Faculty of Law. In September, the foundation dean of the faculty died at the age of sixty-five. Sir David Derham was a pioneer in legal education in Australia. The model he created at Monash University is one that has been emulated and envied by other Australian universities. Another loss in 1985 was that of Emeritus Professor Julius Stone. Professor Stone was perhaps Australia's best known modern legal academic. Apart from being one of the current dean's law teachers in his law school days, he was a distinguished visitor at Monash University on two occasions, and delivered the 1972 Wilfred Fullagar Memorial Lecture. A third loss during 1985 was the death of Professor Melville Nimmer of the University of California, Los Angeles. This most distinguished North American Intellectual property lawyer had been a visitor to Monash during the months of June and July 1985. Shortly after returning home, he sustained an illness which led to his eventual death in October, at the age of sixty-two.

Last year was the first year of operations of the newly created Centre for Commercial Law and Applied Legal Research. Whilst we were unsuccessful in obtaining the appointment of a person to be the full-time director of the centre, a number of members of staff worked hard in order to ensure that the centre's operations for the year were successful. Over twenty legal firms and organisations became sponsors of the centre including the State Government.

Professor Michael Pryles was appointed to the Henry Bournes Higgins Chair of Law. Professor Enid Campbell was appointed a member of the newly established constitutional commission and Professor David Allan resigned his chair to take up a chair in the School of Accounting and Business Law, Faculty of Commerce, at the University of Melbourne.

The CTEC appointed a committee to review the discipline of law. Professor Enid Campbell was appointed a member of this committee. A great deal of work has been undertaken by a number of people in the faculty to answer queries raised by the CTEC inquiry into the discipline of law.

1986 promises to be a year of great excitement for the faculty, as it will be a co-host with the University of Sydney, for the Twelfth Congress of the International Academy of Comparative Law. This congress will bring together the largest gathering of academic lawyers in Australia's history. A number of distinguished visitors will be spending time at Monash, either before or after the congress.

Students

The faculty enrolments in 1985 were as follows:

	Full time	Part time	Total
PhD	7	4	11
LLM	20	117	137
Diplomas	4	51	55
Diplomas Bachelors	1 188	182	1 370
Not for Degree		11	11
	1 219	365	1 584

External courses are not available.

Staff

Actual appointments, other than casual staff, as at 31 December 1985, totalled 62.2 (including staff on leave without pay).

Visitors

The Law School hosted a number of distinguished visitors from all branches of the profession and from various countries during the past twelve months. Many have been visitors to the newly created Centre for Commercial Law and Applied Legal Research.

Graduate studies program and summer teaching

The Faculty of Law offers an extensive graduate studies program which includes Doctor of Philosophy, Master of Laws (both by thesis alone and by thesis and advanced courses), and graduate diplomas in Commercial Law, Family Law, International and Comparative Law and Taxation Law. The diploma programs are available to persons from other disciplines (social workers, accountants and economists).

In 1985 there were over 200 candidates enrolled in the graduate program including twenty from thirteen overseas countries. Twenty-two semester courses were taught over the year. Twenty-eight candidates satisfactorily completed their courses of study, with one PhD, nine LLM and seven Diploma.

Summer teaching has been maintained during 1985/86. A total of eleven subjects is being taught during the summer semester. The final number of students enrolled in summer semester will not be known until 1986.

Research

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 twenty-one 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, the

ARGS, government and private bodies for research into various areas of law.

Law Library

At the end of 1984, the Faculty of Law was selected as a performance test site within the Computerised Legal Information Retrieval Service (CLIRS) Pilot Study, giving faculty and library staff free access to the system until approval was given by the Attorney-General for its operation on a commercial basis. As that approval was not given until the end of the year, library staff had ample opportunity to use and assess the system. The system offers real advantages in the retrieval of certain classes of materials, such as unreported judgements, and information relating to proclamation dates of legislation. No decision has been made yet as to which of the service options offered by CLIRS, will be selected for the library.

The library is also involved with CLIRS in the role of a provider of information for one of the secondary databases, 'Monashfinder', an index of notes and comments on cases and statutes, updated weekly by the library. CLIRS reports that it is one of the heaviest used of the secondary databases. While the financial return from this undertaking has been minimal, it is expected to grow considerably as CLIRS attracts more subscribers. It has generated good publicity for the library, and has provided a constantly updated, cumulative index. Senior library staff were further involved with CLIRS through the year, in training courses and user committee meetings.

The Victoria Law Foundation made a grant of some \$30 000 for the purchase of books and backsets of periodicals, and microforms. The Faculty of Law continued its policy of generously supporting the library, with grants of \$12 000 towards the cost of books and periodicals, and \$4 000 towards the purchase of a microcomputer to give the library better access to external databases such as CLIRS, and to wordprocessing facilities.

Student activities

The Professional Experience Scheme has again been maintained at a satisfactory level.

The Law Students' Society had a busy and successful year. The students continued to take an active interest in the development of courses and programs within the faculty.

The Monash Jessup Mooting Team had outstanding success in the finals in New York. Apart from the fact that they came runners up in the international division (losing to the eventual winners of the competition, the University of Singapore), the Monash team came equal first for its memorials, and Andrew Hamlyn-Harris and Alan Swanwick were first and second, respectively, in the oratory division.

Research and 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.

Continuing Legal Education

The Continuing Legal Education program conducted by the Centre for Commercial Law and Applied Legal Research continued the emphasis and quality established by the Faculty of Law in previous years. Programs were presented in a variety of formats including intensive workshops, short courses and occasional seminars, and were run both in Victoria and interstate — particularly in Perth, where we have established excellent relations with the Law School at the University of Western Australia.

Commercially related areas of law formed the basis of most programs and in many



instances we were able significantly to increase the value and prestige of the activity by inviting visitors to the centre and faculty who enjoy international reputations. Among those invited were Professor Melville Nimmer of the University of California, Professor Tom McCarty of the University of San Francisco, Professor Joe Goldstein of Yale University, Professor Michael Botein of the New York Law School, Professor Louis Loss of Harvard University, Professor John Morris of Arizona State University and Professor Neil Brooks of Osgoode Hall Law School. The program for 1986 is currently being planned to include a number of visitors from Canada, the United States of America and England.

Faculty of Medicine

Dean: Professor G.C. Schofield, OBE, MD, ChB NZ, DPhil Oxon., FRACP, FRACMA

Students

The total number of equivalent full-time students (EFTS) in the faculty at April 30, 1985 was 1 735. There were 912 medical undergraduates distributed as follows: Year I: 154; Year II: 148; Year III: 142; Year IV: 157; Year V: 142; Year VI: 158; BMedSc: 11. Female entrants comprised 45 per cent of the first year intake.

Staff

Academic staff comprised 126 full-time and forty-four part-time members. Clinical teachers included some 270 visiting medical staff and seventy full-time hospital medical staff in affiliated hospitals and approximately 250 general practitioners.

Honours and distinctions

Professor D.M. de Kretser was elected President of the International Society of Andrology for a period of four years. Professor M.E. Holman was awarded the ANZAAS Medal in recognition of her research into the properties of smooth muscle in mammals. Dr B. Hudson was awarded the Order of Australia. Dr P. Nagley was awarded the degree of Doctor of Science for a set of published work entiled 'The Molecular Biology of Mitochondria'. Dr J.W. Powles was appointed to the National Health and Medical Research council's Food Standards Committee for a term of three years. Dr H.H. Salem was awarded the R.T. Hall Prize by the Cardiac Society of Australia and New Zealand. Clinical Associate Professor B.H. Toh was awarded the degree of Doctor of Science for a set of published work entiled 'Autoimmunity and Cytoskeletal Antigens', and Mr R. Widdop was awarded the Neville Percy Prize by the Australian Society of Clinical and Experimental Pharmacologists.

Appointment of professors

New appointments included: Dr D.G. Barton, senior lecturer (part-time), Social and Preventive Medicine; Dr R.L. Boyd, lecturer, Pathology and Immunology; Dr I. Busmanis, lecturer, Pathology and Immunology; Mr C. Christophi, senior lecturer (part-time), Surgery, Alfred Hospital; Dr D.J. Findlay, lecturer (part-time), Community Medicine; Dr G.P. Hodsman, lecturer, Medicine, Prince Henry's Hospital; Dr R. Iansek, lecturer (part-time), Medicine, Prince Henry's Hospital; Dr J.R. Lambert, lecturer (part-time), Medicine, Prince Henry's Hospital; Dr P. MacIsaac, lecturer (part-time), Community Medicine; 'Dr C.J. Miller, senior lecturer (part-time), Community Medicine; Dr J.E. Olley, lecturer, Pharmacology; Dr A.M. Street, lecturer, Medicine, Alfred Hospital; and Mr R.J. Wale, lecturer (part-time), Surgery, Alfred Hospital.

Promotions were awarded to: Dr B. Adler, senior lecturer, Microbiology; Dr E.F. Berah, senior lecturer, Psychological Medicine; Dr J.K. Davies, senior lecturer, Microbiology; and Dr K.V.L. Jones, senior lecturer, Psychological Medicine. Resignations included: Dr O.L. Copolov, senior lecturer, Psychological Medicine; Dr P.L. Jeffrey, senior lecturer, Biochemistry; Professor L.J. Opit, Social and Preventive Medicine; Clinical Associate Professor E.A.V. Pihl, Pathology and Immunology; and Dr L.J. Rogers, lecturer, Pharmacology.

Associate Professor H.P. Taft, Biochemistry and Medicine, Alfred Hospital, retired this year. Professor D.M. DeKretser, Professor V.C. Marshall, and Professor B.G. Firkin were appointed Associate Deans for 1985. Dr A.O. Trounson, previously reader in Obstetrics and Gynaecology, was appointed as Director of the Centre for Early Human Development for an initial period of five years.

Visitors

Visitors to the faculty in 1985 included: Professor E.O. Akande, University of Ibidan, Nigeria (Obstetrics and Gynaecology; Dr R. Asche, University of Texas, USA (Obstetrics and Gynaecology); Dr H. Barber, University of Glasgow, Scotland (Community Medicine); Dr R. Bolender, University of Washington, Seattle, USA (Anatomy); Sir Arnold Burgen, Darwin College, Cambridge, UK (Physiology); Dr M. Dunlop, University of Melbourne (Anatomy); Professor D.G. Doane, East Tennessee State Univer-USA. (Community Medicine); Mr D. Evans, Wexham Park Hospital, Snough, UK (Surgery, Alfred Hospital); Professor G. Fink, University of Edinburgh, Scotland (Psychological Medicine); Dr A. Fowden, University of Cambridge, UK (Physiology); Dr M. Godfrey, Medical Research council, London, UK; Associate Professor H.J. Gundersen, University Clinic of Internal Medicine, Aarhus, Denmark (Anatomy); Professor L. Henson, University of Goteborg, Sweden (Paediatrics); Dr L. Mackay, Victorian Institute of Secondary Education (Anatomy); Professor M.M. Merzenich, University of California, San Francisco, USA (Physiology); Dr R. Moor, Institute of Animal Physiology, Cambridge, UK (Obstetrics and Gynaecology); Dr H. Moore, Zoological Society, London, UK (Obstetrics and Gynaecology); Professor P. Niknass, Kerman University, Iran (Paediatrics); Dr R. Nowak, University of Leeds, UK (Physiology); Professor D.G. Porter, University of Bristol, UK (Physiology); Dr R.M. Sharpe, Medical Research council Reproductive Biology Unit, Edinburgh, Scotland (Anatomy); Dr Shi Man Hua, Institute of Epidemiology and Microbiology, Beijing, China (Microbiology); Professor T.A. Sinnathuray, University of Malaya, Malaysia (Obstetrics and Gynaecology); R.M. Wadsworth, University Strathclyde, UK (Physiology), Dr E. Wu, Chinese University, Hong Kong (Community Medicine); Mr G. Yuan, Guizhou Agricultural College, China (Physiology).

Coroners Act 1985

In 1985 the State Parliament passed a Coroners Act which authorised the establishment of a Victorian Institute of Forensic Pathology and established also that the Professor of Forensic Medicine is to be director of the institute. The faculty was closely involved in the planning of the institute during 1985 and construction is already underway with an anticipated completion date in 1987. The Act also establishes a council of the institute with Monash and Melbourne Universities represented on the council.

Australian Medical Examining Council (AMEC) examination

The new format for this examination introduced by Monash University in 1985 has proved to be successful and Monash University has been asked to continue with the examination. The numbers of Australian residents with overseas medical qualifications seeking medical registration through the AMEC examination have grown to the extent that two examinations a year, in both Melbourne and Sydney, are now required. conduct of the examination is somewhat complex involving several teaching hospitals and arrangements have been made for both Monash and Melbourne Universities to collaborate in organising the examination on behalf of the Australian Medical Examining Council.

Research

Funds obtained by the faculty in 1985 for new and continuing projects were \$2 203 628 from the National Health and Medical Research council, and \$291 407 from the Australian Research Grants Committee. Research funds from other sources amounted to \$2 748 845 which includes a most welcome \$407 680 from FS13. Total outside support for the faculty amounted to \$5 243 880. Research productivity, as eviProfessor M.E. Holman who was awarded the ANZAAS Medal in recognition of her research into the properties of smooth muscle in mammals. Professor Holman is pictured receiving her medal from Sir Edmund Hillary.



denced by publications in international journals of high standing, continues to be commendably high. However, in a situation where approximately one third of the total funds available to the faculty are derived from outside sources, the faculty faces increasing problems in maintaining the infrastructure such as personnel, facilities and equipment.

Faculty of Science

Dean: Professor W.R.A. Muntz, BA, DPhil Oxon., FRSE

Student enrolment

Reflecting the overall non-growth situation in University enrolments for the last several years, the total number of students taught by the faculty, expressed as equivalent full-time students (EFTS), has increased only marginally since 1980 from 2 629 to 2 691 in 1985. As the faculty has been successful in substantially adhering to its enrolment target, which is expressed in the kind of EFTS measure as referred to above, the development is not a consequence of any spontaneous trend in demand for places, but rather an engineered event which is inherently linked to the allocation of resources to the University and to the faculty.

However, within the virtually static situation of overall EFTS enrolments, it is interesting to note that the number of higher degree (HD) enrolments has expanded in the 1980's. To comply with overall enrolment targets quotas have been applied on other than higher degree (OTHD) enrolments, whereas it hitherto has been possible to cater for virtually all highly qualified graduates seeking to pursue higher degree studies in the faculty. As a proportion of total EFTS the HD enrolments have increased to 18.8 per cent in 1985, from 17.3 per cent in 1980. Looking at HD enrolments in further detail it is clear that the Doctor of Philosophy enrolment has increased, with the other component of higher degree enrolments, the Master of Science, having remained virtually static. The Doctor of Philosophy course enrolment reached a record high of 286 students in 1985, up from 265 in 1984. The Master of Science enrolment stood at 132 compared to 134 in 1984.

At the OTHD level the first year intake steadied in 1985 after having been reduced quite substantially from a peak in first year enrolments of 803 students in 1981. Total first year enrolments were 657 in 1985. Given the increase in recent years in the number of students seeking entry to tertiary education, including to this faculty, it is unfortunate that the faculty has been forced

to reduce its intake in order to comply with given total enrolment targets. The growing imbalance between the supply and demand for places in the faculty seem to have had the effect of the admitted students valuing their places higher. In any case, retention rates in the Bachelor of Science course have risen quite markedly in the last few years, leading to higher graduation rates. This improvement in productivity is at least partly due to increased competition for entry; whether the quality of teaching has improved or if course requirements and overall standards have indeed declined, is subject to continuous debate and subjective opinion.

The Blackburn Report

The Report of the Ministerial Review of Post-Compulsory Schooling, also known as the Blackburn Report, which was released on 1 May 1985, evoked a great deal of interest and discussion in the faculty. A faculty ad hoc committee was established to prepare implications of relevance to the faculty.

Significantly the findings and recommendations of the report were based on the principal recommendation that the Government should commit itself to a target of ensuring that by 1995 70 per cent of secondary school students should complete year 12, whereas currently that percentage is approximately 50 per cent. The other major recommendations of the report included the introduction of a two-year Victorian Certificate of Education to replace the HSC, the TOP and other year 12 certificates, that the certificate should be controlled by a new curriculum assessment authority (the Victorian Curriculum and Assessment Board) to replace VISE, that the students completing the certificate should be compelled to choose a minimum number of units from all the broad discipline areas of English, Mathematics Arts/Humanities, Science/Technology in addition to so called 'practical studies' and the study of 'work in society'. The organisational concentration of arrangements for the last years of secondary education should also result in the provision of a much broader range of studies than in any one of the previous certificates.

The faculty agreed that generally the Blackburn Report recommendations seemed to represent a valuable, even innovative, blueprint for a better model of the upper level of secondary education. However, in general terms, it was noted that current trends of a political nature had a tendency of down-playing the importance of university opinion in matters relating to how the system would fit universities' requirements, and there were elements in the report that indicated scant attention to such requirements. Predominantly, the faculty is concerned with upholding standards, to ensure that the emerging system will produce fairly selected students motivated and able to realise the same kind of potential at university level as do university students in other advanced countries. It should be kept in mind that universities in Australia need to uphold standards in competition with such institutions internationally, not only in the interests of the students concerned but also to best serve the interests of Australia.

There are a number of recommendations in the Blackburn Report, some of them already accepted by the Minister, related to preparatory study sequences for entry to tertiary educational institutions, the setting and monitoring of standards and to the method and associated aspects of selection of students for tertiary entrance. A great deal of work is yet required to enable the implementation of sensible measures consistent with the report recommendations and the faculty is concerned that there will be adequate university representation in the working groups and committees which will carry out this work.

Key centre in statistical sciences

In 1984 the Government invited the Commonwealth Tertiary Education Commission to make recommendations regarding the establishment of key centres for teaching and research in universities and colleges of advanced education, promising \$1 million to enable a number of such centres to be established in 1985. The Government indicated that it saw centres of this kind as a means of fostering research activities in areas of relevance to national priority, with potential for direct economic or social benefit.

In competition with thirty submissions made from this University and several hundred from all around Australia, the proposal for a joint key centre in statistical sciences was one of six centres the government has agreed to fund for the 1985-87 triennium. The proposal was formulated jointly by, and the centre will be based on, the Department of Mathematics (statistics section) at this University, the Department of Statistics and Statistical Consulting Centre at the University of Melbourne, the La Trobe University Department of Statistics and the Department of Mathematics (statistics and operations research group) at the Royal Melbourne Institute of Technology. The objectives of the centre are to make a significant contribution to the improvement of teaching of statistics; to make a significant contribution to the improvement of research standards; and to act as a link between business, industry and government and the statistical profession in Australia. In the Australian context the teaching and research activities of the separate departments have been highly significant in qualitative and quantitative terms, and the establishment of the centre will add to the resources for teaching and research in the statistical sciences as well as lead to a concentration of effort.

Arrangements have already been made to offer from 1986 a coursework Master of Science degree in each of the participating universities with the students being able to choose units across the institutional barriers. It is planned to substantially extend this cooperative venture by providing joint activities at third year level and at the honours year level. The centre will also engage in the pro-

vision of consulting services and to act as a 'broker' in identifying suitable consultants where the expertise lies outside the centre. Short training and refresher courses will be emphasised. Four members of staff, one at each institution, have been appointed to plan and develop this consulting service and already considerable interest has been expressed from the wider community and requests for advice have started to flow. It is planned that the income from consulting work will be sufficient to support the centre's activities once the grant from the CTEC cease, three years hence.

Graduate teaching and research

Graduate enrolments have expanded in recent years, partly at the expense of the number of enrolled undergraduate students. The high graduate enrolments are now also reflected in the number of students completing Doctor of Philosophy and Master of Science programs. In the year ending 30 June 1984 a total of fifty-two students completed the above degrees, exceeding a previous peak number achieved in 1978. In the last year, until 30 June 1985, there were fifty-six students completing their higher degrees, thirty-five finishing Doctor of Philosophy programs and twenty-one completing the Master of Science requirements.

Discussion has been on-going in the University for some time with a view to simplifying the procedures and administrative detail of Doctor of Philosophy candidature. Unfortunately it has not as yet proved possible to finalise this discussion and agree on definitive procedures, probably due to the fact that it is difficult to find a set of rules of relevance to the very broad range of disciplines at this University within which a Doctor of Philosophy can be pursued. The Department of Zoology is one department that has expressed considerable frustration with the way in which the Doctor of Philosophy regulations currently are interpreted by the Doctor of Philosophy and Research Committee. For this department, and also for other departments in the faculty, a phase of extensive data collection in remote locations could often be required prior to laboratory work, which could be pursued on campus or at an affiliated institution. Perhaps it would be easier and make sense to accept some variation in the provisions governing the Doctor of Philosophy degree between the different faculties.

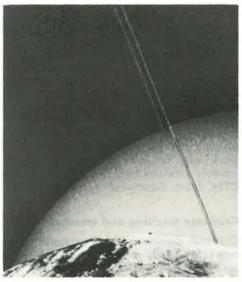
Whereas the faculty has been greatly concerned with research funding, and continues to be so, it was pleasing to note that total support from funding agencies continued to rise in 1985 at a rate exceeding the rate of inflation. It has been said before but it bears emphasising that the various grants and donations are fundamental to the endeavour in the faculty to vigorously pursue research. Details of the research undertaken, the research papers and theses published, and the higher degrees conferred are reported in detail in the University's Research Report.

Faculty forward planning

In accordance with new University procedures aimed at providing an orderly and consistent approach to forward planning the faculty produced a document which endeavoured to identify problems and desirable future developments for the next five or seven years. The intention was that this document would be updated annually and so constitute a rolling plan. While it is tempting and easy to dream of a rosy future in a document about future plans, the faculty agreed to base its plans on the assumption of level funding and relatively unchanged student numbers — ie, on premises which at the current time seemed to be the only realistic ones. Nevertheless, the opinion was expressed at the relevant meeting of the faculty board that the faculty should perhaps also look even further ahead to identify and prepare, in a more expansionary manner for the developments which seemed desirable in science as a consequence of community and technological changes.

The ringed planet Uranus looms behind the craggy surface of one of its inner moons, Miranda. The Voyager probe confirmed predictions of two new moons made by Dr Andrew Prentice, a senior lecturer in Applied Mathematics.





One of the problems identified by the faculty, which almost certainly is prevalent in other universities, related to the age structure of academic staff. The age profile of the staff is such as to allow for very few younger members of staff to be recruited for the next several years, whereas in the early 1990s large numbers of staff would reach retirement age with the consequent need for the faculty then to engage on a heavy recruitment exercise. To enable the age profile to be evened out, the faculty has proposed that it should be allowed now to recruit two or three members of junior academic staff per year, even though the faculty departments would be notionally overstaffed in the short term. Such appointments would need to be financed partly through the normal retirement of senior staff, but also through literally 'mortgaging' the cost of the new appointments against the known increasing rate of staff retirements after 1990. The introduction of such an internal 'new blood' scheme, the concept of which has been received with interest by the University, would also make it easier for the departments to find, in the short term, the staff resources they would require in order to get some new developments off the ground. Several academic developments have been mooted, including new Master of Science programs in Forensic Psychology and in Biotechnology and a new undergraduate, second year subject in genetics, but a major problem will be to fund such developments, as based on the assumption of level funding, no new resources are in prospect.

Major concerns touched upon in the planning document related to the space problem faced by the faculty and the impossibility in the present financial climate to sustain any orderly program of replacing obsolescent equipment. The faculty continues to experience capacity problems in terms of space and high priority is accorded means of extending space facilities for the departments of Earth Sciences and Computer Science. A plan to re-house Computer Science in space some 25 per cent larger than the department currently has is being pursued, but it has ramifications for other departments and will be costly.

