



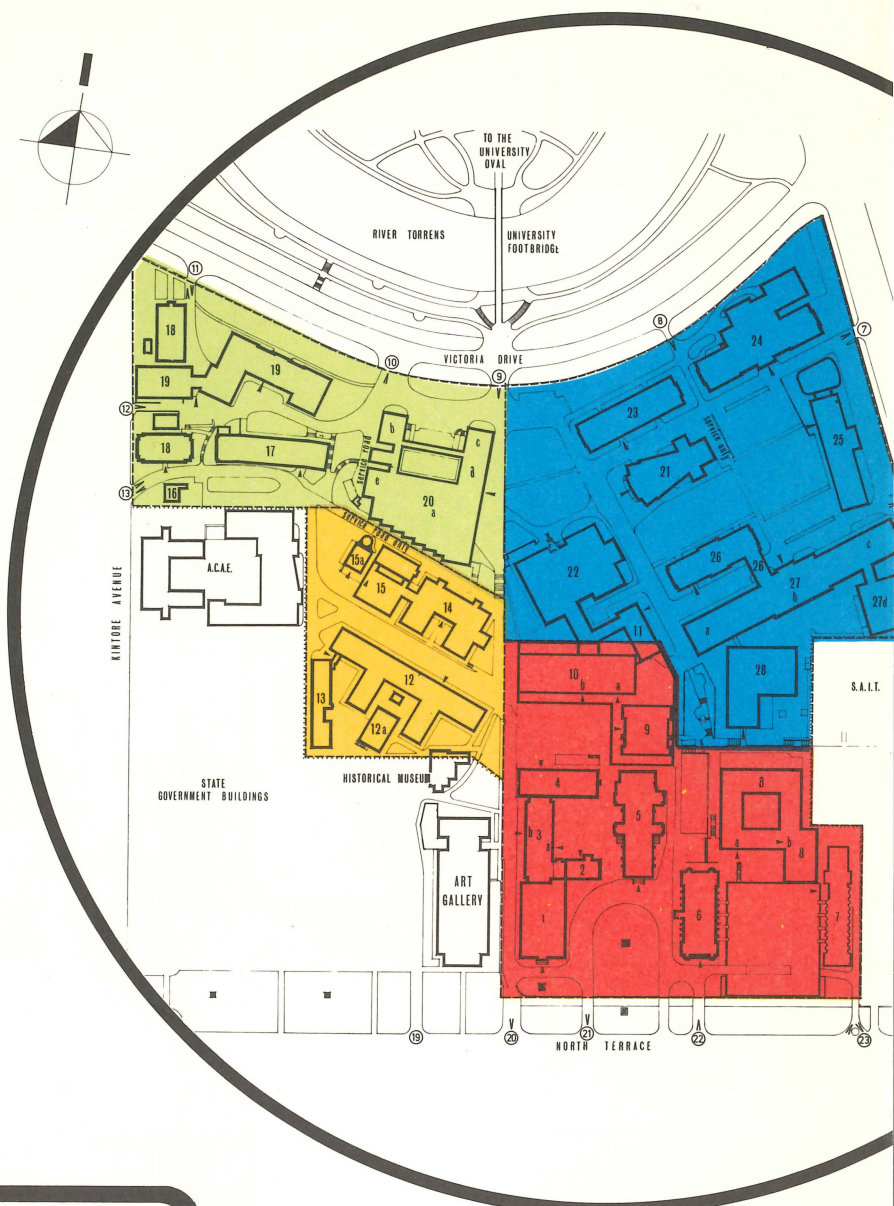
**THE UNIVERSITY OF ADELAIDE
SOUTH AUSTRALIA**

1981

CALENDAR

VOLUME III

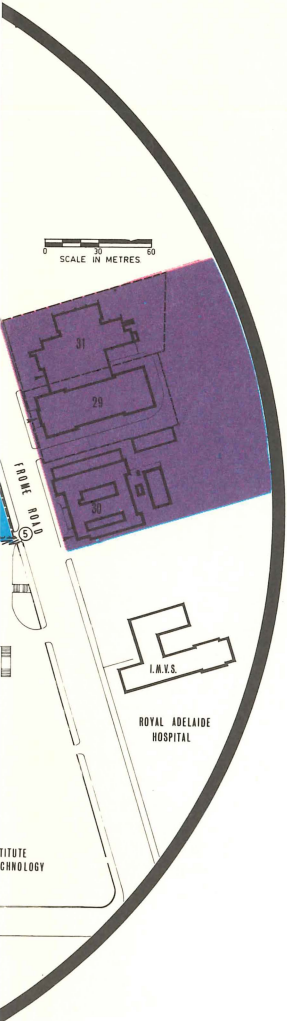
**ANNUAL REPORT AND FINANCIAL STATEMENTS
FOR 1980.**



STUDENT SERVICES

- REGISTRAR, FACULTY SECRETARIES, STUDENT RECORDS & EXAMINATIONS
Mitchell Bldg. First Floor 1
- CAREERS ADVISORY SERVICE
Mitchell Bldg Grd. Floor 1
- COUNSELLING SERVICE
University Union,
George Murray Bldg.
First Floor 20c
- HEALTH SERVICE
Horace Lamb Bldg.
Ground Floor 11
- WELFARE SERVICE
University Union,
Ground Level
opp. Little Theatre 20e

THE UNIVERSITY OF ADELAIDE



Mitchell Building 1
Faculty/Administration.
Parking Office.

Old Classics Wing 2
Executive Secretariat.
Buildings Office.

Kenneth Wills Building 3
a. Administration.
Office of
Vice-Chancellor.
Registrar.
a. Student Records
& Examinations.
Bursar.
b. Adult Education.
b. Post Office.

Hughes Building 4
Advisory Centre for
University Education.
Philosophy.
Bank of Adelaide.
Multilith Centre.
Music.
Psychology.
W.E.A.

Elder Conservatorium 5

Bonython Hall 6

Ligertwood Building 7
Classics.
Law.
Philosophy.

Napier Building 8
a. Commerce.
a. Economics.
b. Education.
b. English.
b. French.
b. Geography.
b. German.
b. History.
b. Politics.

University Club 9

Library Complex 10
a. Architecture.
a. Computing Centre.
a. Computing Science.
a. Health Service.
a. Radio VL5UV.
b. Research Library.
Levels 1, 2, 3 & 4.

Physics Building 12
Physics.
a. Physics & Maintenance
Workshop.

Oliphant Wing 13
Physics.
Mathematical Physics.
Mawson Institute.
Asian Studies.
Environmental Studies.

Darling Building 14
Biochemistry.

Bragg Laboratories 15
Physics.

Observatory 15a
Physics.

Services Supt.'s Residence ... 16

Organic Chemistry 17

C.S.I.R.O. 18

Johnson Laboratories 19
Physical and Inorganic
Chemistry.

University Union 20
a. Refectory and
Amenities.
b. Lady Symon Building.
c. George Murray Building.
d. Union Bookshop.
e. Little Theatre.