Library

Librarian: Mr T.B. Southwell, BA Syd., ALAA

Looking back to 1984 we note that even with a favourable exchange rate and a lessening of the inevitable increase in the price of books and periodicals, it has still been necessary to make extremely painful reductions in periodical subscriptions. The February devaluation of the Australian dollar made such nonsense of any financial planning by any university or college library, that only the CTEC could take responsibility for the necessary support. Informally, word came that this would be forthcoming, and no panic action was taken, until it became clear, about September, that overspending would be even higher than anticipated: at least a temporary stop to the library's blanket order scheme for the Humanities and Social Sciences — a scheme which has served it well for eleven years — had to be ordered. From later information, sheer bad luck had married an unexpected increase in the number of relevant titles published, both in England and the USA, with the fall in our purchasing power.

Bad luck dogged us to the end. The great majority of periodical subscriptions are paid in the last few weeks of the year; it was in those weeks that the dollar fell again, to its lowest point. As a result, the average cost of our periodicals — even though costs show signs of stabilising in their country of publication — rose by a very worrisome 33 per cent. The 'theoretical' increase, computed from samples at two other universities as well as Monash, was 37 per cent. The difference presumably resulted from the considerable cancellation program of the year be-

fore.

Twenty-four thousand six hundred and sixty-seven new monograph titles were taken into stock and catalogued during the year, an increase of over 2 000 from 1984. One hundred and seventy-five new periodical titles were added but, resulting from the cancellations noted above, nearly 300 titles were closed off! For a research library, this must be the unhappiest figure in the report. The collection grew by 46 551 volumes during the year (compared with 46 996 in 1984) bringing its total to 1 258 959.

It may not be generally realised how much of this growth results from the generosity of the library's donors. The Library Appeal, to parents of students and to graduates, provided \$40 000, the Parents' Group itself added a further \$3 100, and from the Medical Mothers' Auxiliary was received \$1 200. Special gratitude must be expressed for an amount of \$10 000 received from an anonymous donor who, clearly conscious of the library's particular problems, specified that it was to help cope with the suddenly inflated cost of periodicals. As well as gifts of cash, over 7 000 volumes were received by direct donation. Many were, of course, duplicates of items already held, or otherwise of more use to other libraries, so with the consent of the donors they were passed on; universities in Thailand are especially benefiting. Among the gifts was a further instalment of 429 Australian children's books from Mr Lindsay Shaw, to add to his already definitive collection, 370 books on economics in Japanese and English from Professor E.S. Crawcour, over 500 books emphasising psychology, from the estate of the late Arthur L. Hill and some 375 books from Mrs L. Grynberg. To these good friends, and to the very many others, the library happily extends thanks. To these friends must, of course, be added the Friends of the Library, whose interest it has been to purchase for use outstanding items our normal budget could not support. Two such were James Harris, Miscellanies in five volumes, 1775-86, and the very rare J.D. de Lacroze, A letter from Monsieur de Cros.. (only two other copies were recorded by Wing), the latter a very welcome addition to the Swift Collection. A very important collection of some 350 French publishers' and booksellers' announcements was bought, interestingly, from the proceeds of an engineering patent; the inventor had wished that they be devoted specifically to important material for the humanities.

This was our first full year of participation in the Australian Bibliographic Network (in which, on-line to a computer at the National Library we take advantage of other libraries' cataloguing, and make ours available to them). As expected, there was a learning period to the use of these new protocols, and we assumed there would be problems with such centralisation, but there were hazards we had not expected. A fire at the National Library put their computer out of use for several weeks, and brought our cataloguing, as well as that of most of the rest of Australia, virtually to a standstill. The National Library staff deserve every praise for the speed of their recovery, as do our own cataloguers for their readiness to adjust to a further upset to their daily routine. The National Library of Australia has not yet taken into the record the 40 000 titles that we catalogues in 1984. Because of this delay they still cannot provide us with a unified microfiche catalogue. Our readers have been remarkably patient with our supplements to supplements to outmoded listings; our staff are perhaps more conscious of the extra load added to almost every activity that requires catalogue lookup.

Despite these problems, there has been no pressure to break away from the national system for our cataloguing operation. There has, however, been increased determination to press forward with the development of SESAME, the library's own public access catalogue. It is based on STATUS, a retrieval system developed at the Atomic Energy Establishment at Harwell. Certain developments promised by them are well behind time, and these are essential for economic loading of our files. They are now expected early in 1986, and we hope to have at least part of the system available to our users before mid-year. The module giving access to titles in process is working, and by the end of the year was working well. The addition of the library's short-title records, and then of its full computerised catalogue are now dependent on these overseas developments as much as our own tiny programming capacity; to throw the system open to users, which is our aim for 1986, both the library's planned purchase of terminals and the Computer Centre's planned increase in computing power, must now go ahead.

The RSI epidemic did not pass the library by, though many other institutions have, we know, suffered more. Not only keyboard operators were affected. Some quite traditional library occupations, with nothing of the rapid repetition usually associated with the condition, showed up as areas of risk. The University created a team to survey and advise on the position, and the library was selected to be the first area covered. A great number of the staff was involved in the organisation and operation of the survey. The cost of complying with the recommendations that have so far emerged is in the tens of thousands of dollars. More will be needed in the year to come, but it is hoped that this expenditure, and more importantly, the insights we have gained, will prevent such situations in the future. The alternative would be personal pain as well as institutional inefficiency. A parallel process, of checking for problems of industrial safety, was carried out by another dedicated group; problems were uncovered and their solutions cost money, but the alternatives could well have proved disastrous.

In the Main Library, a shift in emphasis both in collecting and in usage had changed Government Publications from a small special collection which could be tucked away on the fifth floor, to a busy operation supporting nearly half a floor full of material. This made necessary a major space reallocation, planned throughout the year and commenced in the long vacation. Periodicals and Audiovisual Aids were also involved. It is hoped that all will be more conveniently located for users and more economical to

staff.

It is planned that the Queen Victoria Medical Centre will move to Clayton in 1986, and the hospital and the University have used the move as an occasion to combine their two medical libraries. Agreement was reached to commence the amalgamation early in 1985, so that the inevitable problems could be ironed out before the pressure of a major move compounded them. The combined library will be run by the hospital, with staff partly financed by the library, and bibliographic back-up provided by the Biomedical Library. There have been problems, but there has been general goodwill and they have so far been resolved.

Loan figures were slightly down for the year at 616 141 compared with 626 694 for 1984. Some 3000 of the reduction is due to the Queen Victoria transfer — only the first half of the year is included — but no explanation is obvious for the remainder, visible in all branches except Biomedical and its Alfred Hospital sub-branch. Loans to other libraries were also lower: 22 822 against 23 471, continuing the trend of recent years. Borrowings were higher, again continuing a trend; 8 183 as against 7 934 in 1984.

Operation of the computerised loans system depends on the reliability of the service provided by the Computer Centre. This had fallen away in the last months of the Burroughs 6700, and it was hoped that installation of the larger B7800 would provide relief. It did, but not without teething troubles, including the loss of several full days' worth of information. Recovery had to be manual, slow, time-consuming and tedious, and required all the tact imaginable to deal with borrowers wrongly accused of misdeeds.

On-line enquiry by computer of bibliographic data bases located in Australia, the United States and Europe became a large part of the Reader Services operation in 1985. The staff concerned had reached a level of familiarity such that they could use this technique to answer quick reference questions more cost-effectively than by the use of the standard reference books. Which raised the standard dilemma: though it may be cheaper to answer the question by using the computer, the library will be charged, whereas use of the books is 'free'. The same service will be given to the user. How then can he be charged? Equally, how do we pay for the costs of the service?

Supporting the ANZAAS Festival of Science held at Monash, all branches produced bibliographies of subjects covered by the festival. They were very well received, and it is hoped that many will be kept up-to-date and reissued in the Monash University Library Occasional Publications series, launched during the year with Geoffrey Blainey: a Bibliography by Anne Macauley. Earlier in the year Irene Macdonald and Susan Radvansky's New Zealand Literature to 1925 in Monash University Library was issued. A toal of fourteen Pathfinders (guides to the literature) were issued by the Humanities and Social Sciences Library, on topics ranging from agricultural policy to sociology.

The library's Advisory Committee on Staff Training met throughout the year, largely to prepare at the request of the Librarian an induction course for new staff, to replace the existing rather ad hoc version. Their report was due at the end of the year. They also organised courses in keyboard skills, now needed as more staff must deal with computers, and also a workshop for supervisors. Both were highly successful, as was their end-of-year seminar. This last dealt generally with the problems of expanding operations with contracting resources. The seminar focused on better staff development, and especially on the need for a fulltime staff development officer.

Much time has been spent over the last three years on development of a new staff classification scheme. The existing scheme depended for level of appointment or promotion on a number of differing criteria, many conflicting. A scheme based purely on job definition was seen as cleaner, less subject to misinterpretation, and certainly easier to administer, fitting better into the University's established practice. After long negotiation, the new scheme was approved, to be introduced from the beginning of 1986.

From every angle it was an extremely busy year, one requiring constant re-adjustment at the professional, the administrative and certainly at the financial level. It is a tribute to the staff that morale remained high.

UNIVERSITY FACILITIES

Alexander Theatre

It is pleasing to report on one of the Alexander Theatre's most successful years to date. Usage and attendances reached new levels; the 351 performances, and the eighty-eight groups which staged them, represent increases of more than 11 per cent over 1984 figures, and the total audience rose to more than 108 000. When rehearsals are taken into account as well as events open to the public, there was a total of 458 occasions on which the lights were on at 'the Alex'; this is an exceptional pattern of usage for a single auditorium theatre.

The theatre's programs for children were again among the most significant contributors to the high level of activity, and to the success of the year. The response to the January presentation of Alice in Wonderland was actually rather disappointing, particularly given the ingenuity of the production; perhaps its fidelity to Carroll's original made it rather too 'literary' for a very young audience. Later school holiday productions of The Adventures of Paddington Bear, and (in what we hope will be a continuing association with the Young Dancers' Theatre) of The Nutcracker ballet, proved very popular, however, and the success of the schools' performances and the Saturday Club, which goes annually from strength to strength, are clearly evident.

The Monash Festival of Theatre this year involved two productions in the Alexander, the MUMCO season of Anyone Can Whistle, and Monash Players' Once A Catholic. The former was something of an historical event; though it was the first of Stephen Sondheim's musicals and written in the early 1960s, this was its Australian premiere. MUMCO deserve to be congratulated both for their enterprising choice, and their spirited performance. Once a Catholic, too, was full of vitality and proved a popular choice. In 1986, the Festival at the Alexander Theatre will involve only one production, Marvellous Melbourne, in which all the student theatre groups will collaborate. The occasion is one to which we look forward; there are signs though that the concept of a festival centred on the theatre, which this committee initiated, is — disappointingly — losing its appeal to participants. The size of the stage and auditorium at the Alexander has always proved an impediment to a high level of student activity in the theatre.

The theatre's major initiative in its presentations for adults in 1985 was Down an Alley Filled with Cats, a new play by Warwick Moss. In attracting houses that amounted to only 11 per cent of capacity, Cats hardly emulated the success of its illustrious namesake; but it was a well-crafted and entertaining play, and deserved a much better response. The play was one of a number down the years which have inexplicably failed to draw an audience either from the University or the wider community, but which have achieved a quality in production of which the theatre can be justly proud. While the Alexander Theatre performs a very important role as a venue for a wide range of community-performance groups (and while hiring can be a lucrative function was well), the committee still regards the pursuit of independent production initiatives, and the active encouragement of student theatre, as continuing responsibilities. Finding the right balance between contending commitments will be a particularly challenging task for the committee in the next few years, when the theatre will be undertaking a number of essential capital works; the most significant of these will be the construction in 1986 of the new Theatre Resources Centre, but, as the theatre approaches its twentieth year of operation, there is a good deal of refurbishing ahead in a number of areas. Most of this cost will be met from the theatre's own resources, but the committee is most grateful for the additional financial assistance provided by the University for projects of this kind.

While on the subject of gratitude, it seems appropriate to conclude this report by noting the committee's appreciation of the contribution of the theatre's first-rate management and staff.

Robert Blackwood Hall

In addition to the hall's commitments for Monash University (exams, orientation ceremonies, graduations, parents' gatherings, etc) 1985 saw a continuation and expansion of the hall's use by outside groups. It was the venue for Waverley council sponsored concerts, the official opening of the 1985 ANZ-AAS conference, recordings for the Australian Pops Orchestra and a large number of local school and college break-up concerts. The Australian Broadcasting Corporation used the hall (apart from the six Monash Series Concerts and rehearsals) on eleven occasions for 'Melbourne Makes Music' recordings and on thirty-three recording/rehearsal sessions. The Schools Concert Series attracted a larger number of young students

From the hall's point of view, two significant projects were launched. These included installation of stage 1 of a cooling system for the hall, which was commissioned successfully in mid-December and an appeal for funds to order a harpsichord from Mr W. Bright to be delivered in 1987, to complete the hall's complement of keyboard instruments.

Monash University Bookshop

The discount given to customers in 1985 was \$120 127 — nearly three times as much as in 1984 and four times as much as in 1983. Despite this higher discount the profit for the year was \$85 838.

Gross sales for the year were \$1 910 202 — about 8 per cent higher than in 1984. They might have been higher still had the bookshop not been forced to move into smaller temporary premises late in the year so that the shop ceiling could be replaced.

Expenses were reduced for the second successive year. Staff costs in 1985 were 14 per cent less than those for 1983.

In 1986 the bookshop is committed to further price reductions and intends to install a computer system which will improve the service to customers.

Religious Centre

Members of the chaplaincy for 1985 included Reverend Father Laurence Foote, OP, Roman Catholic Chaplain; Reverend Philip Huggins, Anglican Chaplain; Pastor Peter Pfitzner, Lutheran Chaplain (parttime?; and Rabbi Michael Katz, Chaplain to Jewish students (part-time). Mr Andrew Clifton made weekly visits to Christian Science followers.

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 seminars, musical recitals, and religious services. Bookings were made for the celebration of ninety-two weddings in the chapels and several baptisms and funeral and memorial services were conducted.

A series of fifteen weekly musical 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 ecumenical service was held to mark the commencement of the academic year. The service was conducted jointly by the chaplains with the address being given by the Most Reverend David Penman, Anglican Archbishop of Melbourne.

Careers and Appointments Service

Client demand increased for all the major activities undertaken by the Careers and Appointments Service in 1985. The University may derive some satisfaction from there now being unmet demand for visits to schools, and for graduates to fill vacancies in fields such as teaching, computing, accounting and economics.

Interest in university courses has reached such a high level that the Careers and Appointments Service needs to draw more extensively upon the resources of the University to provide adequate assistance to teachers, parents and students in selecting courses and assessing the career opportunities these offer.

The difficulties students experience in identifying the extent of alternatives offered by their studies requires emphasis be directed towards information being provided and widely disseminated to students in their undergraduate years, even though the preferred course of action for many of these students is to ignore the future altogether.

One trend in graduate employment has been the increase in the number of employers actively seeking graduates, another has been a greater willingness on the part of employers to show more flexibility in matching graduates to the vacancies that are available. Expectations are high that in 1986 employers will experience great difficulty in recruiting suitable graduates. Mounting pressures upon Government to meet shortfalls in availability of qualified professionals by boosting immigration intakes can be expected.

Financially the service continues to be partially dependent upon donor support. Fortunately, support from the private sector continues to be generous although the uncertainty whether this magnanimity will

continue still gives concern.

Technological change continues to affect career work. Some further progress may be expected in using developments in information processing to improve the effectiveness of administrative procedures, careers counselling and the provision of more comprehensive information as a basis for better decisionmaking.

University Counselling Service

The past year has been a particularly difficult one for the University Counselling Service. Due to illness and resignation, the service was operating on half staff for most of the year. Consequently the large group programs of the service were virtually abandoned and the number of students able to be seen diminished by 20 per cent. The dedication of the remaining staff, during this diffi-

cult period, was exemplary.

One-to-one counselling remains the bulk of the work of the service. Over 800 students and staff members were seen during the year, and a further 400 students participated in our reduced group programs. These programs centred mainly around issues of study skills and orientation for mature-age students. The service provided lectures for both the Law and Medical faculties during the year. The counsellors value these opportunities to make a contribution to the academic life of the University.

The problems presented to the service continue to centre around study difficulties, relationship problems, issues of identity and self-esteem, and academic progress problems. It was noticeable in 1985 that an increasing number of staff members are presenting themselves to the service with 'personnel' as opposed to 'personal' problems. It is essential, therefore, that the University address itself to this issue — the establishment of a fully effective personnel service.

Students' Grants and Loans Committee

Fifty-seven applications for assistance were considered, of which fifty-three were approved as loans. No grants were made during the year. The total amount of assistance given was \$85 020.

During the year, funds made available under the Commonwealth Government Special Assistance for Students Program were added to the funds administered by the committee, bringing the total of all funds to \$548 858. Of that amount, \$287 342 was on loan at 31 December 1985.

A condition attached to the newly available funds that their monetary value be maintained, and the desirability that comparable conditions apply to each of the assistance schemes administered by the committee led to council approval of a committee recom-

mendation that modest interest be applied to all loans approved after May 1985.

Expression of appreciation for assistance given continued to be received.

Student housing

The number of requests for assistance in 1985, either direct assistance in finding accommodation or for advice on matters concerning housing, was 3 637. The trend towards independent living in direct requests for off-campus accommodation accelerated and in this year only 7.25 per cent of the requests were for private home accommodation, mostly within walking distance of the University. As suitable offers of this type of accommodation diminished at an even greater rate, within the foreseeable future private home accommodation will become an oddity.

Flats in the Clayton area became very hard to get during 1985. In the second half of the year three nearby blocks of flats were sold as own-your-own units and two more blocks are expected to follow. Most of these flats will be offered to students again but at greatly increased rentals. Surprisingly there was a considerable increase in the number of houses offered. In spite of all the forecasts the local investors remain dedicated to property. These included a new element this year, two Vietnamese investors.

Although applications for the South-east flats remain high, there has been a decided decrease in applications from local students. Occupancy rate for 1985 was 97.9 per cent. The repainting program for the flats continued during December, six of the eight flats planned for the 1985-86 vacation being painted in that month.

Health Service

The Health Service has continued in a steady equilibrium for some years now and 1985 was no exception. The total number of consultations has varied by less than 1 000 either way from the average 21 700 consultations per annum over the last nine years. The greatest variation from the average 7 200 for the number of individuals attend-

ing was 390.

With the formation of the Occupational Health Unit and the withdrawal of the Health Service from the Occupation Health and Safety Group, the Health Service role in occupational health changed significantly. Many of the staff still use the Health Service as the point of first contact for their occupational health problem, but the ongoing management of a significant number of these is now carried out by Dr Tony Ryan and Sr Cathy Hill. This has been particularly true of those people troubled with RSI. The friendly and cooperative interaction between the two units has been greatly appreciated.

The relief from the Occupational Health and Safety Group has meant much more time has been available for clinical work; also the anxiety concerning the Health Services' non-aligned position being compromised has been largely eliminated.

Additional services

The Health Service has come to arrangements so that much of the routine microbiology and haematology can be done without the patient having to visit an outside pathologist. While this has been a great time saver for many patients, it has meant considerable extra work for Sr Cathro and Sr Groom. If it was not for the special knowledge and expertise of both these ladies in the collection of blood and other specimens, it would not have been possible to institute this service.

Change in staff

At the end of May, Mrs Diane Walters, who had been the secretary for ten and a half years, resigned her position. During her time here she helped in the development on the Health Service and she became an important point of contact for many aspects of the Health Service in its interaction with other areas. As Director, I would like to record my sincere appreciation of her support over all these years, particularly her role in the administration of the Health Service, which enabled me to do more clinical work.

The Health Service has been extremely fortunate in obtaining Mrs Joy Pratt to take over Mrs Walters' place.

Alterations

Because of space problems in the reception and secretarial areas, alterations were made during the May holidays. While this has resulted in a smaller waiting room, the overall effect has been very beneficial to the Health Service.

Salient statistics	Individuals	Visits
	1984 1983	1984 1985
Total attendance	7 195 7 21	5 20 850 21 976
Attendance by Category staff	1 561 1 67	5 4 705 4 987
student	5 430 5 35	4 15 712 16 637
other	204 18	66 433 352

RESEARCH CENTRES

Computer Centre

In 1985 there were two major developments in the Computer Centre. One was the commissioning of the large Burroughs B7800 computer which was delivered at the end of 1984 and the other was the use of the new laboratory housing some 350 computer terminals. The B7800 substantially increased the computer power available to the University and the income the centre obtained by selling computer time. The teaching laboratory made an enormous improvement in the conditions for teaching students of computing.

All requests for computing budgets for 1985 were met fully. While there were times when people could not get access to a computer when they wanted to, as far as the centre can ascertain, most were able to get their work done in a reasonably timely manner. The reorganisation of the Department of Computer Science's class timetable helped considerably in the spreading of the workload more evenly throughout the day. For that the centre and many of its custom-

ers were most grateful.

There were two other substantial equipment purchases. The University's fifteenth DEC VAX computer was installed in April and its third Pyramid computer in May. The VAX 780 was added to the pool of VAX machines serving the campus as a whole while the Pyramid replaced a VAX 750 in the Department of Electrical Engineering which was reassigned as a tool for research in computer vision and robotics. Like other computer centre machines installed in other departments, the Pyramid is used primarily to meet the needs of the local customers and it is also available for general use. Other equipment purchased included disk storage units, Ethernet controllers for several VAX computers, additional memory for VAX and Pyramid machines, laser printers and a number of microcomputers.

Some seventy microcomputers were acquired under favourable purchasing arrangements and resold to both departments and staff members for their personal use. As competition in the marketplace grew, it became economic to stop assembling IBM PCS and acquire fully assembled units. Sales were almost equally divided between the IBM PC and the Corona marketed by AWA. Toward the end of the year sales dropped off, which was to be expected as equipment funds became exhausted and people took more interest in cheaper microcomputers imported from Taiwan and elsewhere.

The local area network (MONET) continued to grow, from some 1 500 ports at the end of 1984 to about 1 900 at the end of 1985. Further research and development work produced a high speed interface between MONET and VAX computers. As interface modules are built and installed in the VAX computers there will be an improvement. The units are also for transfering information between computers. The units are also saving expenditure on data adaptors for the VAX. A major enhancement to the network was the completion of a network manager program which runs on a microcomputer and provides facilities for monitoring traffic, installing new connections awnd diagnosing problems. For example, it can be used to test whether the network or the terminal connected to it is faulty.

Transfer of the MONET technology to Racal Electronics was successfully completed. Racal had by the end of the year manufactured about 200 network nodes and installed several networks for customers.

The goals for software development for 1985 which were mentioned in the 1984 report were not all met partly because the programming effort required could not be provided. File transfer facilities were improved by the introduction of DECNET on all machines and the KERMIT package on all machines. Connection of four VAXes by an Ethernet link provided a reasonably fast data channel and an opportunity to test the effectiveness of the DECNET-Ethernet combination. As a result there are plans for increasing the use of Ethernet for communi-

cation between machines in the same building. New back-up strategies were developed but there was little progress made on the design of a new archiving system. The TEX document processing system was installed with a laser printer which has the ability to produce near typeset quality camera-ready documents for publication. Arrangements were made for having documents typeset at Chisolm Institute of Technology. Further enhancement of document processing facilities is being pursued. The next step is to provide a means of incorporating graphics output in a document printed on the laser printer. When it became clear that Mechanical Engineering was proceeding to establish a computer graphics laboratory, the centre decided to defer investing in more elaborate graphics equipment until it could benefit from Mechanical Engineering's experience with new equipment.

One unusual development was the setting up of the Computing Research and Development Fund which was created as part of the University's agreement with the Victorian Government for the acquisition of the B7800 computer. The aim of the fund is to support projects which are likely to lead to computerrelated products which could be manufactured in Victoria. Seven projects received financial support amounting to \$76 000 in 1985. By providing assistance to people with ideas which are potentially of commercial value, the centre hopes that in a small way it may be instrumental in the University gaining additional revenue. It should be noted that the fund is not intended to support only the computer experts on campus. The list of projects supported, which is reported below, shows that ideas about applications for computers may arise in many parts of the Uni-

versity.

The centre accepted the invitation of the Central Budgets Committee to participate in the project involving the replacement of the University's PABX (Private Automatic Branch Exchange). As a modern PABX provides both voice and data switching capabilities, the choice of equipment could have

important implications for the future means of communication between terminal devices and computers.

In the later part of the year the centre had staff investigate recent developments in computer technology in America and Japan. Particular attention was paid to new computers with high speed arithmeticm capabilities for scientific research. The information obtained is expected to have a significant influence on future equipment acquisitions.

Academic staff in the centre taught a total of fourteen units in Electrical and Computer System Engineering, Computer Science, Mathematics, Mechanical Engineering and Civil Engineering. By far the largest course, in terms of student numbers, was for about 900 students in first year Mathematics.

The bulk of the research and development activities continued to be devoted to the local area communication network, MONET. At the end of the year there were some 1 100 computer terminals and 750 computer ports and 150 printers connected to the network which provided access to nineteen computers.

Engineering development was concentrated on a high speed interface (UCP) between a network node and the VAX computers and an X.25 interface. Progress on both projects was less rapid than anticipated, partly because of the effort which had to be directed to transfering network technology to Racal Electronics. At the end of the year production versions of the UCP were operating and final software 'tuning' was in progress and the X.25 interface production prototype was nearing completion.

The network management system NET-MAN was released to Racal during the year. It provides for a wide range of network management functions including documentation, location of devices and diagnostic testing. It has proved to be a significant enhancement to MONET which has increased it acceptance in the market place.

Work continued on the digital imaging project using a Lilith computer and a digital camera. The aim is to provide a way of recording drawings and various objects in digital form. One application is research into

particle recognition and sorting.

In addition to maintaining operating systems and providing technical advice to customers, the programing staff were involved with a number of new developments: introduction of the B7800 computer, installation of the VMS 4.2 version of the VAX operating system, new file back-up facilities, installation of the DECNET communication system between VAX computers, and software associated with the MONET system.

The maintance engineering section maintained the 3x3 B7800 computer, ten VAX 11-780's, five VAX 11-750's, three Pyramids, the MONET network, about 1 200 terminals, about fifty printers, numerous microcomputers and carried out the manufacture of MONET nodes, installation of two new computers, refurbishing used disk file systems purchased cheaply, development of a memory extension for VAX computers to enable the memory of old VAX machines to be increased from four to eight megabytes very cheaply and commencement of the design of an Ethernet interface for the B7800.

At the beginning of 1985 a total computing budget of ?2 166 000 (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 to \$2 369 200.

There were approximately 6 900 current account codes in 1985. This is some 1 300 fewer than 1984, the decrease resulting from effort put in to identifying and cancelling dead accounts. Some students take more than one course and have more than one charge code, some courses use one code for several hundred students and some customers are registered to use more than one computer, which makes it difficult to determine accurately the number of different custom-

ers. The number of different people using the centre's facilities would have been slightly higher than the 5 500 guessed for 1984.

The total University FS1 budget allocated to the centre was \$1 663 448. 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 \$1 413 448 rather than the \$2 049 006 actually recovered. A rebate of 31 per cent was therefore made.

The charging rates for VAX and Pyramid computers were maintained at the level set in October 1983 when substantial reductions were made to the rates charged for connect time and disk storage. In January the B7800 replaced the B6700 and new rates were introduced. The B7800 is about five times the speed of the B6700 it replaced and the rate charged for processor time was \$150 per hour compared to \$74 for the B6700. Thus the fact that the total amount charged to departments of \$2 049 006 is comparable to the \$2 081 838 (unadjusted figures) charged in 1984, does not indicate little growth in workload. With changing charge rates it is difficult and time consuming to measure the growth in workload so that has not been done. There was a significant growth. The centre's computing capacity was increased by the installation of a VAX 780, a Pyramid and the B7800 and even then there were times when there was insufficient computer power.

The income from the Pyramid computers was disappointingly low, being about one thirteenth of that for the VAX computers in August. As there are thirteen VAX computers, each less powerful than a Pyramid, a more satisfactory ratio would be of the order of one sixth. This situation probably somes about as a result of two factors. First the Unix operating system has not proved attractive to our customers apart from Computer Science and some departments in Engineering. Secondly there is little work done outside of the prime shift on week days. It is

obviously important that we encourage use of the Pyramid computers at night for computationally intensive work. A breakdown of the expenditure of the centre in 1984 and 1985 into a few broad classifications is shown below.

1984		1985
1 438 445	Salaries and associated costs	1 554 854
2 976	CSIRO computer time	3 013
1 011	Computer maintenance	
286 061	Consumables	259 638
902 882	Equipment purchased	698 198
44 441	Software	48 446
16 480	Miscellaneous	8 186
185 000	Building and site works	
	Building and site works MONET Racal royalties	17 312
	CR and D fund transfers	10 100
2 877 296		2 599 747

The recurrent budget provided by the University increased over the 1984 budget to the extent of providing for inflation and a small increase in staffing costs in the maintenance engineering area. External income increased significantly from \$333 245 to \$486 326 as a result of installing the B7800 computer and providing services to Victorian Government departments. At the same time there was an increase in the amount paid from income for salaries, from \$80 653 to \$132 513 reflecting the need for additional technical staff to support the B7800. The nett result was an increase in the 'profit' from \$132 015 to \$277 991.

The profit derived from work for outside organisations, which is attributable to the B7800, is used partly to offset the costs of running the B7800 and partly to contribute to the Computing Research and Development Fund set up under the terms of the agreement with the Victorian Government. Some \$157 000 was allocated to the Computing Research and Development Fund during 1985.

The balance of \$567 894 in the outside earnings fund at the end of 1985 includes the amount available to the fund. The amount available to the centre for other purposes was \$409 950, an increase of only \$68 000

over the balance at the end of 1984. In fact the centre is in the difficult position of having to use significant amounts of its outside earnings to support day to day computing activities of the University while facing uncertainty about future earnings. The result is that the potential for accumulating funds for new equipment is not good. It is estimated that about \$200 000 of the balance can be contributed to the purchase of new equipment in 1986. The remaining \$200 000 is needed as a buffer to cover commitments to staff salaries and other operating costs in case there is a substantial drop in income. Whether that happens will be very largely dependent on the computing plans of the Victorian Government. If the centre is fortunate in maintaining the current level of income it will be able to contribute more than the \$200 000 to new equipment purchase as well as providing funds for computing research.

A royalty of \$17 312 paid to the University by Racal found its way incorrectly into the centre's accounts and was subsequently transferred to a central University account. This relatively small amount does not reflect the true potential of the MONET system to earn royalties. Current expectations are that as much as five million dollars of MONET

equipment will be sold in Australia by Racal in the first two years of marketing and that the University may get up to \$500 000 in royalties. If it is fortunate enough for that to happen, the centre would expect to benefit by receiving from the administration of the University some funds to support additional research and development and for the purchase of computing equipment to improve services to the University as a whole.

The total expenditure of \$2 599 747 for 1985 was less than the \$2 877 296 for 1984. This drop is accounted for mainly by a reduction of about \$200 000 in the amount spent on equipment and the \$185 000 spent on a new air conditioning system in 1984. An increase in the money recovered for maintenance engineering services explains the apparent decrease in the consumables from \$286 061 to \$259 638.

Graduate School of Environmental Science

In 1985 the number of units taught by the graduate school was twenty-five and with other relevant units across the campus the number of units available for selection by candidates was 140.

The course on Applied Ecology and Conservation was offered to undergraduates of the Faculty of Engineering.

Interest in the MEnvSc course continues and a high standard of applicants were available from which to select candidates.

Twenty candidates have been involved in project work for which the research reports and minor theses will be submitted in early 1986. The topics studied included environmental management of a wetland conservation on private land in Victoria; review of environment effects statement (assessment) procedures in Victoria; land use conflict and planning in the Dandenong Ranges; occupational cancer — an information kit in the workplace; recycling of domestic wastes; fire regime and soil loss from forested lands; and community responses to youth homelessness.

Enrolment information

	Full	Part	
	time	time	Total
Enrolled December,			
1984	22	100	122
Number of applicants			
for 1985	39	37	76
Offers made	17	18	35
Acceptances (as at			
28/1/85)	8	18	26
Total enrolled 21/3/85	13	113	126
Total withdrawn/			
intermitted during			
1985	0	15	15
Graduated 1985	5	6	11
Total enrolled			
December 1984	9	126	135

As well as being involved in supervision of the above research teams, staff have undertaken research into the background and practical application of environmental impact assessment in Australia; evaluation of the MEnvSc degree, with particular emphasis on the perceptions of graduates, and operation of the subject Multidisciplinary Organisation; aspects in the anthropology of technology, such as notions on non-violence and appropriateness in technology; applications of general system theory; characterisation of conserver society; political economy of environmental relations; relationship between environmental philosophy and educational practice; tertiary environmental education in Asia and the pacific; and soil compaction of forest soils and growth of forest vegetation.

Dr E.H.M. Ealey, director, gave a series of lectures and acted as a consultant to Nankai University, Tienjin, Peoples Republic of China. As senior consultant to UNEP he assisted in setting up and running the Meeting of Experts which endorsed the Action Plan for Environmental Education for Asia and the Pacific. The staff and director of the school presented papers at a number of conferences in Australia and overseas and contin-

ued to serve in a variety of government and non-government appointments outside the University.

During 1985 the school welcomed Professor George Francis, visiting from the University of Waterloo, Canada.

Higher Education Advisory and Research Unit

The Higher Education Advisory and Research Unit (HEARU) has five principal functions:

the giving of specific advice on the conduct of tertiary teaching;

 the counselling of individual staff members on problems they encounter in tertiary teaching;

 the provision to the University of general information and advice on tertiary education:

• the conduct of research into aspects of tertiary education; and

the provision of an educational technology service.

In 1985, HEARU experienced a steady increase in the demand in each of these functions. The number of evaluations of teaching requested by academic staff has maintained a high rate with more evaluations of multi-unit courses; work on remedial english has increased and there have been more requests for comments on federal and state government publications or inquiries.

The Educational Technology Service has also had the busiest year since detailed

records were kept in 1980.

In-service workshops on aspects of teaching in higher education were conducted throughout the year and attracted staff from all faculties. Consultancies on issues related to tertiary teaching, but not solely evaluation, were conducted in forty-three faculties/departments and varied widely in scope from the analysis of marking procedures to course planning.

Considerable time was spent on the proposed School Link Program which is an attempt to bring students from disadvantaged backgrounds to Monash. HEARU has been asked to comment on various reports and correspondence from government sources by the Vice-Chancellor; in addition from its study of overseas publications HEARU has raised issues which it believes to have implications for Monash University.

A small grants scheme called TIP (Teaching Improvement Project) was begun in 1981, funded by the Vice-Chancellor. This scheme has supported over fifty innovative teaching techniques since its introduction. The variety has been extraordinary — from computer generated Chinese pictographs to a board game to teach respiration and to the use of mime to help students understand complex ideas. It has proved to be an efficient way of encouraging innovative teaching

For nine years the Australian Development Assistance Bureau has funded a scheme whereby approximately fifteen academics from Thailand come to Monash University for six months each year. The group in 1985 came from Chulalongkorn University and King Monkut Institute of Technology. They spent the first four months in HEARU undertaking a full-time formal course on teaching and learning in higher education. This was the last year of the contract with ADAB but a further extension of the contract to 1990 has been proposed by the Thai Ministry of University Affairs. Negotiations are continuing with the Department of Foreign Affairs.

Two staff have acted as consultants for the Australian Development Assistance Bureau (ADAB) and the Internal Development Program in Thailand and the Phillipines. One book was edited, one chapter in a book, eight journal articles and several internal reports were published during 1985.

HEARU has attracted over \$100 000 of government research funds to investigate two matters of interest. The first project, funded by the Commonwealth Department of Education, seeks to estimate the number of full-time students who would discontinue their full-time studies and to try to understand the reasons. The second project, funded by the CTEC, investigates the impact of higher education on mature age students who entered the system in 1978. Both are national studies, sampling over 13 000 students in thirteen universities, thirteen colleges of advanced education and nine TAFE institutions.

STUDENT ACTIVITIES

Orientation

The orientation program is designed to serve both as an academic and as a social introduction to life at the University.

For the fourth consecutive year orientation began with an official ceremony for new students in the Robert Blackwood Hall. Some 1 400 students were present for a ceremony which combined both dignity and warmth of welcome.

The opening ceremony was followed by faculty welcomes, with addresses by deans (or substitutes) and the opportunity to talk to staff over morning coffee. Moreover, many departments extended individual welcomes, and the Main Library offered guided tours.

The Host Scheme again proved to be one of the most important and valued aspects of the orientation program. Some 157 hosts gave of their services and some 1 500 new students availed themselves of the opportunity to join a group and be introduced to university life by a senior student.

Many others also contributed to the success of orientation — MAS, Clubs and Societies and the Sport and Recreation Association. A 'Do-it-Yourself' tour of the Sports and Recreation Centre was available and a free day was held at the pool. As always, the MAS fireworks display brought the program to a brilliant conclusion.

The theme of the *Orientation Handbook* was 'Life, the Universe and Everything', aimed at introducing the new students to a wide range of University activities and at promoting full participation in the University community.

The Union — Administration and general

In 1985 the Union operated on an expenditure budget of \$2 531 560 derived from a Union fee of \$225 for full-time students and \$141 or \$98 for part-time students. Substantial surplus funds carried forward from the

1984 budget were held in reserve and later used to modify fee increases in 1985. Subscription rates for all categories of optional Union membership were increased by \$5.00.

In the building and development area, the Clubs and Societies office was extended and plans were approved for remodelling of the Monash Health Foods shop and for enclosure of the southern balcony on the first floor of the Union building and extension of offices into that area. The Union Bar project progressed to the stage of appointment of architect and solicitor to prepare sketch plans and application for a liquor licence respectively, but the location of the bar proved to be an obstacle. As at the end of 1985 the location and financial aspects are being reconsidered in relation to other building proposals which, together with the bar, will absorb all of the space available for extension of Union premises. Because priority was given to the bar project, the proposed extension of the building to the northwest remained in abeyance. In the meantime, the need for refurbishing of facilities which are showing the effect of intensive wear and tear came to a head. Professional advice was obtained on the renovation of catering areas, first floor foyer and the Wholefoods Restaurant and initial proposals and cost estimates are being considered.

The Union's commitment of funds for the establishment of student facilities at the Queen Victoria Medical Centre, Clayton, was increased to \$260 800. A further commitment of \$90 000 plus, towards the establishment of the combined staff/student social club at the Alfred Hospital, was confirmed.

Proposed building works in the Cellar Room to accommodate the Union Bar prompted the removal of asbestos material from the ceiling of that area — and also from the ceiling of the University Bookshop. The latter work was a precaution against possible future hazards from asbestos and difficulties in temporarily relocating the bookshop operation at a later date.

Expenditure on minor works included a contribution towards the provision of a sealed car park adjacent to the swimming pool, safety measures in the aerobics facilities and in the Union theatre projection box.

For the first time in many years all food services returned surpluses — of .98 per cent of turnover for the main catering service, 1.9 per cent for the Health Foods shop and 2.6 per cent for the Wholefoods Restaurant. These pleasing results stem from an increase in business in all areas, plus improved management and financial controls. While the catering service objective of a breakeven result remains, the Union Board allows subsidies for selected aspects of the service. In 1985 the result was slightly above breakeven after deduction of these subsidies.

In the staffing area, measures to improve the working environment for all Union staff progressed. Recommendations from an occupational health and safety consultant for improvements to office furniture, lighting and ventilation were implemented. Staff education on the risks of RSI continued and no new cases of this condition were reported this year. The turnover of staff in Union areas was above the average level but there was no significant change in the overall establishment level. The Union Staff Committee worked hard to clarify the procedures for appointment of staff in the MAS areas, following the introduction of elected/remunerated positions for Lot's Wife editors and the administrative executive chairperson, and the new Taxation Department requirement that payments to former contractors be made via the University payroll. Some problems and anomalies in this area remain not the least being a continuing movement within MAS for more autonomy in staffing matters.

The imminent separation of the Union and the Sports and Recreation Association, in line with the Tadgell recommendations, gave rise to the Union Board conducting a review of the Union constitution and, late in the year, proposing a review of Union ad-

ministration. The constitution review ended in a decision to replace the two Sports and Recreation Association representatives on the board with two student representatives and to hold a referendum in 1986 to decide whether the positions shall be for one C and S and one MAGS representative or for general student representatives elected by postal vote. Consideration of the need or desirability of an administrative review continued into 1986. During the year council approved an amendment to the Union constitution to provide for urgent decisions by the Union Board. A proposal for amendment to the objects of the Union, incorporated in the Statute, is under consideration.

The Union Board was ably chaired by Professor R.P. Tisher. As usual the business of the Union Board covered a diverse range of subjects, reflecting the complexity of the Union organisation. These subjects included:

Child care As a result of negotiation with the Oakleigh Family Day Care Centre a field worker from the Centre assisted in the coordination of child care placings for student parents. A child care information service was provided in the Union for enrolling and re-enrolling students and an information booklet was issued to relevant Union and University offices.

Bus hire The service which had operated from the Sports and Recreation Centre for some years was discontinued and, in its place, the board offered subsidies to approved groups of Union members for the hire of commercial vehicles.

After hours bus service In response to the board's recommendation for safe passage on campus at night, council introduced a free after-hours bus service to serve the campus and associated flats and halls of residence.

Security at evening functions The Union now provides doorkeepers for discos and large functions sponsored by clubs and societies.

Student accident insurance The possibility of medical cover included in the Studentplan B

scheme being disallowed after May 1986 under new legislation is a cause for concern. Negotiations at Government level are con-

tinuing.

Reports from the major student organisations are included here. Reports from other student organisations indicate an active year in all cases: clinical students at the Alfred Hospital look forward to improved recreational facilities through the Alfred/Monash social club; the Community Research and Action Centre organised discussions and forums and its members contributed to offcampus conferences. CRAC special projects reflected current student interest in issues such as animal rights, freedom of information, drug abuse, conservation, alternative media, women's rights and the gay movement. Student Radio 3MU made good use of a long-awaited second studio and reactivated plans for short-range transmission. 3MU was given impetus by the ANZAAS congress at Monash as the facilities were used by the congress organisers and the 3MU operators were able to rub shoulders with professional radio operators. Once again a mid-year theatre festival staged by Student Theatre in association with the Alexander Theatre was a highlight in the cocurricular activities program.

In reviewing the Union year it is worth mentioning trends in student attitudes towards part-time employment versus voluntary work. With some improvement in the job market the Student Employment Office placed a record number of students in part-time and vacation jobs. Several jobs within the Union which have traditionally been carried out by student volunteers were converted to paid positions. From this the inference might be drawn that as the job market improves the motivation for volunteer work declines — or it might be purely a matter of economics. In any case, the volunteer spirit remains strong in clubs and societies where office-bearers continue to give generously of their time for the benefit of others.

Sports and Recreation Association

Throughout 1985 the Monash University Sports and Recreation Association complex continued with a high level of patronage from students, staff and subscribing members. The general public is also making increasing use of the swimming pool and other facilities at times which do not materially interfere with student activities.

The increased interest in general fitness activities such as aerobics, weight training and swimming continued at an even higher level than last year, despite the closing of some local commercial fitness centres. This heightened awareness of fitness as an integral part of occupational health is particularly noticeable with more students and staff seeking personalised fitness programs.

An appreciation of the value of physical activity in a social sense is also indicated by the level of participation in the co-recreational programs. Lunchtime games were again so popular that entries far exceeded the available hall space. In conjunction with the beginners' classes these involve a large number of participants, many of whom continue to pursue these interests on and off campus.

Although no building projects were undertaken during the year, the extensions of the alpine lodge were completed and work commenced on refurbishing the squash change rooms, originally built during the

early 1960s.

The World Pentathlon Championships, ANZAAS Questacon and Australia Games badminton competition attracted a large number of the general public to the centre.

The University was well represented in 1985 intervarsity competitions, hosting the rowing, canoeing, billiards and snooker, and snow skiing championships. First positions were obtained in athletics, table tennis, billiards and snooker and canoeing. Several Monash students were selected in the badminton and rowing teams which repre-

sented the Australian Universities Sports Association in New Zealand. Two students in basketball and one in judo also represented Australia at the World University Games.

Following the decision to separate the Sports and Recreation Association and the Union, the association is prepared to implement the new procedures contained in the proposed new constitution of the association.

Clubs and Societies

1985 was again a very successful year for the Clubs and Societies council. A number of new clubs were formed and all clubs as usual benefitted from grant monies distributed on the authorisation of the student-elected clubs and societies executive.

In addition to the variety of services already offered to clubs which includes photocopying, duplication, electronic stencil cutting and screen printing, the Clubs and Societies Office now has three IBM Selectric typewriters for club use and these have proved to be very popular for club work.

The clubs and societies executive and staff again provided much assistance to club office-bearers, in the form of responses to queries about the access to and distribution of funds; and considerable time was also spent in helping and advising newly-appointed club personnel in understanding the C and S manual and grants criteria.

With the return of the Activities Officer (Louise Robertson) to campus and the appointment of a new General Secretary (Toni Wallace), the Clubs and Societies Office is now working at full capacity and looking foward to a busy and very successful 1986.

Monash Arts and Crafts Centre

For the Monash Arts and Crafts Centre, 1985 once again proved to be a successful year.

In the established theme of four terms per year — Summer, Autumn, Winter and Spring — many new courses have been introduced, including Vegetarian Cooking, International Cookery, Cane Seat Weaving, Make a Teddy Bear, Massage for Fun, Massage for Couples, American Patchwork, Seminole Patchwork, Crochet, Tapestry Frame Weaving, Reducing Gas and Electricity Bills, Wig Making for Antique Dolls, Leather Shoemaking for Antique Dolls, Chocolate Making for Easter, and Personal Self-Motivation.

The 'old faithfuls', Pottery, Music, Leadlight, Jewellery, Painting and Drawing, Sewing, Weaving, Spinning, Music and Photography are sustaining their popularity and courses fill very quickly.

Participation in the Weekend Workshops has increased steadily, particularly with the Monash students and staff who otherwise would have clashes with normal work and/or studies.

Every effort has been made to promote public awareness of the courses offered. The various displays held in the centre's gallery throughout the year have created a great deal of interest amongst students, staff and the general public. The 50 per cent discount to Monash fee-paying students is also proving to be extremely popular, with their increasing participation in the courses.

During 1985, the centre continued to run smoothly and efficiently, due to the dedication of administrative, support and teaching staff.