Horace Lamb Building 11
Architecture.
Mathematics.
Library.

Union Hall 21

Barr Smith Library 22

Benham Laboratories 23
Botany.

Mawson Laboratories 24
Economic Geology.
Geology.

R. A. Fisher Laboratories 25
Biology.
Genetics.
Zoology.

Mathematics Building 26
Mathematics.
Statistics.

Engineering Building 27
a. Civil.
b. Electrical.
c. Chemical.
d. Engineering Depts.

Mech. Engineering Building ... 28

Medical School (South Wing) 29
Anatomy & Histology.
Microbiology & Immunology.
Pathology.
Physiology & Pharmacology.
Oral Biology.
Anthropology.
Road Accident Research
Unit.

**Medical Sciences
(North Wing)** 31
Anatomy.
Pathology.
Physiology & Pharmacology.
Electron Microscopy.
Faculty Administration.

Dental School 30
Dental Health.
Oral Pathology and
Oral Surgery.
Restorative Dentistry.

DEPARTMENTS RELOCATED
Anthropology—Moved to the
Medical School.
Oral Biology—Moved to the
Medical School.
Philosophy—Moved to the
Hughes Building.

THE FOLLOWING ARE AT NORTH ADELAIDE

Mark Mitchell Centre Physical Education Administration. Gymnasium. Squash Courts.	Mackinnon Parade
Child Care Centre	Mackinnon Parade
Aquinas College	Palmer Place
Lincoln College	Brougham Place
Kathleen Lumley College	Finnis Street
St. Ann's College	Brougham Place
St. Mark's College	Pennington Terrace

The University of Adelaide

FOREWORD

The Calendar of the University is published as follows:

VOLUME I

Published every three years commencing with 1981-1983.

General Information, including—

- The University Act
- Principal Officers of the University
- Statutes
- Standing Orders of the Senate
- The Elder Conservatorium of Music
- Institutions, Foundations and Colleges of the University
- Public Lectures and Courses
- Service Departments and Divisions of the University
- Scholarships and Prizes
- Societies Associated with the University

VOLUME IA

Published annually in February as a booklet.
(To be published for the first time in February, 1982.)