Monash Association of Graduate Students

1985 was a year of establishment and growth for MAGS. Early in the new year, the committee was sad to see the departure of its research organiser who had given to that position much needed stability and had been responsible for the consolidation of the MAGS office as the heart of the organisation. After an exhaustive search for a successor, the committee was delighted to discover

the current research organiser who entered the position with energy and enthusiasm, and has remained dedicated and professional.

The committee of fifteen elected at the last annual general meeting diminished as always towards the end of the year, but the core of eight or nine members who remained to carry on were enthusiastic and devoted. Some new faces were also coopted allowing the committee to function most

efficiently until the 1986 AGM.

After a period during which it operated as 'cooperative collective committee', without formal offices or structural processes of decisionmaking in 1985, the committee moved towards a more traditional form with the appointment of an official president on a three-month rotational basis. The committee and the research organiser have worked on a number of areas including the new MAGS constitution, supervision, postgraduate representation on Union Board, the MGS stipend, sexual harassment grievance procedures, a remuneration survey, insurance for postgraduates, word processing and data storage sessions, five newsletters and various social functions.

One of the year's highlights and a resounding success was the Thesis Writing Workshop held in May. The workshop was very well attended by postgraduates, honours students and staff, with the result that a similar function will be held annually for new postgraduates and honours students. A Thesis Planning Seminar is also planned for 1986.

MAGS also took an active part in the council of Postgraduate Associations (CAPA), particularly since one of its committee members will be the CAPA women's executive member for 1985. This same member is the CAPA president in 1986.

In 1986, for the first time, MAGS will have a part-time project officer who will commence work early in February. With the increasisng volume of business coming through the office each day, as well as the extra demands for research generated by the number of projects being undertaken by MAGS, the committee approached the Union for the creation of a part-time position to assist the research organiser. Along with the secretary, this now takes MAGS staff to three. This may sound like a modest total, but it makes MAGS one of the largest employers of all time university postgraduate associations! The committee is grateful to the Union Board, and to the Warden of the Union, for supporting MAGS in this, its period of maturing and growth.

GIFTS AND GRANTS

Ahrama Mra I D		
Abrams, Mrs I.D. to the Student Asssistance Fund		150
ACI Australia Limited		100
to the work of the Krongold Centre		250
ACI Fibreglass Pty Ltd		
for the project: Heat flow through ceilings and roofs of buildings,		
Associate Professor A. Williams (Mechanical Engineering)		9 167
Aitken, Mr A.K. and Mrs L.D.		
for use in the the Krongold Centre		50
Alcoa of Australia Limited		
1984 Alcoa Prize in Fourth Year (Materials Engineering)		200
Aldermans		
for in vitro fertilisation program, Professor C. Wood (Obstetrics and		
Gynaecology)		400
Alexander, Mrs R.		
further payment for artists' room (Robert Blackwood Hall)	1 000	
to be used at the discretion of Professor E. Laurenson (Civil		
Engineering)	500	1 500
Alexander Foundation, The George		
for collection of avian fossils from Lord Howe Island, Mr C. Meredith		
(Zoology)		1 590
Alfred Hospital		
Peter Hay Cancer Research Fund to Dermatological Research Fund,		
Dr R. Marks (Medicine, Alfred Hospital)	11 053	
Specific Purpose Trust Account		
for liver transplantation research (Surgery, Alfred Hospital)	2 500	
final payment of 1984 scholarship (Medicine, Alfred Hospital)	7 500	
research into leukaemia being conducted by Dr H. Salem (Medicine,	* 10*	00.010
Alfred Hospital)	5 195	26 248
Allada Pty Ltd		
for payments due under agreement Cancer Diagnostic Kit project		
Professor A.W. Linnane (Centre for Molecular Biology and		225 222
Medicine)		225 000
AMP Society		700
to Careers and Appointments Service		700
Angliss (Victoria) Charitable Fund, The William		5 000
for use in the Krongold Centre		5 000
Anonymous	100	
1984 A.R. Wallace Prize (Zoology) Prize for Obstetrics and Gynaecology	100	
for use by Associate Professor J. Mainland (Surgery, Alfred	100	
Hospital)	1 500	
to assist in paying subscriptions to journals, etc. (Library)	10 000	
for research (Chemistry)	1 252	
for funding of scholarship for Mr S. Saejiv (Law)	2 000	
for Library	220	15 172
Anti-Cancer Council of Victoria		10 114
research grants to: Dr R.L. Boyd and Dr H.A. Ward (Pathology and		
Immunology)	30 000	
67.		

Dr G.B. Deacon (Chemistry) Dr J.S. Pederson, and Associate Professor B.H. Toh (Pathology and	25 292	
	23 712	
Immunology) Dr. J. Balland (Bathalam and Immunology)		
Dr J. Rolland (Pathology and Immunology)	13 360	
Dr D.R. Smyth (Genetics)	17 320	
Dr P.J.M. Tutton, and Dr D.H. Barkla (Anatomy)	28 922	
Associate Professor M.B. Van der Weyden (Medicine, Prince Henry's	00.000	
Hospital)	23 832	
Dr G.L. Willis, Dr G.N. Brodie and Dr G.C. Smith (Psychological		
Medicine)	24 498	
	186 936	
to cover increases in costs — 1984:		
(Pathology and Immunology)	3 021	
(Medicine, Alfred Hospital)	1 691	
(Genetics)	981	
(Psychological Medicine)	1 574	
(Anatomy)	1 578	
	8 845	195 781
Applied Chemicals Pty Limited	0 010	100,01
to Chemical Engineering		500
Arthritis Foundation of Victoria, The		300
for the projects:		
Turnover of proteoglycans in adult articular cartilage in culture,	1.050	
Dr C.J. Handley (Biochemistry)	1 250	
Tissue degradation by proteolytic enzymes in experimental arthritis,	4 000	
Professor D. A. Lowther (Biochemistry)	4 000	
Changes in the characteristics of the core protein of the aggregating		
proteoglycan from articular cartilage as the result of degeneration		
of articular cartilage, Dr C.J. Handley and Dr H.C. Robinson		
(Biochemistry)	3 750	
Polymorphonuclear elastase in experimental arthritis, Professor		
D.A. Lowther (Biochemistry)	1 500	
Structure of proteoglycan lost from normal and activated articular		
cartilage maintained in organ culture, Dr C.J. Handley		
(Biochemistry)	2 500	13 000
Arthur Andersen and Co.		
1984 prizes for Business Finance	150	
Electronic Data Processing	150	300
Arthur Robinson and Hedderwicks	100	000
for use in Careers and Appointments Service	100	
for contribution to Centre for Commercial Law and Applied Legal	100	
Research	5 000	5 100
	3 000	3 100
Arthur Young and Company		9.00
for use in Careers and Appointments Service		320
Association of Ukrainians in Victoria (AUV)		
financing of Ukrainian lectureship for 1985	0.06	
from Association	21 004	
from Members of the Association		
(Slavic Languages)	10 996	32 000

Australia and New Zealand Banking Group		
for use in Careers and Appointments Service		500
Australia-China Council		300
living allowance for Zhao Yi-Xiang during project: Prediction of the		
profile of hot-rolled steel slab after edge rolling, Dr P.F. Thomson		
(Materials Engineering)		2 500
Australia Council		- 000
for poetry readings 1985 (English)		600
Australia Wide Personnel for Careers and Appointments Service		
	100	
Australian Airlines		
1984 Prize in Air Law		100
Australian American Assurance Co. Limited		
for use in Careers and Appointments Service		20
Australian Associated Brewers, The		
for the project: The cerebellum in experimental alcohol intoxication,		
Dr S.C. Phillips (Anatomy)		25 107
Australian Ceramic Society, The		
Frank Bailey Memorial Prize (Materials Engineering)		300
Australian Development Assistance Bureau		
allowance for Dr S. Hua, visitor from China, training in Leptospirosis		
with Professor S. Faine (Microbiology)		5 000
Australian Kidney Foundation, The		
for the projects:		
The control of normal and abnormal development of		
metanephric kidney by the ureteric bud, Dr L.J. Cussen and Dr		
R.W. Yardley (Paediatrics)	3 000	
Mechanisms of glomerular injury, Dr S.R. Holdsworth (Medicine,		
Prince Henry's Hospital)	6 750	9 750
Australian Medical Association		
(Victorian Branch)		
1984 Australian Medical Association Final Year Prize		1 000
Australian Mineral Industries Research Association Limited		
for project: Condition monitoring of mineral processing machinery,		00.500
Dr R.J. Alfredson (Mechanical Engineering)		90 500
Australian Museum Trust		
for the project: Collection of avian fossils from Lord Howe Island, Mr		1 000
C. Meredith (Zoology) Australian National University, The		1 000
share of first quarterly payment for Committee for Review of Australian Law Schools (CTEC) (Centre for Commercial Law and		
Applied Legal Research)	17 315	
balance of 1985 ARGS grant transferred from ANU for project:	17 515	
Intelligent sensory-based robotics, Dr R.A. Jarvis (Electrical		
Engineering)	17 704	35 019
Australian Psychological Society, The	17 701	00 015
prize in Psychology		100
Australian Society of Accountants		100
Prize in First Year Accounting	125	
Prize in Second Year Accounting	125	250
O		

Australian Tobacco Research Foundation for the project: Investigation of theeffects of nicotine on human platelets, Dr S. Pfueller and Professor B.G. Firkin (Medicine, Alfred Hospital)		31 813
Australian Welding Research Association final payment for the project: Microstructural stability of self shielded cored wire weld metal, Dr R.A. Jago (Materials Engineering)	795	
instalment for the project: Hydrogen stress cracking susceptibility of line pipe steels, Associate Professor B.W. Cherry (Materials Engineering)	3 140	3 935
Baker, Shaw Benefactions Thomas Baker (Kodak) Alice Baker towards research into Interferon, Professor A.W. Linnane (Centre for Molecular Biology and		
Medicine) Baldwin, Ms W.		25 000
for purchase of books (Graduate School of Librarianship)		D0
Baxter Charitable Trust, Percy for the projects: Design of a prosthetic anterior cruciate ligament, Dr B. Oakes and Dr G.H. Edward (Anatomy)	3 000	
Human skin epithelial expansion in tissue culture, Dr B. Oakes (Anatomy)	2 000	
Biomechanical, morphological and biochemical studies of repair in the sheep anterior cruciate ligament, Dr B. Oakes (Anatomy)	1 000	
towards costs of radioactive isotope counting system, Dr A. Walker (Centre for Early Human Development)	5 000	11 000
Behrend, Mrs D.H. for Molecular Biology and Medicine		400
Betty and Lawrie, c/- Mrs J. Sampson		100
for use in Medicine, Prince Henry's Hospital Biotechology Australia Pty Limited		20
for Inhibin research project, Professor D. de Kretser (Anatomy) National Biotechnology Grant for joint project:	6 570	
The cloning and production of inhibin microbial cells, Professor D. de Kretser (Anatomy)	84 622	91 192
Blackwell Limited, B.H. for publications (Graduate School of Librarianship)		3 000
Blake and Riggall 1984 Prize for Contract Law (Law)	100	
contribution to the Centre for Commercial Law and Applied Legal Research	5 000	5 100
Blood Centre of S.E. Wisconsin towards research (Medicine, Alfred Hospital)		577
Boby and Co. (Australia) Pty Ltd 1984 Prize for Chemical Engineering		350
Bode, Mr and Mrs K. for use in the Krongold Centre		100
BP Australia Limited for use in Careers and Appointments Service	1 700	

towards cost of international symposium on coal structure and reactivity, Professor W.R. Jackson (Chemistry)	750	2 450
BP Research Centre UK		
for the project: Kinetic and mechanistic studies on liquefaction of low		
rank coals particularly using synthetic gas — extra-mural research		
award, Professor W.R. Jackson and Professor F.P. Larkins		
(Chemistry)		130 123
Brockhoff Foundation, The Jack		
to screen documentary film 'Theorem - A Dream of Change' to		
make all students aware of the special needs of disabled students		
(Vice-Chancellor's Advisory Committee for People with		
Handicaps)		100
Broken Hill Associated Smelters, The		
postgraduate scholarship for Mr Li Nan of Beijing, China (Chemical		T 010
Engineering)		7 616
Broken Hill Proprietary Company Limited, The	000	
BHP Prize in First Year Engineering	200	
towards scholarship stipend, Mr Zhao Yi-Xiang (Materials	1 500	1 700
Engineering)	1 500	1 700
Brown Coal Liquefaction (Victoria) Pty Limited		
towards the International Coal Science Conference, November 1985,		200
Professor W.R. Jackson and Dr P.J. Cassidy (Chemistry) Brown, Professor R.D.		200
		50
for Dr Enn Elbing Memorial Prize Fund Buckland Foundation, William		30
for the project: The role of glycoproteins in the processes of		
fertilisation, early embryonic development and implantation, Dr		
P.J. Lutjen (Obstetrics and Gynaecology)	8 000	
second and final instalment for research into Interferon, Professor		
A.W. Linnane (Centre for Molecular Biology and Medicine)	25 000	33 000
Burchill, Sister E.		
annual contribution to the Elizabeth Burchill Fund (Arts)		10 000
Carlton and United Breweries Limited		
for use in Careers and Appointments Service	500	
for use in Centre for Molecular Biology and Medicine	26 250	26 750
Celanese Research Company		
for the project: Genetics of gram-negative micro-organisms,		
Professor B.W. Holloway (Genetics)		51 957
City of Nunawading		
for the Krongold Centre		100
City of Waverley		
subsidy 1984/1985 series, Sunday afternoon concerts (Robert		0.700
Blackwood Hall)		2 700
Claremont Petroleum Scholarship N.L. Scholarship Trust		
Monash-Claremont Petroleum Research Scholarship, Honours student Mr C. Menhennit, researching the geological evolution of		
the Jackson region, Eastern Cooper/Eromanga Basins, Mr V.J.		
Wall (Earth Sciences)		7 000
Clark, Professor A.C.L.		, 000
to Paediatrics		273
		7.7

Classic and Historic Automobile Club of Australia		50
for use in Electrical Engineering		50
Coco, Mr and Mrs B.		100
to the work of the Krongold Centre		100
Coles, G.J. and Company Ltd		
contribution to Centre for Commercial Law and Applied Legal		1 000
Research		1 000
Collier Charitable Fund		
towards flume in hydraulics laboratory (Civil Engineering)	4 000	
towards purchase of set of Encyclopaedia Britannica (Education)	950	
computer teaching program (Chemistry)	300	
video cassettes from Open University (Physics)	300	
text books 250 plastic spheres(Chemistry Resource Centre)	250	
bacterial plate colony counter (Microbiology)	800	
skeleton for museum (Anatomy)	700	
blood pressure transducer (Pharmacology)	700	
personal weighing machine and height measuring device		
(Physiology)	750	9 000
Colonial Mutual		
for use in Careers and Appointments Service		50
Comalco Limited		
for use in Careers and Appointments Service		200
Committee for Chaplaincies		
for use by Religious Centre		750
Coopers and Lybrand (ACT) Pty Limited		
Coopers and Lybrand Research Grant for 1985 (Accounting and		
Finance)	198	
for use in Careers and Appointments Service	400	
1984 prize Accounting and Finance (Honours)	200	798
Corrs Pavey Whiting and Byrne		
contribution to Centre for Commercial Law and Applied Legal		
Research		5 000
Cottman, W.T., Estate of the late		
share of 1984/85 income from The Walter Cottman Endowment		
Fund (Medicine)		5 770
CRA Limited		0 1 1 0
for use in Careers and Appointments Service		250
CSR Chemicals Limited		200
1984 CSR Chemicals Prize (Chemistry)	200	
for 1985 CSR Chemicals Prize (Chemistry)	200	400
Darvall McCutcheon	200	100
contribution to Centre for Commercial Law and Applied Legal		
Research		5 000
Davies and Collinson		3 000
contribution to the Centre for Commercial Law and Applied Legal		1 000
Research		1 000
de Kretser, Professor D.M.		
to assist with the expenses of Dr Peter Temple-Smith's attendance,		
Third International Andrology Conference in Boston, April 28 to		700
May 5, 1985 (Anatomy)		700

Dean, Lady		
to Elizabeth Eggleston Memorial Fund		20
Digital Equipment Pty Limited		
Prize for Computer Engineering project		300
Du Pont (Australia) Limited		
for gastroenterological research, Dr J. Hansky (Medicine, Prince		
Henry's Hospital)		6 000
Eggleston Trust Fund, Elizabeth		
to purchase books, journals and videos (Law)		700
Eggleston, Estate of the late Elizabeth		
for purchase of equipment, books, cassettes, for use in Aboriginal		
Research Centre	2 000	
to MOSA Students' Welfare Fund	2 500	0 *00
to support students participating in MOSA	5 000	9 500
Eggleston, Lady		
to the Elizabeth Eggleston Memorial Fund		500
Electrolytic Zinc Company of A/Asia Ltd		
for the project: Facies and palaeoenvironmental analysis of archaean		
volcanic succession hosting the Golden Grove and Scuddles		
mineralisation WA, Dr R.A. Cas (Earth Sciences)		1 451
Ellison Hewison and Whitehead		100
for use in Careers and Appointments Service		100
Endangered Species Program Fund for Animals		* 000
koala research, Associate Professor K. Lee (Zoology)		5 000
First and Whinney		900
for use in Careers and Appointments Service		300
Esso Australia Limited	300	
for use in Careers and Appointments Service	1 500	
to Engineering to each of the five departments within the faculty, \$1 000	5 000	
general grant in support of students and staff (Earth Sciences)	3 000	
to assist honours students in geology (Earth Sciences)	2 000	
for the project: Investigation into the corrosion of cathodically	2 000	
protected hot land pipelines, Associate Professor B.W. Cherry		
(Materials Engineering)	14 304	26 104
Evatt Memorial Foundation Incorporated,	11 001	20 101
Herbert Vere to MOSA Students' Welfare Fund		5 000
Farrell, Mr B.W.		0 000
for the Krongold Centre		25
Felton Bequest, The		
to assist with the project: Lactation and the contraceptive effects of		
to assist with the project: Lactation and the contraceptive effects of breast feeding, Dr M.B. Renfree and Professor R.V. Short		
breast feeding, Dr M.B. Renfree and Professor R.V. Short		7 500
to assist with the project: Lactation and the contraceptive effects of breast feeding, Dr M.B. Renfree and Professor R.V. Short (Anatomy) Fields Estate, Ernest		7 500
breast feeding, Dr M.B. Renfree and Professor R.V. Short (Anatomy) Fields Estate, Ernest		7 500
breast feeding, Dr M.B. Renfree and Professor R.V. Short (Anatomy) Fields Estate, Ernest to establish one or more scholarships in the Faculty of Medicine, for		7 500
breast feeding, Dr M.B. Renfree and Professor R.V. Short (Anatomy) Fields Estate, Ernest to establish one or more scholarships in the Faculty of Medicine, for students who are admitted to a course of study leading to the		7 500 114 096
breast feeding, Dr M.B. Renfree and Professor R.V. Short (Anatomy) Fields Estate, Ernest to establish one or more scholarships in the Faculty of Medicine, for		
breast feeding, Dr M.B. Renfree and Professor R.V. Short (Anatomy) Fields Estate, Ernest to establish one or more scholarships in the Faculty of Medicine, for students who are admitted to a course of study leading to the degree of Bachelor of Medical Science		

Ford Motor Company of Australia Limited		
Prize for Third Year Mechanical Engineering		100
Freeman, Mrs T.R.		2.5
towards expenses of overseas visit, Dr A. Gregory (Education)		500
Gandel, Mr J.		
to the work of the Krongold Centre		2 500
Gantner, Mrs N.B.		
to the work of the Krongold Centre		2 000
George Weston Foods Limited		
contribution to the Centre for Commercial Law and Applied Legal		
Research		1 000
Gillotts		
contribution to the Centre for Commercial Law and Applied Legal		
Research		5 000
Glasson, Mr E.J.		
honoraria donated to assist with the compiling of the index to the		
Company and Securities Law Journal (Law Library)		197
Glaxo Australia Pty Ltd		and their strategy
towards costs of update courses for 1985 (Community Medicine)		1 850
Gleeson, Dr J.		
to L. J. Gleeson Memorial Prize Fund in Applied Mathematics		
(Mathematics)		125
Gold Fields Exploration Pty Limited		
for laboratory studies, PhD research, Tirad project, Philippines, Mr		
A.G. Trudu (Earth Sciences)	1 544	
for the project:		
Hydrothermal mobility, transport and deposition of tin, Dr M.	1 700	0.044
Bloom (Earth Sciences)	1 700	3 244
GRE Insurance Limited		0.50
for use in Careers and Appointments Service		250
Great Barrier Reef Marine Park Authority		
to augment 1985 grant for the project:		
The functional morphology and nutrition of the dugong in		
relation to its seagrass diet, Ms J. Lanyon; Dr G.D. Sanson		1 000
(Zoology)		1 000
Green, Dr R.L.		30
to Students' Special Grants and Loans Scheme		30
Groom, Mrs L.J.		100
to the work of the Krongold Centre		100
Hanks, Mr P., and Keon-Cohen, Mr B. representing the net royalties to 31st December 1984, in respect of		
sales of the book Aborigines and the Law, Essays in Memory of Elizabeth		
Eggleston, proceeds to go to the Elizabeth Eggleston Memorial		
Appeal Fund.		875
Healy, Mr G., and O'Connor, Ms T.		0,0
for use in muscular dystrophy research, (Biochemistry)		50
Healy, Mr R.L., Mr A.B., and Mr J.B.		50
for research into muscular dystrophy, Dr L. Austin (Biochemistry)		130
Hecht Trust, H. and L.		100
IICCII II GOO, II. GIG I.		

for design of a prosthetic anterior cruciate ligament, Dr B. Oakes and Dr G.H. Edward (Anatomy)	20 000	
towards cost of equipment (Centre for Molecular Biology and	5 000	
Medicine) second and final instalment for the purchase of equipment for	3 000	
Interferon research, Professor A.W. Linnane (Centre for		
Molecular Biology and Medicine)	10 000	
for the project: Control of reproduction in marsupials, Dr M.B.	10 000	
	10 400	45 400
Renfree (Anatomy) Herald-Sun TV Pty Limited	10 100	10 100
for Dr Mary Nixon's project for 1985 — research on children and		
television (Education)		19 900
High Blood Pressure Council of Australia		13 300
for hypertension research, Professor C.I. Johnston (Medicine, Prince		
		200
Henry's Hospital)		200
Hillview Quarries Limited		25 000
to Centre for Molecular Biology and Medicine		23 000
Honeywell Pty Limited		500
for use in Careers and Appointments Service		300
Hughes, Estate of Amy Rhoda		3 000
to the work of the Krongold Centre		3 000
Hungerford, Hancock and Offner		500
for use in Careers and Appointments Service		300
Hunter, G.D.		25
for liver transplantation research (Surgery, Alfred Hospital)		23
IBM Australia Limited	150	
1984 IBM Prize for Marketing (Administrative Studies)	150	
IBM Prize for Excellence in Theoretical Computer Science 1984	150	450
IBM Prize for Third Year Electrical Engineering	150	450
ICI Australia Limited	100	
ICI Prize in Pharmacology	100	670
for use in Careers and Appointments Service	570	670
ICI Australia Operations Pty Limited		
towards travel costs to attend Plasma Chemistry Conference,		
Holland, July 1985, Professor R. McPherson (Materials	1 750	
Engineering)	1 750	(9
to supplement post doctoral fellowship, Mr C. Berndt (Materials	0.000	
Engineering)	2 000	
consultancy fee, as per agreement, Professor R. Jackson	1 700	
(Chemistry)	1 500	
for scholarship August-October 1985, Miss Helen Gountzos	1.004	7 1 7 4
(Chemistry)	1 904	7 154
Imperial Chemical Industries PLC UK		
for project: The genetics and biochemistry of the organism used in		007
the ICI single cell process, Mr P. Kearney (Genetics) Infertility Medical Centre		987
balance for 1984 plus Jan-Dec 1985 salary, Dr H.O. Hoppen		
	10 778	
(Obstetrics and Gynaecology) for purchase and finance of ultrasound equipment (repayment of	40 778	

principal and interest to 31 July 1985) Professor C. Wood (Obstetrics and Gynaecology) for salary costs — embryo and egg transfer fund, Ms M. De Witt and Dr P. Rogers (Obstetrics and Gynaecology, Queen Victoria	15 672	
Medical Centre)	61 589	
for scholarship, Mr C. Yates (Anatomy)	3 100	121 139
Ingram Trust, M.A.	0 100	121 100
for project: Bird fossils on Lord Howe Island, Mr C.W. Meredith,		
(Zoology)	1 200	
for the project: The functional morphology and nutrition of the		
dugong in relation to its seagrass diet, Dr G. Sanson (Zoology) towards the project: Anatomy and evolution of the immune system in monotremes and marsupials, Dr D. Poskitt (Pathology and	2 800	
Immunology)	1 050	5 050
Institute of Chartered Accountants in		
Australia, The award for the best accounting student in 1984		100
International Development Program of		
Australian Universities and Colleges in recognition of the contributions made to the IDP program by:		
Professor E.M. Laurenson (Civil Engineering)	2 000	
Professor J. Crossley (Mathematics)	2 000	
Professor W.A. Rachinger (Physics)	2 000	
Associate Professor A. Williams (Mechanical Engineering)	2 000	
supplementary research funding for:		
Mr M. Watanasak (Earth Sciences)	320	
IDP Fellow, Miss Aurapin Eamsiri, Professor W.R. Jackson		
(Chemistry)	2 150	
incentive grants for:		
Dr L. Frakes (Earth Sciences)	500	
Dr B. Coller (Chemistry)	1 850	
Professor P.J. Fensham (Education)	750	
Dr L.H.T. West (Higher Education Advisory and Research Unit)	750	15 070
IVF Friends		
towards the purchase of an ultrasound machine (Obstetrics and		
Gynaecology)		14 166
Jackson, Mr and Mrs		
for use in Krongold Centre		75
Jennie Campbell Promotions		
for use in Obstetrics and Gynaecology		5 000
Kraft Foods Limited		
for use in Chemical Engineering		2 000
Lalor Foundation, The		
for research fellowship project:		
The contraceptive effects of breastfeeding, Professor R. Short and		
Dr P. Lewis (Physiology)		12 374
Laurenson, Professor E.M.		
to be used for the work of Civil Engineering	1 100	
Leith Charitable Fund, The Flora and Frank		
for use in the Krongold Centre	1 000	

McKinnon High School		
for use in Careers and Appointments Service		40
Mallesons		
contribution to the Centre for Commercial Law and Applied Legal		
Research	1 000	
for use in Careers and Appointments Service	100	1 100
Marks, Dr R.		
to Dermatology Research Fund (Medicine, Alfred Hospital)		55
Masonic Masters' Association		
to assist with the study of the physiology of temperature control in		
sleep in the newborn (Research Centre for Early Human		
Development)		1 500
Mayne Nickless Limited		
contribution to Centre for Commercial Law and Applied Legal		1 000
Research		1 000
Merck Sharp and Dohme (Australia) Pty Limited		
grant in aid for hypertension research, Professor C. I. Johnston	5 000	
(Medicine, Prince Henry's Hospital)	5 000	
to cover cost of conference for visiting Swedish rheumatologists (Biochemistry)	273	5 273
Mobil Oil Australia Limited	413	3 413
for use in Careers and Appointments Service		200
Monash Ex-Committee Club		200
for use in Library		415
Monash Medical Mothers' Auxiliary		
to Library	1 200	
to Community Medicine	750	1 950
Monash-Oakleigh Legal Service		
Commission's contribution to salary of L. Englesmann (Law)		5 950
Monash University Parents Group		
1985 distribution of funds to:		
Department of Botany	219	
Faculty of Economics	450	
Faculty of Education	133	
Electrical Engineering	510	
Department of Genetics	215	
Hargrave Library	1 200	
Department of Mathematics	700	
Main Library	2 3 1 0	
Robert Blackwood Hall	450	7 000
University Union	822	7 009
Monier Limited		
contribution to Centre for Commercial Law and Applied Legal		5 000
Research		5 000
Moore, Mrs Vera	5 500	
for University Union to the Krongold Centre	2 100	
towards the purchase of a harpsichord (Robert Blackwood Hall)	2 000	
	4 UUU	
to the Library	500	

to assist with purchase of sculpture for the Art Gallery	500	10 600
Murdoch University ARGS grant and its associated materials transferred from Murdoch University to Monash, for the project: Cloning and genetic analysis in clostridium perfringens, Dr J.I. Rood (Microbiology)	2 516	
Rural Development Fund grant transferred from Murdoch University to Monash, for the project: Cloning and manipulation of virulence antigens involved in ovine footrot, Dr J.I. Rood		
(Microbiology) Muscular Dystrophy Association of	15 500	18 016
New Zealand to cover consumable expenses for PhD candidate Mr A.D. Gurusinghe (Biochemistry)		652
Myer Foundation, The for use in Centre for Human Bioethics		12 707
Myer, Mr K.B. for use in Graduate School of Librarianship		1 000
National Australia Bank		
1984 Banking Law Prize (Law) National Mutual Life Association of		200
Australasia Limited, The to Careers and Appointments Service contribution to the Centre for Commercial Law and Applied Legal	100	
Research	1 000	1 100
Nylex Corporation Limited 1984 Prize for Materials Engineering for the project Modifications to the Mohar window to achieve	200	
for the project: Modifications to the Mabag winder to achieve cutting, Dr Z. Stachurski (Materials Engineering)	5 600	5 800
Ow, Mr Weng Kai to the Library		21
Paget, Mr N., and Hore, Dr T.		
royalties for use by Higher Education Advisory and Research Unit		18
Paringa Mining and Exploration Company P.L.C. in support of Mr M. MacLennan's expenses in producing final MSc thesis on:		
Paragenetic, fluid inclusion and stable isotope studies of the Cassilis Gold-Sulphide-Sulphosalt Vein System, Swifts Creek,		
Victoria (Earth Sciences)		400
Parkhill Lithgow and Gibson 1984 Prizes in Financial Accounting	150	
and Accounting Honours	150	300
Pathology and Immunology, Department of Professor R.C. Nairn and colleagues to Pathology and		
Immunology		28 080
Paton, Lady Alice for use in the Krongold Centre		25
Peat Marwick Mitchell and Company		40
contribution to Centre for Commercial Law and Applied Legal Research	1 000	

for use in Careers and Appointments Service	220	1 220
Penguin Books Australia Limited		
to Careers and Appointments Service		10
Petroleum Refineries (Australia) Pty Limited		
for use in Careers and Appointments Service		200
Philips Communication Systems Limited		
travel grant, Associate Professor B.A. Parker and Mr P.M. Miller		
(Materials Engineering)		1 430
Philips Telecommunications Manufacturing		
Company Limited in support of visit of student Mr Zhang Qi-Hai		
from the General Institute for Non-Ferrous Metals, Beijing, China,		
for course (Materials Engineering)		400
Phillips, Fox and Masel		
1984 Alec Masel Prize (Law)	150	
to Centre for Commercial Law and Applied Legal Research	5 000	5 150
Potter Foundation, The Ian,	0 000	0 200
for travel grants:		
Associate Professor J.D. Cashion (Physics)	500	
Dr M.W. Beilharz (Biochemistry)	500	
Associate Professor R.S. Dickson (Chemistry)	500	
Mr P. MacKinnon and Dr G. Deacon (Chemistry)	500	
Dr M.N. Clayton (Botany)	2 000	
Dr T. Sridhar (Chemical Engineering)	500	
Dr G.A. Holder (Chemical Engineering)	500	
Dr G.E. Rice (Physiology)	500	
Dr W.D. Comper (Biochemistry)	500	
for equipment purchases:	300	
Dr A. Walker (Research Centre for Early Human Development)	15 000	
Associate Professor B. Preston (Biochemistry)	7 000	
towards the cost of a Perkin Elmer DSC-4 Scanning Calorimeter	7 000	
System (total cost \$30 000) Dr D.R. MacFarlane and Dr D.J.		
Bannister (Chemistry)	10 000	38 000
Pratt Group, The	10 000	30 000
for use in Careers and Appointments Service		250
Praxa Pty Ltd		230
fourth year prizes:		
theoretical	200	
practical (Computer Science)	200	400
	200	400
Prince Henry's Hospital —		
Department of Surgery Research Account for use in Surgery, Prince	9 500	
Henry's Hospital	2 500	
Whole Time Medical Specialists for part-time technical assistant and		
purchase of a heart period meter (Medicine, Prince Henry's	r 000	
Hospital)	5 000	
Department of Medicine towards research into the role of circulating		
morphine-like hormones in psychiatric conditions, particularly		
severe depression, schizophrenia and anorexia nervosa; half		
salary for Mr J. Encel, Technical Assistant (Psychological	0 714	
Medicine)	8 514	

(NHMRC program grant 1981-85 for the project: Reproductive endocrinology, Professor D.M. de Kretser and Dr H. Burger (Anatomy)	200 865	
for C.J. Martin Fellowship Cytological and hormonal studies of	200 803	
testicular function, Dr J. Kerr (Anatomy) Programmed Maintenance Services Pty Ltd	17 833	249 944
for Careers and Appointments Service		250
Prok International Limited 1984 Prizes:		
to Mechanical Engineering		
for Vacation Work Report	100	
International	100	200
Pups, The — one of the supporting groups of		
the Victorian State Schools' Horticultural Society's project, in aid of		
the Spina Bifida Program, Spina Bifida Research Fund, Associate		
Professor R.A. MacMahon (Paediatrics)		250
Queen Victoria Medical Centre		
balance of salary for research assistant 1984: Mini computer		
research, Clinical Associate Professor V.Yu (Neonatal Intensive		
Care Unit in conjunction with Research Centre for Early Human		
Development)		539
Radio Research Board		
second instalment of 1984/85 grant for the project: Ion-exchanged		
and proton-exchanged LiNb03 optical modulators and phase		
shifter, Dr L. N. Binh (Electrical Engineering)		1 750
Ramaciotti Foundations, Clive and Vera		
for the project: Salivary melatonin profiles in blind and quadriplegic	10 770	
patients, Professor R.V. Short (Physiology)	13 558	
for visit to Institute of Zoology London, 18 February — 18 May 1986,	1 000	15 358
Dr P. Temple-Smith (Anatomy)	1 800	13 336
Reckitt and Colman — Pharmaceutical Division	10 000	
to support a PhD student (Pharmacology) Reliance Security Pty Limited	10 000	
due under stage one of agreement with Mucan Pty Limited, Cancer		
Diagnostics project (Centre for Molecular Biology and		
Medicine)	30 000	
payable by Mucan Diagnostics Pty Ltd on assignment of Provisional	00 000	
Patent for kits for diagnosis of mucinous cancers, Professor A.W.		
Linnane (Centre for Molecular Biology and Medicine)	100 000	
part payment of funds due under stage two of research and		
development of cancer diagnostic kits, Professor A.W. Linnane		
(Centre for Molecular Biology and Medicine)	102 000	232 000
Research Fund for Early Human Development		
for purchase of equipment for the Respiratory Medicine Research		
Unit (Medicine, Alfred Hospital)	13 998	
for respiratory medicine research Associate Professor B.C. Ritchie		
(Medicine, Alfred Hospital)	5 000	
for use in Medicine, Alfred Hospital	28 121	
for use in Research Centre for Early Human Development	10 000	57 119
Reserve Bank of Australia —		

Economic and Financial Research Fund for funding of the project: Financing Government: 200 years of money, debt and taxation,		
Professor M.G. Porter (Centre of Policy Studies)	40 000	
Rural Credits Development Fund for the project: Use of cell markers to investigate chicken immune system development and leukaemias and lymphomas, Dr H.A.		
Ward (Pathology and Immunology) for the conference: Changing the Tax Mix, Professor J.G. Head	3 680	
(Economics)	7 500 150	51 330
for use in Careers and Appointments Service Rood, Dr J.	130	31 330
for use in Microbiology		200
Rosenblum and Partners, R.I.		
contribution to Centre for Commercial Law and Applied Legal Research		250
Rotary Club of Bentleigh		430
for use in the Krongold Centre		440
Rotary Club of Clayton		110
towards the purchase of Biorad equipment for muscular dystrophy		
research (Biochemistry)		1 000
Rotary Club of Toorak		
for use in the Burns Unit (Alfred Hospital)		1 700
Rotary Club of Upper Beaconsfield		
towards costs of purchasing some early issues of 'Australian Mining Standard' (Library)		50
Rothmans of Pall Mall (Australia) Limited		
contribution to Centre for Commercial Law and Applied Legal Research		5 000
Royal Australian College of General Practitioners, The		3 000
for the RACGP/MUCAPS project (Monash University Computer		
Assisted Practice Systems) (Community Medicine)	4 890	
1985 student travel subsidy (Community Medicine)	2 400	7 290
Royal Children's Hospital		
for the project: Job satisfaction of Registered General Nursing Staff at		
the Royal Children's Hospital, Dr J. McArthur (Education)		2 440
Royal Southern Memorial Hospital	* 000	
for biochemical research, Professor A.W. Linnane (Biochemistry)	7 200	
for joint research project between Professor P. Zimmet of The Royal		
Southern Memorial Hospital and Professor A.W. Linnane	5 684	12 884
(Biochemistry) Saint John Ambulance Association	3 004	14 004
First Aid research, Professor D. de Kretser (Anatomy)		5 500
Sandoz Australia Pty Limited		0 000
for research, Dr J. O'Neil (Pharmacology)		500
Schneider, Mrs Z.M.		
for the payment of an assistant for ante-natal education research, Dr		
C. Sharpley (Education)		3 092
Schroder, Darling and Company Limited		
1984 prizes for:		

Corporate Finance	200	
Business Finance (Accounting and Finance)	200	400
Schutt Trust, Helen M.		
for the project: The control of reproduction by lactation, Dr M.B. Renfree (Anatomy)		2 500
Scott and Furphy Engineers Pty Limited		
1984 Prize in Highway Design (Civil Engineering)		100
Selby Scientific		
for use in Careers and Appointments Service		70
Servier Laboratories (Australia) Pty. Limited		
travel grant Mr R. Hoich, to attend Australian Biochemistry Society's		
conference, Canberra, May 1985 (Biochemistry)		250
Shell Company of Australia Limited, The		
1984 Prize for Chemical EngineerinB		100
Silcraft Manufacturing Company		
for research scholarship in adhesion studies, Mr B. Evely; Associate		
Professor B.W. Cherry (Materials Engineering)		5 000
Simpson Limited		
contribution to the Centre for Commercial Law and Applied Legal		
Research		1 000
Simson Educational Trust, Stuart		
half share of income for the Stuart Simson Scholarship		1 400
Skin and Cancer Foundation		
grant in aid for the project: A study on the nature of the role of		
ultraviolet light in the development of solar keratoses, Dr R. Marks		
(Medicine, Alfred Hospital)		3 975
Smithers, Warren, Davenport, Mant		
contribution to Centre for Commercial Law and Applied Legal		
Research		5 000
Springvale Legal Service		
in support of second Springvale position (Law)	14 942	
in support of Monash-Oakleigh Legal Service (Law)	12 808	27 750
Squibb and Sons Pty Limited, E.R.		4.0
to Medicine, Prince Henry's Hospital		48
Staff of Centre for Early Human Development,		
Queen Victoria Medical Centre for the purchase of small items of		
equipment required by the research teams at the Centre for Early		1 449
Human Development		1 443
Staff of Department of Psychological		000
Medicine towards research (Psychological Medicine)		982
Steifel Laboratories Pty Limited		
towards dermatology research, Dr R. Marks (Medicine, Alfred		3 000
Hospital) Stephen Louise Stone James		3 000
Stephen Jaques Stone James contribution to Centre for Commercial Law and Applied Legal		
Research		5 000
Stewart Memorial Fund, Sir Alexander		3 000
award to student (Engineering)		3 000
Sudden Infant Death Research Foundation for the projects:		0 000
outdon main Death research roundation for the projects.		

Corporate Finance	200	
Business Finance (Accounting and Finance)	200	400
Schutt Trust, Helen M.		
for the project: The control of reproduction by lactation, Dr M.B.		
Renfree (Anatomy)		2 500
Scott and Furphy Engineers Pty Limited		100
1984 Prize in Highway Design (Civil Engineering)		100
Selby Scientific		70
for use in Careers and Appointments Service Servier Laboratories (Australia) Pty. Limited		70
travel grant Mr R. Hoich, to attend Australian Biochemistry Society's		
conference, Canberra, May 1985 (Biochemistry)		250
Shell Company of Australia Limited, The		400
1984 Prize for Chemical EngineerinB		100
Silcraft Manufacturing Company		100
for research scholarship in adhesion studies, Mr B. Evely; Associate		
Professor B.W. Cherry (Materials Engineering)		5 000
Simpson Limited		
contribution to the Centre for Commercial Law and Applied Legal		
Research		1 000
Simson Educational Trust, Stuart		
half share of income for the Stuart Simson Scholarship		1 400
Skin and Cancer Foundation		
grant in aid for the project: A study on the nature of the role of		
ultraviolet light in the development of solar keratoses, Dr R. Marks		0.077
(Medicine, Alfred Hospital)		3 975
Smithers, Warren, Davenport, Mant		
contribution to Centre for Commercial Law and Applied Legal		5 000
Research Springvale Legal Service		5 000
in support of second Springvale position (Law)	14 942	
in support of Monash-Oakleigh Legal Service (Law)	12 808	27 750
Squibb and Sons Pty Limited, E.R.	12 000	41 100
to Medicine, Prince Henry's Hospital		48
Staff of Centre for Early Human Development,		
Queen Victoria Medical Centre for the purchase of small items of		
equipment required by the research teams at the Centre for Early		
Human Development		1 443
Staff of Department of Psychological		
Medicine towards research (Psychological Medicine)		982
Steifel Laboratories Pty Limited		
towards dermatology research, Dr R. Marks (Medicine, Alfred		
Hospital)		3 000
Stephen Jaques Stone James		
contribution to Centre for Commercial Law and Applied Legal		* 000
Research		5 000
Stewart Memorial Fund, Sir Alexander		9 000
award to student (Engineering)		3 000
Sudden Infant Death Research Foundation for the projects:		

The role of the opioid peptide system in the foetus and neonate, Dr C. McMillen (Physiology)	14 460	
Sleep, cardiovascular disturbance and arousal studied from birth in	17 100	
lambs, Dr A.M. Walker (Centre for Early Human Development)	6 651	
Cardiac function, thermal stress and sleep in newborn lambs, Dr		
A.M. Walker (Centre for Early Human Development)	20 636	41 747
Sunshine Foundation		
Computing and Word Processing Package University of the Third	1 775	
Age at Monash (Centre for Continuing Education)	1 775 2 000	3 775
for use in the Chemistry Resource Centre (Chemistry) Synthes Australia Pty Limited	2 000	5 115
for orthopaedic teaching (Surgery, Alfred Hospital)		500
Telecom Australia		000
contribution to the Centre for Commercial Law and Applied Legal		
Research	5 000	
for the projects:		
R and D studies into the effects of Bismuth impurity levels in lead		
for use in large stationary lead acid storage batteries, Dr M.S.J.		
Gani (Materials Engineering)	8 000	
R and D investigations with stress relaxation of thermoshrinkable		
polyethylene sleeves used for joint moisture barrier cables, Dr Z. Stachurski (Materials Engineering)	9 000	
R and D for the determination of early indicators of	9 000	
electricaldeterioration of polyethylene spacers in coaxial cable, Dr		
R.J. Fleming (Physics)	2 400	24 400
Tertiary Credit Union Co-operative Limited for Hargrave Library		
,	4 400	
Tertiary Education Commission		
second payment for higher degree study, Professor P.J. Fensham		F 403
(Education)		7 491
Tileman (A/sia) Pty Limited Tileman Prize for Civil Engineering		100
Tiu, Dr C.		100
to Chemical Engineering		250
Touche Ross and Co.		400
1984 Prizes:		
Income Tax Law	100	
Advance Taxation	100	
Accounting	100	
Auditing and Systems	100	400
Trewin, Mrs C.O.		
to the Ron Trewin Research Fund for research into cancer of the bowel (Surgery, Alfred Hospital)		5 000
United Nations Educational Scientific and		3 000
Cultural Organisation (Unesco) ICSU/UNESCO Distinguished		
Fellowship in Science, for research in molecular biology, awarded		
to Dr Z. Al-Doori (Genetics)	30 736	
expenses, Cuban visitors Mr S. Martinez and Mr C. Gonzalez,		
Professor O.E. Potter (Chemical Engineering)	8 024	38 760

University of Melbourne, The		
printing subsidy for Australian Journal of French Studies	500	
reimbursement of salary costs, January to June 1985 - NHMRC grant		
to University of Melbourne for the project:		
Study of non-pharmacological treatment of patients with mild		
hypertension, Dr P.G. Matthews (Medicine, Prince Henry's		
Hospital)	12 539	13 039
University of Oxford Nuffield Centre		
for joint research program, Dr D.K. Bowden (Anatomy)		3 546
University of Western Australia		
contributions to Centre for Commercial Law and Applied Legal		
Research		6 000
Victoria Law Foundation		
final payment for Victorian Criminal Procedure Text (Law)	2 106	
for the projects:		
Legal implications of sex re-assignment procedures, Associate		
Professor H.A. Finlay (Law)	40	
Development of Aboriginal and ethnic communities curriculum		
materials, Professor R. Baxt (Law)	30 892	33 038
Victorian Academy for General Practice, The		
towards salary of Dr I. Rowe, Medical Manpower Survey		
(Community Medicine)		8 757
Victorian Medical Postgraduate Foundation		
to Dermatology Research Fund (Medicine, Alfred Hospital)		2 745
Victorian Nursing Council		
for the project: Ethical, legal and social dilemmas in the practice of		
nursing, Dr M. Brumby (Centre for Human Bioethics)		22 386
V Line		
for the project: Investigation of railway bridge design, Associate		
Professor P. Grundy (Civil Engineering)		30 000
Warman International Limited final payment of Warman		
International Postgraduate Scholarship, supervised by Dr G.B.		
Deacon (Chemistry)		4 000
Waverley, City of		
for subsidy 1985 series Sunday afternoon concerts (Robert		
Blackwood Hall)		1 400
Weigall and Crowther		
contribution to Centre for Commercial Law and Applied Legal		
Research		5 000
Wellcome Foundation Limited, The fourth and final payment under		
Research Collaboration Agreement with Professor J. Bornstein,		
for the project: Research with growth hormone fragments		
showing potential antidiabetic properties (Biochemistry)		18 750
Were and Son, J.B.		
towards the work of the Krongold Centre		1 000
Wertheim, Dr E.S.		
for use in Paediatrics		40
Westall Primary School		
for research by Monash Teachers' Centre, Mr J. Kelly (Education)		750

Western Mining Corporation Limited	
1984 Western Mining Corporation's prizes in Chemical	
Engineering	300
Westpac Banking Corporation	
1984 Psychology Award	100
White Bequest, Joe	
from the income of the Bequest, to the Library	1 000
Whyte, Professor J.P.	250
for use in Librarianship	250
Wilson, Dr I.R.	**
for Dr Enn Elbing Memorial Prize Fund	50
Wilson, Estate of the Late Edward	
partial support of Edward Wilson lectureship in dermatology, Dr R.	* 000
Marks (Medicine, Alfred Hospital)	5 000
Windermere Hospital Foundation Ltd	10.000
for research Centre for Early Human Development	10 000
Woolawarra Nominees Pty Ltd	
for further research Chemical aspects of metallurgical treatment of	
refractory gold ores, Associate Professor F. Lawson (Chemical	1 000
Engineering) World Health Organisation	1 000
for research on fertility promoting agents, Professor D. de Kretser	
(Anatomy)	6 907
World Wildlife Fund Australia	0 307
for the translocation of koalas to new habitat, Associate Professor	
A.K. Lee and Mr R.W. Martin (Zoology)	7 238
Zenford-Ziegler Pty Limited	, 200
for use in Careers and Appointments Service	20
201 doe 21 dat de 12pposition de 11cc	40

Commonwealth Government

Aboriginal Affairs, Department of		
1984/85 basic grant for operational costs (Aboriginal Research		
Centre)	67 650	
1984/85, 1985/86 payments for operation costs of MOSA (Monash		
Orientation Scheme for Aboriginal students)	18 950	86 600
Arts, Heritage and Environment, Department of		
Australian Biological Resources Study Grant (ABRS) remaining		
payment for the project: Taxonomic revision of Fossombronia		
and other liverwort genera in Australia, Dr G.A.M. Scott		
(Botany)		12 973
Australian Centre for International Agricultural Research		14 370
payment of 1985 grant for the project:		
Genetics of Pseudomonas Solanacearum causal agent of bacterial	99 000	
wilt;	38 000	
salary supplement, Professor A. Kerr and Professor B.W. Holloway	1.005	00.005
(Genetics)	1 305	39 305
Australian Institute of Energy -Gippsland Group		
contribution towards mini symposium to continue exchange of coal		
science information (Chemistry)		500
Australian Institute of Nuclear Science and Engineering		
for AINSE studentship stipends:		
Mr D.J. Cookson (Physics)	9 5 1 9	
Mr J.C. Osborn (Physics)	6 615	
compulsory University fees for 1985 AINSE scholarship Mr J.		
Osborn	225	16 359
Osborn	225	16 359
Osborn Australian Institute of Social Analysis Incorporated	225	
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine	225	16 359 100
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service	225	
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service	225	
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas,	225	100
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology)	225	
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme	225	100 9 300
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants	225	100
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board	225	100 9 300
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J.		100 9 300
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology)	359	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service		100 9 300
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board	359	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects:	359	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward,	359 100	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering)	359	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering) Image processing for robotics applications using stereoscopic	359 100	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering) Image processing for robotics applications using stereoscopic	359 100	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering) Image processing for robotics applications using stereoscopic moving camera and zoom lens techniques, Associate Professor	359 100	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering) Image processing for robotics applications using stereoscopic moving camera and zoom lens techniques, Associate Professor W.A. Brown and Dr K.C. Ng (Electrical Engineering)	359 100 3 000	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering) Image processing for robotics applications using stereoscopic moving camera and zoom lens techniques, Associate Professor W.A. Brown and Dr K.C. Ng (Electrical Engineering) Multimicroprocessor systems for parallel concurrent and distributed	359 100 3 000	100 9 300 487 969
Osborn Australian Institute of Social Analysis Incorporated for use in Psychological Medicine Australian National Parks and Wildlife Service consultancy agreement between National Parks and Wildlife Service and Monash, for the project: Reproductive tract disease in koalas, Associate Professor A.K. Lee (Zoology) Australian Research Grant Scheme second quarterly instalment of 1985 grants Australian Road Research Board final payment for the project: Vehicle lateral displacement, Dr T.J. Triggs (Psychology) for use in Careers and Appointments Service Australian Telecommunications and Electronics Research Board (and Australian Computer Research Board) for the projects: Multi-processor implemented in VLSI, Dr K.E. Forward, Dr L.N.Binh, and Dr T.S. Dillon (Electrical Engineering) Image processing for robotics applications using stereoscopic moving camera and zoom lens techniques, Associate Professor W.A. Brown and Dr K.C. Ng (Electrical Engineering)	359 100 3 000	100 9 300 487 969

Development of a real time vector graphics display system, Mr D.G.		
Holmes (Electrical Engineering)	1 250	
postgraduate scholarship, Mr P.J. Stuckey (Computer Science)	5 000	16 250
Australian Wheat Board		
on behalf of various donors:		
to muscular dystrophy research program, Dr L. Austin		
(Biochemistry)		175
Australian Wool Corporation		
travel grant: Wool harvesting research — general, Professor G.D. Thorburn (Physiology)	2 400	
for the projects:		
Investigation of the physiological and neurophysiological basis of electro-immobilisation in sheep, Professor G.D. Thorburn and		
Professor D.G. Lampard (Electrical Engineering)	62 696	
additional funds for mandatory salary increases, 1984/85, above		
project	3 431	
Use of recombinant DNA technology to produce a multivalent		
footrot vaccine, (half yearly grant-continuing project from	1 220	
Murdoch University) Dr J.I. Rood (Microbiology)	1 550	
Semi-strong form efficiency of the Australian wool market, Dr B.A.	05.061	
Goss (Economics)	25 961	
additional funds for mandatory salary increases, 1984/85, above	£ 9.0	
project	580	
Physiological studies on tactile comfort of wool, Dr R.D. Helme	74 269	
(Medicine, Prince Henry's Hospital)	74 209	
additional funds for mandatory salary increases, 1984/85, above	2 697	
project Studies on foetal skin development and foetal growth Professor C.D.	2 097	
Studies on foetal skin development and foetal growth, Professor G.D. Thorburn (Physiology)	24 753	
Control of ovarian function in cyclic, pregnant and anoestrous sheep,	44 733	
Mr S.B. Hooper (Physiology)	4 308	
Effect of heat stress on foetal developments, postgraduate	4 300	
scholarship, Mr A.N. Davies (Physiology)	4 308	
Studies on the physiological mechanism which EGF alters the normal	4 300	
production of fibre within the wool follicle, Professor G.D.		
Thorburn (Physiology)	14 088	
supervisor's allowance, postgraduate scholar Mr S.B. Hooper;	11 000	
Professor G.D. Thorburn (Physiology)	800	221 841
Commonwealth Schools Commission		
to Elwyn Morey Child Study Centre — Language Group — for the		
project:		
Provision of early special education services for five children with		
severe language impairment. Dr N. C. Nettleton (Education)		1 520
Commonwealth Serum Laboratories Commission		
support for staffing and equipment of a histology/		
immuno-histochemistry laboratory, Dr P. Rogers (Obstetrics and		
Gynaecology)	14 318	
for collaborative work on the use of synthetic molecular surfaces to		
•		

stimulate an immune response — stage one, Dr P. Perlmutter (Chemistry)	5 000	
extension of grant January to June 1985, Interferon research, Professor A.W. Linnane (Biochemistry)	30 000	49 318
Commonwealth Tertiary Education Commission	30 000	13 310
for study of mature age entrants following higher education, Dr T.		
Hore and Dr L.H.T. West (Higher Education Advisory and	07.007	
Research Unit)	25 267	
for higher degree study in the Faculty of Education, Professor P.J. Fensham (Education)	14 441	39 708
Conservation, Ministry for Soil Conservation Authority		
for project on Catchment Hydrology research, Dr R.G. Mein and Professor E.M. Laurenson (Civil Engineering)		10 000
Defence, Department of		
for the projects: Adhesive bonding, Associate Professor B.W. Cherry		
(Materials Engineering)	10 985	
Synthesis and characterisation of chelate components, Professor		
B.O. West (Chemistry)	30 000	40 985
Education, Commonwealth Department of		
for Monash Orientation Scheme for Aborigines (MOSA) quarter	F 120 120 00100	
ending 30.6.85	17 676	
for the project:		
Tertiary students' reasons for discontinuing their studies, Dr T.		
Hore and Dr L. West (Higher Education Advisory and Research		
Unit)	34 252	51 928
Education & Youth Affairs, Department of		
Australian Foundation for Management Development for use in	***	
Administrative Studies	50 000	100 000
for Monash Orientation Scheme for Aborigines (MOSA)	52 382	102 382
Electricity Supply Association of Australia —		
Electrical Research Board for the projects: Planning and design of		
controls on an overall system basis to achieve small disturbance		
stability, whilst properly accounting for load characteristics, Dr T.	10.000	
Dillon and Dr C. Berger (Electrical Engineering)	12 000	
Calibration of the Victorian lightning location system, Dr D.B.	16 900	00 200
Giesner (Electrical Engineering)	16 300	28 300
Employment and Industrial Relations		
Department of for research project: National Review Committee on		
Aboriginal employment and training programs, Ms E. Fesl		5 277
(Aboriginal Research Centre)		3 211
Employment and Training, Ministry for Employment Initiatives		
Program part payment for the project: Acid preparation of fossils, Dr P.V. Rich		
(Earth Sciences)		1 041
		1 041
finance, Department of for geophysical fluid dynamics (Mathematics)		1 500
Health, Department of (NHMRC)		1 300
for C.J. Martin Fellowship Cytological & hormonal studies of		
testicular function, Dr J. Kerr (Anatomy)	836	
concentration, or j. Ker (materily)	0.50	

conference travel grants to: Dr M.B. Renfree (Anatomy)	500	
Dr A.M. Walker (Research Centre for Early Human Development)	500	
Dr B. Jackson (Medicine, Prince Henry's Hospital)	500	
Dr T. O. Neild (Physiology)	500	
medical postgraduate scholarship — six month extension of project:		
Cell mediated immune mechanisms in glomerulo nephritis, Dr		
D.H. Hooke (Medicine, Prince Henry's Hospital)	8 223	
85% of superannuation for the project: Organisation and functions of		
the cerebro-cerebellar projection in the primate, Dr J. Rawson		
(Physiology)	1 675	
1985 Medical Undergraduate Scholarships	2 700	
for the projects:		
Work influences on health — relative behaviour of white collar		
workers, Associate Professor Ryan and Dr M. Salzberg (Social and		
Preventive Medicine)	24 751	
final payment: Repetition injuries for keyboard workers, Associate		
Professor G.A. Ryan (Social and Preventive Medicine)	28 030	68 215
Heritage and Environment, Department of initial payment 1985 for		
the project:		
Taxonomic revision of Fossombronia and other Liverwort genera in		
Australia, Dr G.A.M. Scott (Botany)		12 950
Human Rights Commission		
balance for the project: Survey of Guardianship Law, Professor P.		
Singer (Centre for Human Bioethics)	1 000	
for the project: Effects of the school system on students from		
non-English speaking backgrounds, Dr B.M. Bullivant		
(Education)	8 500	9 500
Industry, Technology and Resources, Department of		
Teaching Company Scheme for the projects:		
Development and application of scandata-based management		
information systems, Dr R.N. Shaw (Administrative Studies) and		
Data Sciences Pty Ltd	40 000	
Development of flavour and aroma in premium grape varieties, Dr		
T. O'Brien (Botany) & Brown Bros Pty Ltd, Milawa	40 000	80 000
Marine Sciences and Technologies Grants Scheme:		
Longevity and age structure of the Antarctic Krill, Euphasia superba		
Dana. Dr G. Ettershank (Zoology)	39 881	
Studies on the growth and reproduction of the kelp Durvillaea, Dr		
M.N. Clayton and Dr N.D. Hallam (Botany)	19 160	
Wind, wave and mooring response data from Bass Strait, Associate		
Professor J. Hinwood and Dr G.T. Lleonart (Mechanical		
Engineering)	27 600	86 641
Meteorology, Department of		
for use in geophysical fluid dynamics laboratory (Mathematics)		1 500
National Energy Research, Development and Demonstration		
Program		
for the project: Modelling of coal liquefaction reactions, Dr T.		0 100
Sridhar and Professor J. Agnew (Chemical Engineering)		8 433

National Health and Medical Research Council for Special Investigations — Special Initiative project: Bioethical issues in the use of foetal tissue, in vitro human gametes and embryos, Professor J. Swan, (Centre for Human Bioethics) National Heart Foundation of Australia		39 496
supplementation for National Heart Foundation Fellowship for 1984, Dr R.D. Arnott (Medicine, Prince Henry's Hospital) grant-in-aid for the project: Hormonal control of water and electrolyte metabolism — role of atrial natriuretic factor,	2 055	
Professor C.I. Johnston (Medicine, Prince Henry's Hospital) Fellowship stipend July to December 1985: Thyroid hormone modulation of cardiac adrenoceptors, Dr R.D. Arnott (Medicine,	24 612	
Prince Henry's Hospital)	36 714	63 381
National Parks Service instalment for the project: Status of malleefowl in mallee shrubland, with particular reference to Wyperfeld National Park, Professor		
J.M. Cullen (Zoology)		10 000
Overseas Telecommunications Commission (Australia) part payment for the project: Measurement of raindrop size,		
distribution and near real time calculation of propagation		
parameters, Dr J.A. Bennett (Electrical Engineering)		750
Primary Industry, Department of Australian Chicken Meat Research Committee 84/85 grant for the project:		
Monoclonal antibodies in study of chicken major		
histocompatibility complex and disease resistance, Dr H.A. Ward (Pathology and Immunology)		6 605
Resources & Energy, Dept of		
for NERDDP projects: Design of a low energy indoor heated swimming pool, Professor		
T.F. Smith and Dr J.L.A. Francey (Physics)	6 838	
The direct hydrogenation of brown coal in a continuous flow		
catalytic conversion system, Professor W.R. Jackson (Chemistry)	76 535	
Flow improvers for waxy crudes and middle distillates, Dr G.A.	14 427	
Holder (Chemical Engineering) Hydrocarbon reservoir quality in the Cooper Eromanga Basins, Mr	14 447	
V.J. Wall and Dr R.T. Gregory (Earth Sciences)	29 084	
The direct hydrogenation of brown coal in a continuous flow		
catalytic reactor, Professor W.R. Jackson, Dr T. Sridhar, and	***	
Professor J. Agnew (Chemistry)	76 535	
Modelling of coal liquefaction reactions, Dr T. Sridhar and Professor J. Agnew (Chemical Engineering)	9 902	
final payment for the project:	0 0 0 4	
Australian wind data correction, Professor W.H. Melbourne and	10 07010	
Doctor L.L. Koss (Mechanical Engineering)	2 000	
NERDDP reimbursement of balance of expenditure for quarter ended 30.6.85 (Earth Sciences)	30 170	168 956
Science, Department of balance of travel grant to Dr R.C. Tobin (Physics)	852	

research Fellowship, Dr M. Rowley (Earth Sciences) part payment of travel grant under bilateral U.S./Australia Science and Technology Agreement, for the project: Electron beam pumped metal vapour recombination lasers at room temperature, Dr R.C. Tobin to work at Colorado State	24 496	
University (Physics) Queen Elizabeth 11 Fellowship, Dr I. Cooke (Research Centre for	5 048	
Early Human Development)	17 527	47 923
Science and Technology, Department of Australian Research Grants Committee quarterly payment 1985		407.000
grants Social Security, Department of		487 969
salary subsidy (Krongold Centre)		20 492
Transport, Ministry of three months' extension of grant, for research in the field of transport engineering and planning, Associate Professor K. Ogden (Civil Engineering)		3 000
Water Research Foundation of Australia first half of grant for the		
project: Evaluation of sulphide producing capacity of sewage using a rotating drum biological reactor, Dr G.A. Holder (Chemical Engineering)	4 000	
for the project: Reservoir size — demand — reliability relationship, Dr R.M. Phatarfod (Mathematics)	2 500	6 500
State Government		
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry)	500	
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry)	500 52 215	52 715
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry) Community Services, Department of for salary subsidy advance payment quarter ending 31.12.85 Krongold Centre		52 715 19 843
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry) Community Services, Department of for salary subsidy advance payment quarter ending 31.12.85 Krongold Centre Education Department — Victoria educational programs for handicapped children — Commonwealth Schools Commission project; physiotherapist, Dr N. Nettleton		19 843
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry) Community Services, Department of for salary subsidy advance payment quarter ending 31.12.85 Krongold Centre Education Department — Victoria educational programs for handicapped children — Commonwealth Schools Commission project; physiotherapist, Dr N. Nettleton (Education)		
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry) Community Services, Department of for salary subsidy advance payment quarter ending 31.12.85 Krongold Centre Education Department — Victoria educational programs for handicapped children — Commonwealth Schools Commission project; physiotherapist, Dr N. Nettleton (Education) Melbourne and Metropolitan Board of Works under agreement with Department of Civil Engineering, for the project: Headworks and transfer mathematical model application of an optimisation technique, Dr G. Codner (Civil Engineering)		19 843
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry) Community Services, Department of for salary subsidy advance payment quarter ending 31.12.85 Krongold Centre Education Department — Victoria educational programs for handicapped children — Commonwealth Schools Commission project; physiotherapist, Dr N. Nettleton (Education) Melbourne and Metropolitan Board of Works under agreement with Department of Civil Engineering, for the project: Headworks and transfer mathematical model application of an optimisation technique, Dr G. Codner (Civil Engineering) for the project: Mechanisms of material failure of fittings, Associate	52 215 4 500	19 843 2 297
Coal Corporation of Victoria towards one-day mini-symposium (Chemistry) for project: Catalytic hydroliquefaction of Victorian brown coal, Professor W.R. Jackson (Chemistry) Community Services, Department of for salary subsidy advance payment quarter ending 31.12.85 Krongold Centre Education Department — Victoria educational programs for handicapped children — Commonwealth Schools Commission project; physiotherapist, Dr N. Nettleton (Education) Melbourne and Metropolitan Board of Works under agreement with Department of Civil Engineering, for the project: Headworks and transfer mathematical model application of an optimisation technique, Dr G. Codner (Civil Engineering)	52 215	19 843

Planning and Environment, Ministry for,	
for project No.901: Status of malleefowl in mallee shrubland with	
particular reference to Wyperfeld National Park, Professor J. M.	
Cullen (Zoology)	7 000
Premier and Cabinet, Department of the	
final payment of Macfarlane Burnet Biomedical Research	
Scholarship, Mr C. Adams (Physiology)	12 406
Victorian Institute of Marine Sciences	
for the project: Reproductive biology of brown algae, PhD student	
Mr G. Gibson; Dr M.N. Clayton (Botany)	800

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 \$
ARTS		
Anthropology and Sociology Dr E. Willis	Health and safety at work: a socio-historical analysis	1 600
English Miss B. M. Niall	Biography of Martin Boyd	10 000
Geography Dr A. P. Kershaw Dr C. A. Mayer	The vegetation history of North-East Queensland Alteration of inner city environments	11 798 12 420
German Associate Professor M. G. Clyne	Cross-cultural comparison of academic discourse	9 978
History Dr F. W. Kent	Florence in the time of Lorenzo De Medici	3 000
Librarianship Dr B. J. McMullin and Associate Professor W. Kirsop	Australia and New Zealand early imprints project (Victoria)	24 500
Linguistics Associate Professor J. T. Platt	A cross-cultural investigation of some basic communicative strategies	12 098
Music Dr M. J. Kartomi	Music cultures of the Batak, Gayo and Alas peoples, Sumatra	17 000
Philosophy Professor P. Singer, Dr H. Kuhse	Life or death choices for defective newborns	20 921
Slavic Languages Professor G. J. Marvan	Theoretical framework of Slavic inflection	10 000

ECONOMICS & POLITICS

Econometrics and Operations Research Dr M. L. King Dr K. McLaren, Dr M. Upcher	Specification error in econometric models Financial modelling in continuous time	15 150 9 400
Politics Dr A. Davidson	The intellectual function in the formation of the modern state	12 000
EDUCATION		
Education Dr R. F. Gunstone	Analyses of physics learning with two closely related emphases: the process of schema change in learning, and successful problem solving strategies	11 000
ENGINEERING		
Chemical Engineering Associate Professor F. Lawson	Removal of trace amounts of copper from liquid metals using elemental sulphur	19 975
Chemical Engineering Professor O. E. Potter Professor O. E. Potter and Dr T. Sridhar	Fluidisation for reaction and other applications Liquid phase organic oxidations — chemical engineering aspects	45 392 18 000
Civil Engineering Dr G. I. N. Rozvany	Optimisation of structural layouts by analytical methods	22 000
Electrical Engineering Dr J. A. Bennett and Dr P. L. Dyson Dr L. N. Binh Dr K. E. Forward and Dr T. S. Dillon Dr D. L. Morgan	Development of new ray tracing techniques and their application to space-lab and ground-based radio experiments Fibre optic interferometric techniques for remote sensing of fluid flow Mathematical modelling of real-time multiple computer systems Comparative studies of fast tension transients in single vertebrate muscle fibres	6 000 13 700 26 671 10 327
Materials Engineering Associate Professor B. W. Cherry	The initiation of stress corrosion cracking by low frequency cyclic straining	18 000

Associate Professor B. W. Cherry	The structural basis of polymeric friction	12 000
Dr G. H. Edward	Deformation mechanism mapping of	u se
Associate Professor	polymers Microstructural development in alumina-	23 300
R. McPherson	silica-zirconia ceramics prepared from glasses	21 248
Dr B. C. Muddle	The structure and properties of rapidly	
Associate Professor B. A. Parker, Dr B. C. Muddle and Professor I. J. Polmear	quenched crystalline alloys Analytical electron microscopy of materials	22 827 12 000
Mechanical Engineering		
Professor W. H. Melbourne Dr T. T. Nguyen and	Aerodynamic instabilities, loading and response of bluff bodies in a turbulent flow Kinematic properties of breaking waves	26 311
Associate Professor J. B. Hinwood	kinematic properties of breaking waves	8 000
LAW		
Law		
Professor R. Baxt	A new form of incorporation for small businesses	20 500
MEDICINE		
Anatomy		
Professor R. V. Short	Pregnancy and parturition in the marsupial Macropus Eugenii	26 788
Dr P. D. Temple-Smith and	Effects of obstruction and vasoepididymal	20 700
Mr G. J. Southwick	anastomosis on the function of the testis and epididymis	8 000
Biochemistry		
Associate Professor	Biogenesis of mitochondria	
H. B. Lukins and		90.000
Professor A. W. Linnane Dr S. Marzuki and	Structure and function of mitochondrial	30 000
Professor A. W. Linnane	membranes	26 378
Associate Professor B. N. Preston,	Macromolecular transport through porous	
Dr W. D. Comper	systems	31 000
Associate Professor	Photon correlation spectroscopy of	
B. N. Preston and	multicomponent systems in non-equilibrium	11 000
Dr W. D. Comper	states	11 800

Informational macromolecules in	97.000
Expression in yeast nucleus of genes encoding hydrophobic proteins targeted to	27 000
mitochondria	11 000
Pegulation of the microbial degradation of	
zylenols and cresols	18 500
plasmid	37 631
The development of lymphoid tissues and immunity in marsupial mice	7 200
Differentiation of chicken lymphocytes and reticular epithelial cells studies by	
antigens	13 000
Development of structural and functional asymmetry in the brain; the influence of	
experience, neurotransmitters and gonadal hormones	10 400
Project of the state of the sta	10.000
Role of ovarian nerves in mediating	10 290
ovariectomy	6 030
Endocrine functions in Australian marsupials	16 390
Studies on the reproductive biology of brown algae	12 189
	6 500
Molecules in space — Phase 3	96 600
Mechanism of aryne formation from	86 600
aromatic anhydrides Studies of enolic ortho esters	23 350 26 800
	nucleocytoplasmic interactions Expression in yeast nucleus of genes encoding hydrophobic proteins targeted to mitochondria Regulation of the microbial degradation of zylenols and cresols Molecular analysis of the conjugative F plasmid The development of lymphoid tissues and immunity in marsupial mice Differentiation of chicken lymphocytes and reticular epithelial cells studies by monoclonal antibodies to cell membrane antigens Development of structural and functional asymmetry in the brain; the influence of experience, neurotransmitters and gonadal hormones Brain mechanisms and binaural hearing Role of ovarian nerves in mediating ovulatory compensation after unilateral ovariectomy Endocrine functions in Australian marsupials Studies on the reproductive biology of brown algae Ionically conducting solid polymer-alkali metal salt complexes Molecules in space — Phase 3 Mechanism of aryne formation from aromatic anhydrides

Dr G. B. Deacon Dr G. B. Deacon	Lanthanoid and actinoid chemistry Syntheses of organometallics and organoamidometal compounds by	16 000
	decarboxylation reactions	10 800
Associate Professor	Binuclear metal complexes — versatile	10.000
R. S. Dickson	centres for organic synthesis	12 900
Dr B. M. Gatehouse	Crystal chemistry of the solid state	21 660
Dr P. D. Godfrey and	Molecular structures in electronically excited	9 900
Dr S. R. Wilson	states	2 800
Professor W. R. Jackson	Synthesis of biologically important molecules	18 300
Dr D. R. MacFarlane and	involving metal catalysis Impedance electrochemistry	10 300
Dr B. A. W. Coller	impedance electrochemistry	7 060
Dr R. J. S. Morrison	Laser multiphoton ionisation spectroscopy of	7 000
Di R. J. S. Worrison	beam cooled free radicals	9 500
Dr K. S. Murray	Magnetic properties of inorganic and	3 000
Di II. S. Mariay	bioinorganic compounds	22 500
Dr P. Perlmutter	New synthetic vaccines based on simulated	
	antigen surfaces attached to cynthetic	
	porphyrin templates	11 000
Dr A. D. E. Pullin	Chemical matrix isolation studies	9 900
Professor B. O. West	Sulfur and nitrogen co-ordination to metals.	
	Influence on metal spin states re-activity and	
	oxygen atom transfer	17 500
Dr J. K. Yandell and	Synthesis and redox properties of	
Dr D. G. Hewitt	metalloprotein models	22 474
Computer Science	P	
Mr J. Jaffar and Dr J-L. Lassez	Programming with equations in logic	01 000
Professor C. C. Wallace	programs	21 000
Professor C. S. Wallace, Dr D. A. Abramson	Capability-based multi-processor	28 000
Di D. A. Abianison		20 000
Earth Science		
Dr M. S. Bloom	Experimental study of mineral solution	
	equilibria: molybdenum complexing in	81
	hydrothermal solutions	9 000
Dr R. A. F. Cas	Palaeovolcanology, stratigraphy, and	18
	sedimentology of the Lower Devonian	
	Snowy River Volcanics, Eastern Victoria	5 500
Dr R. A. F. Cas,	Tectonic style and significance of the	
Dr D. R. Gray	Ordovician system Eastern Victoria.	31 314
Dr L. A. Frakes	Australian Cretaceous ice?	28 697
Dr D. R. Gray	The analysis of strain and of incremental	
4	strain history in the Ordovician Silurian	
	rocks of Victoria — implications for tectonic	19.000
Dr. B. T. Crosser	development	18 900
Dr R. T. Gregory	Stable isotope studies of archean	
	hydrothermal systems, Pilbara block Western Australia	57 000
	TT COCCAAL A EMOLIMINE	3, 000

Dr I. A. Nicholls	Partitioning of rare earth elements between clinopyroxenes and basaltic liquids as a	
Dr I. A. Nicholls	function of pyroxene composition Geochemistry/petrology of Silurian Devonian volcanic rocks of the South East Lachlan	17 378
Dr P. V. Rich and	Mobile Belt Evolution of the higher vertebrates with	6 578
Dr T. H. Rich	emphasis on Australasian taxa: a palaeo- biochemical approach	3 175
Genetics		
Professor B. W. Holloway, Dr A. F. Morgan and Associate Professor	Genetic analysis of <i>Pseudomonas</i> and its role in the genetic exploration of selected gram negative bacteria	
V. Krishnapillai	negative outcome	52 943
Dr S. W. Mckechnie, Dr K. Lavery	Genetic variation in alcohol tolerance and alcohol dehydrogenase in a winery	
Dr D. R. Smyth	population of drosophila melanogaster. Dispersed repeated sequences in the	21 489
	genomes of lilium species	2 446
Mathematics		
Dr T. E. Hall	Automata, languages, machines and inverse	
	semigroups.	9 000
Professor B. R. Morton Professor B. R. Morton,	Fluid flow past surface-mounted obstacles Dynamics of tropical cyclones	9 000
Dr R. K. Smith		11 470
Dr R. K. Smith	Morning glory wind squalls	6 292
Dr R. K. Smith and Dr M. A. Page	Southerly buster cold fronts	16 760
Physics		
Associate Professor	A study of the structure and magnetic	
J. D. Cashion	properties of solids using the Mossbauer	
	effect	44 002
Dr R. J. Fleming and	Electrical properties of quartz-implications	91 047
Dr A. C. McLaren Dr T. J. Hicks and	for defect chemistry Polarisation analysis of diffuse neutron	31 247
Dr J. R. Davis	scattering	25 000
Dr A. C. McLaren	Transmission electron microscope study of	7
	the structure and properties of grain	
	boundaries in rocks	7 500
Dr J. R. Pilbrow	Electron spin resonance in biological and	19 544
Associate Professor J. H.	model systems Magnetism in atomically random systems	19 344
Smith and Dr T. J. Hicks	m desired y said y stells	32 016

Professor T. F. Smith, Associate Professor J. D. Cashion,	Vibrational modes and lattice stability in solids	
Dr T. R. Finlayson and		15 400
Dr F. Ninio Dr R. C. Tobin	Room temperature metal vapour lasers	28 491
Dr G. J. F. Troup, Associate Professor F. Lawson and	Application of laser speckle photography to mineral processing investigations.	20 191
Mr R. G. Turner		15 500
Psychology		
Dr D. C. Bradley and	Language processes in listening and reading	
Dr R. J. Wales		18 600
Dr J. L. Bradshaw and	Hemispace and intermodality integration	
Dr N. C. Nettleton Professor R. H. Day	and conflict in decision making and learning Perceptual processes involved in visual	21 000
The second secon	illusions	21 300
Dr K. I. Forster	Visual processing of sentences	23 755
Mr B. J. O'Loughlin	Interaction between excitation and	
	suppression in the auditory periphery	3 830
Dr D. M. Thomson	Recall and recognition processes	19 900
Dr W. R. Webster	Neural systems in the primate involved in	
	auditory and visual spatial localisation: a	0.400
	2[14C] - Deoxyglucose study	8 400
Zoology		
Dr G. Éttershank	Age pigment accumulation as an ecological tool — baseline studies on Daphnia carinata	
	(crustacea)	19 500
Dr D. J. O'Dowd	The evolutionary significance of extrafloral	10.001
Da B. Dahanta	nectar production by acacia pycnantha	13 691
Dr B. Roberts	The nature of PTTH synthesis and release in flesh flies	12 500
	220012 12200	12 000

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 D. K. Bowden	A study of thalassaemia syndromes, malaria and other anaemias in Vanuatu	27 707
Dr D. Ehrlich	Studies on the development of the	4,,
	supraoptic decussation and optic nerve of	
	chicks	25 845
Dr F. H. Guldner	Plasticity of synaptic contact in the central	
	nervous system	21 420
Dr B. W. Oakes, and	Human skin epithelial expansion in tissue	
Associate Professor	culture and its application to burn patients	
J. P. Masterton		22 193
Dr S. M. Rees,	Brain structure in chronic placental	
Dr J. A. Rawson	insufficiency	36 733
Dr P. D. Temple Smith,	Ciliary function and its relationship to	
Dr H. Teichtahl	respiratory disease and infertility	21 559
Biochemistry		
Dr L. Austin, Dr D. J. Bates	The molecular biology of nerve regeneration	
and Dr P. L. Jeffrey		50 554
Dr P. Jeffrey	The function of THY-1 in the nervous	00 =00
7.6	system	26 782
Professor D. A. Lowther and	The role of oxy radicals in experimental	00 #00
Dr E. J. Bates	arthritis	23 780
Professor D. A. Lowther,	Changes in metabolism of pregnant sheep	00.000
Dr C. J. Handley	and rabbit cervix pre- and post-partum	29 263
Professor D. A. Lowther,	Response of cartilage metabolism to	
Dr C. J. Handley and	nonsuppressible insulin like activity	04 941
Dr H. C. Robinson	The assumption of human mitagliandial	24 341
Dr S. Marzuki	The expression of human mitochondrial	26 736
Associate Professor B. N.	genome	20 /30
AND DESCRIPTION OF THE PERSONNEL PROPERTY AND ADDRESS OF THE PERSONNEL PROPERTY ADDRESS OF THE PERSONNEL PROPE	Experimental models of transcapillary	
Preston and	exchange	16 589
Dr W. D. Comper Dr H. C. Robinson	Biosynthesis of heparin the basis of heparins	10 309
Di II. C. RODIISOII	pharmacological activity	4 488
	pharmacological activity	1 100
Centre for Early Human		
Development	n 1 1 1 1	
Dr P. J. Berger and	Perinatal development of the cardio-	E7 746
Dr J. E. Maloney	respiratory system in lambs	57 746
Dr A. A. Orgill and	High frequency ventilation in term and	32 539
Dr A. M. Walker	preterm lambs	34 339

Dr A. M. Walker	Cardiovascular development from birth in lambs after chronic stress in utero	73 438
Dr A. M. Walker	Postnatal development of the respiratory	73 436
Mr M. H. Wilkinson and	system in neonatal lambs stressed in utero	46 035
Dr J. E. Maloney	Optimisation of gas exchange in very high frequency ventilation of the mature lung	42 078
Centre for Molecular Biology and Medicine		
Professor A. W. Linnane and Dr P. J. Hertzog	Characterisation of acid-labile leukocyte interferon in AIDS	67 971
Dr S. Marzuki, Dr G. L. McMullen and	Antibodies with predetermined specificity to individual species of interferon	
Professor A. W. Linnane	A service Supplementation	27 456
Genetics		
Professor B. W. Holloway and Dr A. F. Morgan	A molecular genetic approach to the study of pseudomonas infections	25 025
Medicine		
Dr J. Hansky and	Control of pancreatic exocrine secretion in	99 000
Dr J. R. Lambert Dr S. R. Holdsworth	the dog Mechanisms of glomerular fibrin deposition	23 900 34 576
Dr S. R. Holdsworth	Mechanisms of macrophage accumulation in	28 492
Dr B. Jackson	experimental glomerulonephritis Antihypertensive drug modulation of	
Professor C. I. Johnston and	glomerular injury in renal failure models Vascular receptors and reactivity	23 106
Dr P. L. Nolan		26 946
Professor C. I. Johnston and Dr P. L. Nolan	Vasopressin in blood pressure homeostasis and hypertension	78 849
Dr B. P. McGrath	Vasoconstrictor mechanisms in congestive heart failure	19 465
Dr P. F. Ryan	Mechanisms of immunoregulation within the	25 167
Associate Professor	rheumatoid synovial joint Development of selective biochemical	23 107
M. B. Van der Weyden and Dr H. Cole-Goodwin	therapy in haematological malignancies	40 622
Associate Professor	Anti-cancer drug resistance and human	
M. B. Van der Weyden and Dr G. J. Young	mutant cell lines	57 360
Microbiology Dr J. K. Davies	The genetics of cell surface liability and	
	virulence in neisseria gonorrhoeae	30 809
Dr J. K. Davies	Site-specific recombination systems in	24 318
Professor S. Faine	neisseria gonorrhoeae Basis of latency in experimental syphilis	50 900

Professor S. Faine and	Immunity and pathogenesis in leptospirosis	
Dr B. Adler		59 664
Dr R. A. Skurray and Dr J. W. May	Molecular and genetic analysis of antibiotic resistance in staphylococci	44 616
Dr E. G. Westaway	Nucleotide sequence of the flavivirus	11 010
,	genome	55 293
Dr E. G. Westaway and Dr P. J. Wright	Replication and immuno-chemistry of	66 179
Dr P. J. Wright and	togaviruses Molecular basis of the expression of the	00 179
Dr E. G. Westaway	flavivirus genome	41 133
Obstetrics and Gynaecology		
Dr A. O. Trounson and	Characterisation and correction of cervical-	
Mr P. J. Lutgen	factor infertility	24 650
Dr A. O. Trounson and	Studies on mammalian egg and embryo	40.001
Dr L. R. Mohr Dr A. O. Trounson,	A study of human sperm function in vitro in	43 861
Dr P. D. Temple-Smith,	relation to infertility	
Dr M. M. Mahadevan and	,	04015
Mr G. J. Southwick		34 815
Pathology and Immunology		
Dr R. L. Boyd	Antigenic and functional analysis of the	00.051
	thymic microenvironment	28 351
Pharmacology		
Professor A. L. A. Boura and	Converting enzyme block and cardiovascular	
Dr R. G. King	responses to sympathetic stimuli Effects of steroids and vasectomy on	28 011
Dr J. N. O'Neil	adrenergic neurotransmission in vas deferens	29 579
Dr J. N. O'Neil	Effects of steroid hormones and pregnancy	
	on myometrial responsiveness to drugs	42 854
Physics		
Dr P. P. Phakey,	Ultrastructure of carious enamel	
Professor W. A. Rachinger		00 700
and Dr H. J. Orams		28 763
Physiology	4100000000	
Dr R. A. Bywater and	Non-cholinergic non-adrenergic	20 655
Dr G. S. Taylor Dr C. L. Gibbs and	neurotransmission in the intestine Comparative studies of basal and active	20 033
Dr I. R. Wendt	smooth muscle metabolism	53 699
Professor M. E. Holman	Innervation of smooth muscle	39 598
Professor M. E. Holman and	Opiate dependence in a mammalian	96 064
Dr S. M. Johnson Professor M. E. Holman and	neuronal network	36 064
	Control of myometrium during pregnancy	
Professor D. G. Thorburn	Control of myometrium during pregnancy and parturition	38 543
Dr A. R. Luff	Control of myometrium during pregnancy and parturition Mutability of mammalian motor units	38 543 37 050

Dr A. R. Luff	Functional aspects of reinnervated limb muscles	29 523
Dr U. Proske	Golgi tendon organs: development, segmental reflex action and central	
Dr J. A. Rawson	projections Organisation and functions of the cerebro-	60 886
Professor R. V. Short,	cerebellar projection in the primate Lactational control of reproduction	17 600
Dr M. B. Renfree Dr G. S. Taylor and	Electrophysiology of colonic enteric	81 842
Dr R. A. Bywater Dr R. A. Westerman, Dr R. Silberstein and	neurones' Effect of electric fields on nerve regeneration	26 775
Dr H. Kranz		12 205
Psychological Medicine Professor G. C. Smith, Dr D. L. Copolov and Dr G. L. Willis	Interaction of cingulum, amines and endorphin during stress and opiate withdrawal	51 455
Psychology		
Dr W. R. Webster	Functional 2-deoxyglucose mapping of auditory and visual systems	27 662
Surgery		
Professor V. C. Marshall, Dr P. Jablonski, Clinical Associate Professor	Improved kidney preservation for transplantation	
D. F. Scott.		22 291
Professor V. C. Marshall, Dr P. Jablonski, Clinical Associate Professor	Normothermic ex vivo perfusion and renal long-term preservation	
D. F. Scott.		6 673
Zoology	North dealers and the dealers and the state of the state	
Dr J. E. Nelson	Neural development in the marsupial native cat	30 136

Gifts in kind

From Dr Joseph Brown, an oil painting entitled South Coast by Brian Dunlop and two sketches by Leonard French of his design for the stained glass windows in the Religious Centre (Monash Art Collection).

From Professor R.R. Andrew, two oil paintings: A Pleasant Evening on the Rhine by Bill Gleeson and A Country Town at Evening by Michael Shannon (Monash Art Collection); a John Gould bird print entitled Machlott's Pitta (Department of Zoology).

From The Broken Hill Proprietary Company Limited Melbourne Research Laboratories, a colour graphic controller (Matrox RGB-256) for student projects (Department of Electrical Engineering).

From Mr H. Wexler, Rider Hunt and Partners, a framed Yogyakarta batik (Faculty of Arts).

From General Electric CAE International Inc., the software package Integrated Design Engineering Analysis Software (1-DEAS) valued at \$US200 000 (Department of Mechanical Engineering).

From Dr and Mrs C.B. Christesen, under the terms of the Taxation Incentives for the Arts Scheme twelve paintings by Danila Vassilieff, Len French, Margaret Preston, William Frater, Jean Bellette, J.S. Ostaja-Kotkowski, Toss Woollaston and Marion Bruere (Monash Art Collection).

From the German Research Foundation, a reprint of thirty-three volumes of Grimms Worterbuch and microfiches of 180 volumes of the eighteenth century periodical of the Allgemeine Literaturzeitung (The Library).

From Mr Ian Armstrong, a drawing for the cover of the catalogue for the three-man show the artist shared with Fred Williams and Harry Rosengrave in 1951 (Monash Art Collection).

Sources of grants and donations

	\$000	%
Private donations and		
indirect Government		
research grants	4 862	47.5
Australian Research		
Grants Scheme	1 960	19.2
National Health and		
Medical Research		
Council	3 404	33.3
	10 266	100.0

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 funds such as the Embryo and Egg Transfer Fund; for endowment such as the Elwyn Morey Memorial Fund and for equipment such as the Ultrasound Fund. Sums contributed this year include:

Centre for Human Bioethics	117 551
Elwyn Morey Memorial Fund	6 386
Embryo and Egg Transfer Fund	63 534
Monash Art Gallery including	
Russell Drysdale Memorial	
Fund	15 422
Ultrasound Fund	47 273
Library Fund	50 067
Elizabeth Eggleston Memorial	
Fund	1 405
Krongold Centre	5 600
Development Fund	203
Total Appeal Funds	307 441
	-

FINANCE

The following salient points from the audited accounts of the University for the year 1985 are set out for ready reference.

Funds available

Recurrent Commonwealth Government funds available for expenditure on recurrent items during the year ended 31 December 1984 were as follows:

		φυυυ
University — 1985 Grant	91 420	
Less deficit brought forward from 1984	538	90 882
Teaching Hospitals		341
Halls of Residence		156

Expenditure of these funds during the year 1985 was:

	University		Teaching Hospitals		Halls of Residence	
	\$000	%	\$000	%	\$000	%
Academic activities	63 844	69.9	341	100.0		
Academic services	8 627	9.5				
Student services	2 065	2.3				
General services	16 545	18.1				
Public services	122	0.1				
Other	105	0.1			156	100.0
	91 308	100.0	341	100.0	156	100.0
		====				

Deficit carried forward

31 December 1985 425 (rounded)

Total does not add due to rounding.

Capital Commonwealth Government funds received in 1985 for expenditure on capital projects (buildings and furniture) totalled \$352 000.

Research Commonwealth Government funds available for expenditure on special research projects in 1985 totalled \$1 561 000.

Equipment Commonwealth Government funds received in 1985 for expenditure on equipment totalled \$3 748 000.

Union fees

Union fees payable by students enrolled for the year 1985 were as follows:

Students studying on campus — full-time \$225; part-time \$141 or \$98.

Students studying off campus in Victoria

- full-time \$56; part-time \$39.

Accounts

The audited accounts of the University for the year 1985 are appended to this report, and provide further details of the year's activities.

General

1985 was the first year of the new triennium (1985–87) and the amounts granted for each of the Commonwealth Government Grants under the Act to Monash University have been set at identical sums at common cost levels for each year of the triennium.

The University has not been granted any funds in this triennium for specified or major building projects, leaving the burden of funding such works as the Multidiscipline Building, extensions and alterations to the Alexander Theatre and alterations to Medical A Block Stage 3 to fall upon the University's limited non-government resources.

Commencing in this year the Australian dollar suffered severe devaluation in relation to the major trading international currencies. The effect of this economic change was felt significantly by budgetary groups which incurred expenditure in these currencies for such various items as equipment and consumables and for library purchases of overseas books and periodicals.

To the extent that expenditure has been incurred on overseas purchases, the devalua-

tion of the Australian dollar has meant a relative loss of purchasing power as universities do not receive supplementation for non-salary cost increases in the year in which such increases are incurred.

The change in the value of the Australian dollar has compounded an already existing problem for universities relating to the purchase of equipment. Monash has previously expressed its long-held view that funding for equipment has been very inadequate and is now at a level, relative to need, from which a crisis situation could well emerge if significant Government action is not forthcoming.

During 1985 a detailed study was undertaken on the University's equipment replacement requirements to the year 2000. This was reported to CTEC. Using data from the University's computerised equipment register and further information from faculties, the report showed that the 1988–90 triennium would be a period of peak demand for equipment replacement, and a very large increase in the level of the present equipment grant is required to meet projected equipment replacement needs.

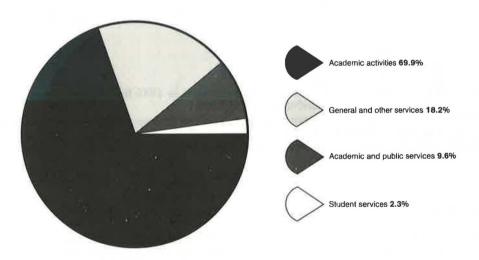


Figure 1 — Recurrent Expenditure in 1985

The analysis of the 1985 recurrent expenditure, as reflected in Figure 1 above, demonstrates that a continued high proportion of the recurrent grant has been spent on

academic activities, whilst incurring a low proportion of costs in comparison to other major universities, for general and other services.

Source of University Operating Funds — 1983-1985 (figure 2)

		1983	1984	1985
		\$M	\$M	\$ M
Government		78.360	82.900	87.277
funds		(99.04%)	(98.22%)	(97.01%)
Non-government		0.763	1.500	1.866
Funds		(0.96%)	(1.78%)	(2.09%)
Total funds	\$4M	79.123	84.400	89.143
		100.0%	100.0%	100.0%

Figure 2 shows that the University operating budget has been supplemented over the three years 1983, 1984 and 1985 by funds from non-government sources, and that the percentage of the non-government funds input to the operating budget has increased for each year. Nevertheless the level of University recurrent expenditure remains heavily dependent on Government grants.

Workers' compensation insurance was reviewed in 1985. The initial quotations received for 1985 indicated that premiums would rise from \$1.1m in 1984 to \$1.856m in 1985. Through negotiations with several insurance underwriters the final cost to the University for 1985 was held to \$956 576. In addition, the introduction of WorkCare on 31 August 1985 was a major change to the workers' compensation insurance system.

An accumulated deficit of Recurrent Funds of \$425 317 has been carried forward as at 31 December 1985.

ACCOUNTS FOR THE YEAR 1985

Certificate by Monash University

In our opinion the statements which follow, numbered 1 to 16, correctly record the transactions of Monash University for the year ended 31 December 1985.

R.L. Martin Vice-Chancellor

> P.B. Wade Comptroller

27 June 1986

Auditor-General's Report

The accompanying financial statements of Monash University comprising a Statement of Balances, a Summary Statement of Income and Expenditure together with supporting statements (2) to (12) and financial statements relating to Monash University Donor Nominated Trust Funds, Monash University Superannuation and Pension Schemes and Monash University Foundation, have been audited as required by Sec-

tion 36 of the Monash University Act 1958 and in accordance with Australian Auditing Standards.

As stated in notes 7, 8 and 9 to the accounts, the investments of the University, held in the Common Fund (\$1 366 986) the Monash University Superannuation and Pension Schemes (\$103 783 422) and University Monash Foundation (\$15 070 017), are held in the name of fund managers. These investments and the related income of \$19 032 210, which include both unrealised and realised gains and losses in respect of the investments of the Superannuation and Pension Schemes, have been included in the financial statements on the basis of statements furnished by the fund managers and have not been independently verified by audit.

In my opinion, subject to the effect, if any, on the financial statements of the matters referred to above, the financial statements correctly summarise the financial transactions of Monash University for the year ended 31 December 1985.

R.G. Humphry Auditor-General

27 August 1986

Notes to and forming part of the accounts — 1985

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, eg 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 Commonwealth 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

7 Investments of the University's Common Fund are managed by a fund manager and are included in the accounts on the basis of statements from the fund manager. Investments held in the name of the fund manager of behalf of the University at 31 December 1985 are recorded in the accounts at cost.

8 Superannuation and pension schemes statement 15

During 1981, a defined benefit 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 1985 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.

In accordance with the provisions of the trust deed, an actuarial valuation of the "M" scheme was made as at 31 December 1982 and 1984. The scheme was considered to be financially sound.

In December 1985 the council resolved that Monash University become a participating institution in the Superannuation Scheme for Australian Universities (SSAU).

As at 31 December 1985 there was a contingent liability of approximately \$89.6m in respect of the lump-sum entitlements of members of the Monash superannuation scheme who elected in December 1985 to transfer to SSAU, and a further liability of \$2.8m in respect of members of staff who retired at 31 December 1985.

9 Monash University Foundation — statement 16

During 1983 the University created a trust entitled the 'Monash University Foundation'. The trust receives 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 is the sole beneficiary of the trust and during 1985 received contributions of \$1 600 000 from the foundation.

Investments of the foundation are managed by a fund manager and are included in the accounts on the basis of statements from the fund manager. Investments held in the name of the fund manager on behalf of the foundation at 31 December 1985 are recorded in the accounts at cost.

many mercanes showing income and expenditure for all general proportion for

(1) Summary statement showing income and expenditure for all general purposes for the year ended 31 December 1985

	Recurrent grant	Building projects grant	Equipment grant	Teaching hospitals recurrent grant	Special research grant
	\$	\$	\$	\$	\$
Income					
Commonwealth Government grants Other	91 420 000	352 000	3 748 000	341 000	1 561 000
Total income	91 420 000	352 000	3 748 000	341 000	1 561 000
Less					
Expenditure					
Academic activities	63 843 300		2 545 415	341 000	1 553 307
Academic services	8 627 237		941 367		
Student services	2 064 647		9 267		
General services	16 544 938	359 301	144 420		7 693
Public services	122 164		23 513		
Other	105 358				
Total expenditure	91 307 644	359 301	3 663 982	341 000	1 561 000
Surplus (deficit) for the year Transfer from Students' Loan Fund, Grants and Loans Scheme	112 356	(7 301)	84 018	-	-
Surplus (deficit) at 1 January 1985	(537 673)	7 301	248 766	_	_
Accumulated surplus (deficit) at 31 December 1985	(425 317)	-	332 784	4	

1984 Tota	Total	Fire ins'ce fund	General auxiliary activities	Union develop't fund	Union activities	General donations	Private and indirect gov't research grants
\$	\$	\$	\$	\$	\$	\$	\$
92 972 003 19 105 678	99 538 148 23 491 733	32 829	156 300 9 832 020	848 115	2 348 914	3 421 632	1 959 848 7 008 223
112 077 688	123 029 881	32 829	9 988 320	848 115	2 348 914	3 421 632	8 968 071
73 338 465 8 772 170	78 387 378 9 764 884					1 428 903 196 280	8 675 453
2 360 767 17 368 627 113 496	2 465 458 18 700 409 147 452	4 740	848 140	582 177		67 128 172 300 1 775	324 416 36 700
9 610 713	10 120 338		7 478 177	270 910	2 205 952	59 941	
111 564 238	119 585 919	4 740	8 326 317	853 087	2 205 952	1 926 327	9 036 569
513 447	3 443 962	28 089	1 662 003	(4 972)	142 962	1 495 305	(68 498)
397 300 10 410 843	11 321 590	243 040	7 961 720	(618 217)	446 094	2 342 222	1 228 337
11 321 590	14 765 552	271 129	9 623 723	(623,189)	589 056	3 837 527	1 159 839

(2) Recurrent grant
Statement of income and expenditure for the year ended 31 December 1985

1984		1985
\$	¥	\$
00.00#.000	Income	01 400 000
83 367 000	Commonwealth Government grant	91 420 000
***	Commonwealth Government grant —	
500	community language	
85 367 500	Total income	91 420 000
	Less	
	Expenditure	
	Academic activities	
E4 000 FOO	Teaching and research —	50 999 901
54 283 520	Salaries and related items	58 338 381
3 165 596	Maintenance	2 662 308
1 167 056	Computing services	1 206 575
383 184	Equipment	358 261
217 250	Outside studies program	211 535
130 680	New appointments	118 859
922 054	Other items	947 381
60 269 340		63 843 300
	Academic services	
	Libraries —	
4 244 967	Salaries and related items	4 493 140
1 751 835	Books and journals	2 001 590
257 894	Maintenance	244 913
154 078	Computing services	108 772
28 977	Equipment	30 491
34 683	Other items	33 944
6 472 434		6 912 850
	Computing —	
1 357 792	Salaries and related items	1 425 331
180 222	Maintenance	205 407
18 782	Equipment	981
1 396 219 Cr.	Recoveries	1 394 421 0
346	Other items	9 666
160 923		246 964
	Other academic services —	
1 097 204	Salaries and related items	1 402 158
55 883	Other items	65 265
1 153 087		1 467 423
68 055 784	Sub-total carried forward	72 470 537

(2) Recurrent grant Statement of income and expenditure for the year ended 31 December 1985 (continued)

ontinued)		
1984		1985
\$		\$
68 055 784	Sub-total brought forward	72 470 537
-	Student services	,
723 679	Salaries and related items	791 121
1 197 598	Scholarships	1 254 303
5 580 Cr.	Other items	19 223
1 915 697		2 064 647
	General services	
	Administration —	
5 765 574	Salaries and related items	6 309 233
139 155	Computing services	95 285
41 697	Other items	187 683
5 946 426		6 592 201
	Overheads —	
949 388	Postage, telephone and advertising	1 013 134
156 878	Furniture and furnishings	262 409
1 461 994	Power, lighting and heating	1 629 441
645 699	Other items	807 687
3 213 959		3 712 671
	Buildings and grounds —	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4 384 932	Salaries and related items	4 621 107
1 408 490	Maintenance	1 375 087
198 372	Other items	243 872
5 991 794		6 240 066
	Public services	
	Continuing education —	
112 980	Salaries and related items	121 158
972	Other items	1 006
113 952		122 164
99 657	Union administration	105 358
85 337 269	Total expenditure	91 307 644
30 231	Surplus for the year	112 356
567 904	Deficit at 1 January 1985	537 673
	Accumulated deficit at 31 December 1985	425 317

(3) Building projects grant Statement of income and expenditure for the year ended 31 December 1985

	1985
¥	\$
Commonwealth Government grant	352 000
Total income	352 000
Less	
Expenditure	
	85 895
New buildings	273 406
Furniture	
Total expenditure	359 301
Deficit for the year	7 301
Surplus at 1 January 1985	7 301
Accumulated surplus at 31 December 1985	_
	Less Expenditure Site development New buildings Furniture Total expenditure Deficit for the year Surplus at 1 January 1985

(4) Equipment grant Statement of income and expenditure for the year ended 31 December 1985

1984		1985 \$
Ф	Income	Ф
3 511 000	Commonwealth Government grant	3 748 000
3 511 000	Total income	3 748 000
	Less	
	Expenditure	
	Ācademic Activities	
	Teaching and research —	
2 307 417	Equipment	2 545 415
	Academic services	
	Libraries	
25 170	Books and journals	42 216
14 255	Equipment	38 682
39 425		80 898
871 097	Computing	697 217
40 718	Other academic services	163 252
2 558	Student services	9 267
	General services	
78 669	Administration	144 420
24 271	Buildings and grounds	_
102 940		144 420
	Public services	23 513
3 364 155	Total expenditure	3 663 982
146 845	Surplus for the year	84 018
101 921	Surplus at 1 January 1985	248 766
248 766	Accumulated surplus at 31 December 1985	332 784

(5) Teaching hospitals recurrent grant Statement of income and expenditure for the year ended 31 December 1985

1984		1985
\$		\$
	Income	
332 000	Commonwealth Government grant	341 000
332 000	Total income	341 000
-	Less	
	Expenditure	
	Academic activities	
	Teaching and research —	
332 000	Maintenance	341 000
332 000	Total expenditure	341 000
	Surplus for the year	_

(6) Special research grant Statement of income and expenditure for the year ended 31 December 1985

	1	
1984		1985
\$		\$
	Income	
1 456 000	Commonwealth Government grant	1 561 000
1 456 000	Total income	1 561 000
	Less	
	Expenditure	
	Academic activities	
	Teaching and research —	
1 043 117	Salaries and related items	988 703
356 037	Maintenance	451 530
50 012	Other items	113 074
1 449 166		1 553 307
	General service	-
144	Buildings maintenance	_
11	Furniture and furnishings	51
6 679	Postage, telephone and advertising	7 642
6 834		7 693
1 456 000	Total expenditure	1 561 000
_	Surplus for the year	=

(7) Private and indirect government research grants Statement of income and expenditure for the year ended 31 December 1985

\$		
		\$
	Income	
1 748 407	Commonwealth Government grant	1 959 848
*	Grants and donations	
4 726 847	Government-financed bodies	5 250 860
2 059 857	Other	1 757 363
6 786 704		7 008 223
8 535 111	Total income	8 968 071
6	Less	
	Expenditure	
	Academic activities	
	Teaching and research —	
5 650 692	Salaries and related items	6 091 692
1 425 880	Maintenance	1 534 314
9 983	Computing services	2 707
675 105	Equipment	732 500
321 929	Other items	314 240
8 083 589		8 675 453
	Student services	
313 712	Scholarships	324 416
	General services	
6 825	Postage, telephone and advertising	26 729
667	Furniture and furnishings	520
	New buildings	7 600
	Buildings maintenance	1 851
7 492		36 700
8 404 793	Total expenditure	9 036 569
130 318 (S)	Deficit for the year	68 498
1 098 019	Surplus at 1 January 1985	1 228 337
1 228 337	Accumulated surplus at 31 December 1985	1 159 839

(8) General donations
Statement of income and expenditure for the year ended 31 December 1985

1984		1985
\$		\$
	Income	
	Donations	000.000
215 251	Government-financed bodies	339 079
1 566 146	Other	2 895 530
1 781 397		3 234 609
	Appeals	
49 459	Library books	50 067
3 492	Other	7 208
52 951		57 275
85 558	Other income	129 748
1 919 906	Total income	3 421 632
	Less	
	Expenditure	
	Ācademic activities	
	Teaching and research —	
636 776	Salaries and related items	689 912
113 777	Maintenance	423 380
62 568	Equipment	109 617
83 832	Other items	205 994
896 953		1 428 903
	Academic services	
1 2 2 2	Libraries —	
4 588	Salaries and related items	
25 020	Books and journals	183 660
3 000	Other items	-
32 608		183 660
	Computing —	
3 525	Salaries and related items	-
	Other academic services —	
237	Salaries and related items	1 801
1 884 Cr.	Other items	10 819
1 647 Cr.		12 620
931 439	Sub-total carried forward	1 625 183

(8) General donations Statement of income and expenditure for the year ended 31 December 1985 (continued)

1984		1985
\$		\$
931 439	Sub-total brought forward	1 625 183
	Student Services	
16 555	Salaries and related items	_
73 549	Scholarships	62 452
38 696	Other items	4 676
128 800		67 128
	General services	
	Administration —	
105 322	Salaries and related items	25 417
_	Other items	16 471
105 322		41 888
	Overheads —	
2 185	Furniture and furnishings	7 146
4 651	Postage, telephone and advertising	18 856
6 836		26 002
	Buildings and grounds —	
3 763	New buildings	89 812
43 395	Maintenance	14 598
47 158		104 410
	Appeals	
45 365	Library books	52 517
456 Cr.	Public services	1 775
	Union activities	7 424
1 264 464	Total expenditure	1 926 327
655 442	Surplus for the year	1 495 305
	Transfer from Students' Loan Fund and	
397 300	Assistance to Students in Need Fund	-
1 289 480	Surplus at 1 January 1985	2 342 222
2 342 222	Accumulated surplus at 31 December 1985	3 837 527

(9) Union activities Statement of income and expenditure for the year ended 31 December 1985

1984			1985
\$			\$
	Income		
2 022 137	Union fees		2 079 612
244 635	Other		269 302
2 266 772	Total income		2 348 914
	Less	_	
	Expenditure		
469 416	Sports and Recreation Association		550 401
380 730	Monash Association of Students		382 500
200 566	Clubs and Societies Council		237 999
254 433	Union tuition and courses		264 851
188 163	Union building management		189 687
684 711	Union administration and special projects Business activities		679 705
6 062 (D)	Catering — operating surplus	19 182	
13 651 (D)	Other — operating surplus	25 347	
	1 0 1		44 529 (S)
2 197 732		-	2 260 614
	Less		
	Contribution by University for use of		
51 306	facilities by staff		54 662
2 146 426	Total expenditure	_	2 205 952
120 346	Surplus for the year	_	142 962
325 748	Surplus at 1 January 1985		446 094
446 094	Accumulated surplus at 31 December 1985	_	589 056

(10) Union development fund Statement of income and expenditure for the year ended 31 December 1985

1984	7	1985
\$		\$
541	Income	
499 410	Union development fees	575 748
279 407	Rentals and other	272 367
778 817	Total income	848 115
	Less	
	Expenditure	
	Ĝeneral services	
202 830	New buildings	345 505
232 435	Maintenance — buildings	223 100
7 538	Furniture and furnishings	13 572
442 803		582 177
	Other items	
140 312	Equipment	83 820
102 210	Occupancy expense	113 420
77 710	Other items	73 670
320 232		270 910
763 035	Total expenditure	853 087
15 782 (S)	Deficit for the year	4 972
633 999	Deficit at 1 January 1985	618 217
618 217	Accumulated deficit at 31 December 1985	623 189

(11) General auxiliary activities Statement of income and expenditure for the year ended 31 December 1985

1984 \$		1985 \$
	Income	
	Commonwealth Government grant:	
224 100	Halls of residence	156 300
4 097 139	Outside earnings	5 283 212
3 229 582	Other income	4 548 808
7 550 821	Total income	9 988 320
	Less	
	Expenditure	
	Ĝeneral services	
	Overheads —	
13 759	Furniture and furnishings	40 427
	Buildings and grounds —	
1 070 287	New buildings	711 117
(-)	Site development	19 985
105 853	Maintenance	76 611
1 189 899		848 140
	Other items	
40 246	University bookshop	93 884 C
204 548	Halls of residence	221 798
45 456 Cr.	South east flats	43 394 C
4 898	Owned houses and transit flats	15 844 C
1 500 005	Outside earnings —	0.000 #04
1 799 397	Monash University Foundation	2 032 724
5 108 997	Other	5 495 471
113 597 Cr.	Other	118 694 C
6 999 033		7 478 177
8 188 932	Total expenditure	8 326 317
638 111 (D)	Surplus for the year	1 662 003
8 599 831	Surplus at 1 January 1985	7 961 720
7 961 720	Accumulated surplus at 31 December 1985	9 623 723

(12) Fire insurance fund Statement of income and expenditure for the year ended 31 December 1985

	1985
	\$
Income	
Income from investments	32 829
Total income	32 829
Less	
Expenditure	
Replacement of equipment	4 740
Repairs to building	_
Total expenditure	4 740
Surplus for the year	28 089
Surplus at 1 January 1985	243 040
Accumulated surplus at 31 December 1985	271 129
	Income from investments Total income Less Expenditure Replacement of equipment Repairs to building Total expenditure Surplus for the year Surplus at 1 January 1985

(13) Statement of balances for all general purposes at 31 December 1985

	1984			1985
\$	\$		\$	\$
		Accumulated funds		
537 673 Dr.		Recurrent grant	425 317 Dr.	
7 301		Building projects grant	_	
248 766		Equipment grant	332 784	
-		Teaching hospitals — recurrent grant		
_		Special research grant	_	
		Private and indirect government		
1 228 337		research grants	1 159 839	
2 342 222		General donations	3 837 527	
446 094		Union activities	589 056	
618 217 Dr.		Union development fund	623 189 Dr.	
7 961 720		General auxiliary activities	9 623 723	
243 040		Fire insurance fund	271 129	
	11 321 590	Total accumulated funds	-	14 765

		Represented by: Investments (refer Note 7)		
		Investments in managed fund — Westpac Investment Management Pty		
1 175 394		Ltd	1 366 986	
		(Market value:		
		31 December 1985 — \$1 754 838		
	1 175 394	31 December 1984 — \$1 387 769)		1 366 986
		Current assets		
128 088		Cash at bank and on hand	260 190	
38 308 648		Cash on term deposits	43 002 132	
		Debtors —		
1 400		Accrued government grants	1 227 000	
2 151 551		Other	3 108 359	
2. 12. Apr. 10. 12. 12. 12.		Stocks on hand, at costs less		
937 375		obsolescence	905 586	
37 118		Payments in advance	54 027	
	41 564 180			48 557 294
		Less		
		Current liabilities		
1 141 723		Bank overdraft	1 243 687	
		Sundry creditors and accrued		
6 111 119		expenses	7 640 424	
		Students' fees received in		
1 026 307		advance	1 395 568	
		Government grants received in		
21 482 000		advance	23 333 147	
29 761 149			33 612 826	
		Long-term liabilities		
1 656 835		Loans on mortgage	1 545 902	
	31 417 984	0.0		35 158 728
	11 321 590	Net assets		14 765 552

(14) Donor nominated trust funds Statement of income and expenditure for the year ended 31 December 1985

1984	1	1985 \$
	Income	
13 095	Income from investments	14 206
13 095	Total income	14 206
	Less	
	Expenditure	
450	Max Buxton Scholarship	450
830	Graham John Beard Memorial Fund	51
	J.W. Dodds Memorial Scholarship	1 001
700	Vallejo Gantner Memorial Travel Fund	800
1 144	Oscar Mendelsohn Lecture	_
111	Monash University Rowing Club	110
350	W.P. and H.E. O'Shea Fund	340
50	The David B. Rosenthal Memorial Trust	150
1 801	Hume Turnbull Scholarship	2 751
2 013	William and Katherine Winter Foundation	5 403
7 449	Total expenditure	11 056
5 646	Surplus for the year	3 150

Balance sheet at 8	31 December 1985	
1984	h	1985
\$		\$
	Accumulated funds	
108 539	Funds at 1 January 1985	114 185
5 646	Surplus for the year	3 150
114 185	Total accumulated funds	117 335
	Represented by:	
	Investments	
50 931	Government securities, at cost	55 045
23 500	Semi-government securities, at cost	23 400
17 960	Fixed-interest securities, at cost	17 960
3 785	Ordinary shares, at cost	3 785
	(Market value: 31 December 1985 — \$12 007	
	31 December 1984 — \$6 218)	
96 176		100 190
	Current Assets	
17 000	Fixed deposit stock	17 000
1 009	Cash at bank	145
18 009		17 145
114 185	Total assets	117 335

(15) Superannuation and pension schemes Statement of income and expenditure for the year ended 31 December 1985

		100#
1984		1985
\$	5	\$
	Income	
2 752 232	Members' contributions	3 008 392
5 443 182	University's contributions	5 837 007
4 999 315	Appreciation of managed funds	16 872 470
35 76 3	Income from other investments	524 124
25 740	Other income	22 032
13 256 232	Total income	26 264 025
	Less	
	Expenditure	
2 463 949	Benefit payments to members	3 419 977
442 829	Payments on withdrawal	427 642
208 712	Other payments	289 711
3 115 490	Total expenditure	4 137 330
10 140 742	Surplus for the year	22 126 695
78 811 570	Surplus at 1 January 1985	88 952 312
88 952 312	Accumulated surplus at 31 December 1985	111 079 007

(15) Superannuation and pension schemes
Balance sheet at 31 December 1985
(excluding contributions applied as premiums to assurance policies with the staff superannuation scheme)

1984		1985 \$
Ψ	Accumulated funds	¥
88 952 312	Accumulated surplus	_111 079 007
	Represented by:	
	Investments	
1 750 000	Term Deposits	6 961 566
31 000	Fixed-interest securities, at cost	V.
1000 0000	Investments in managed funds —	
31 111 071	Australian Mutual Provident Society	36 634 676
01 111 0/1	National Mutual Life Association of	00 001 010
29 559 075	Australasia Limited	35 169 448
26 417 177	Westpac Investment Management Pty Ltd	31 979 298
88 868 323	,	110 744 988
	Current assets	
84 560	University current account	332 320
_	Accounts receivable	1 699
84 560		334 019
	Less	
	Current liabilities	
571	Accounts payable	
88 952 312	Total assets	111 079 007

(16) Monash University Foundation Statement of income and expenditure for the year ended 31 December 1985

1984		1985
\$	•	\$
	Income	
1 143 592	Income from investments	1 973 161
1 143 592	Total income	1 973 161
	Less	
	Expenditure	
50 719	Investment adviser's fee	60 267
660	Bank charges	881
	Legal fees	77 5
51 379	Total expenditure	61 923
1 092 213	Surplus for the year	1 911 238
	Less	
768 000	Distribution to Monash University	434 000
324 213	Retained surplus for the year	1 477 238

(16) Monash University Foundation Balance sheet at 31 December 1985

	1984 \$			1985 \$
	Φ	Accumulated funds		Φ
		Capital funds		
10 266 579		Balance at 1 January 1985	12 065 976	
10 200 373		Add	12 003 370	
		Allocation from accumulated surplus		
-		to preserve capital	1 500 000	
1 799 397		Contribution from Monash University		
		Contribution from Worlash Chiversity	15 598 700	
12 065 976			15 598 700	
		Less		
_		Distribution to Monash University	1 166 000	
	12 065 976			14 432 7
	12 003 370	Accumulated surplus		14 452 7
304 671		Balance at 1 January 1985	628 884	
304 071		Add	020 001	
		Retained surplus for year		
324 213		ended 31 December 1985	1 477 238	
		chaca of December 1909		
628 884		Lace	2 106 122	
		Less		
		Allocation to capital funds	1 500 000	
	600.004	to preserve capital	1 300 000	606.1
	628 884			606 1
	12 694 860	Total accumulated funds		15 038 83
		Reported by:		
		Investments		
		Investment portfolio — Morgan		
	12 720 941	Guaranty Australia Limited		15 070 0
		Market value:		
		31 December 1985 — \$16 267 895		
		31 December 1984 — \$12 700 241		
		Current assets		
469		Cash at bank	73	
		Less		
		Current liabilities		
26 550		Accrued charges	31 268	
	(26 081)			(31 19
	12 694 860	Total assets		15 038 82
	14 031 000	I Otal assets		13 030 02