To include—

- The Almanac
- Membership of Council, Committees, Faculties and Boards
Staff (at 1 January)
- Amendments made to Volume I during the previous year

VOLUME II

Published annually in December of the previous year.

"Details of Courses", being—

- Regulations, Schedules and Syllabuses of degree and diploma courses
- Rules
- Timetables

VOLUME III

Published annually in September.

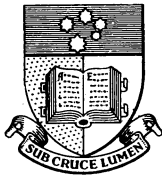
Annual Report, including Financial Statements

The Research Report, which includes a bibliography of publications by members of the staff of the University, is published separately at about the same time as Volume III of the Calendar.

These Volumes are normally published as follows:

- VOLUME I: In May (every three years): price \$2.50.
- VOLUME IA: In February: price \$2.
- VOLUME II: In December of previous year: price \$1.50.
- VOLUME III: In September: price \$2.

Postage extra.



THE ARMS OF THE UNIVERSITY

The heraldic description of the Coat of Arms is as follows:

Per pale Or and Argent an Open Book
proper edged Gold on a Chief Azure
five Mullets, one of eight, two of
seven, one of six and one of five
points of the second, representing
the Constellation of the Southern
Cross;

and the Motto associated with the Arms is—

Sub cruce lumen

"The light (of learning) under the (Southern) Cross"

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ANNUAL REPORT FOR THE YEAR 1980

I. GENERAL

A serious concern of the University during 1980 was once again the financial situation. Nevertheless, in spite of a combination of steadily rising costs and decreasing grants, it has been able to maintain its academic activities at the same high level as in the past, as this Report will show.

As noted in last year's Report, the University was already aware that its recurrent grant for the triennium 1979-81 would be on a continually declining scale, as compared with 1978, and at the end of 1979 it had become necessary to place a complete freeze on the filling of all academic posts (other than tutorial and part-time posts) that might fall vacant during 1980 and 1981, and to postpone for six months the filling of a majority of the support posts that might fall vacant. The urgent need to redress this situation was pointed out in the University's Submission to the Tertiary Education Commission for the 1982-84 Triennium, the terms of which had been approved at the end of 1979, and which was forwarded in January 1980. When members of the Universities Council visited the University in August to discuss the Submission, the need for remedial action was again stressed, but unfortunately a favourable outcome for the discussions did not appear very likely. The University had based its Submission on its research program, but the Universities Council members were not apparently impressed by this argument when they examined the University's student teaching load. They took the view that the overall staffing situation was better than the student numbers could be said to justify, and more favourable than that of some other Universities.

In September, the announced possibility that 17 tutorial posts might have to remain unfilled at the end of the year, for financial reasons, triggered off a student demand for the closure of the University for a day in protest. Instead, however, the Students' Association organised a public rally in the town on 18 September to protest at education funding cuts. About 3,000 people attended the rally and took part in a march to Parliament House. In the addresses given at the rally, and in subsequent publicity, it was pointed out that the Government's declared policy of maintaining recurrent funds for the higher education system as a whole at a constant level for the triennium concealed the fact that Universities like Adelaide, which had reached their maximum size, would in fact have to suffer a reduction in funding, in order that younger, developing Universities could receive increased funds to maintain their growth. The General Development Grants, which had been introduced last year in order to make it possible for the older Universities to initiate some new developments, did not provide sufficient flexibility to enable these Universities to meet increasing demands for existing courses (such as computing) and to provide for new areas of interest in existing courses to meet community needs. From the reduced grants, established Universities like Adelaide have to meet unavoidable increases in costs, such as those arising from 'incremental creep' (i.e. the cost of contractual annual staff salary increments), salary increases arising from industrial awards, and inflationary increases in costs beyond the level covered by the T.E.C.'s rules. It was these considerations that had made it necessary for the University to introduce its 'freeze' on the filling of posts falling vacant, and because of this freeze, combined with changing patterns of student enrolment, there was now a great imbalance over the University as a whole between student numbers and the numbers of teaching and support staff available to meet their needs. Unless this was recognised, and higher grants were provided, it was feared that the University would face intellectual stagnation in the near future. Already there had been a 5-6 per cent reduction in Adelaide's level of activities since 1976, and this reduction, affecting all the University's services, both academic and non-academic, would go on increasing.

In last year's Report, it was mentioned that because of the adverse academic effects of the financial situation, urgent investigations were in progress to see how increasing costs might be contained. A 'Working Party on Budget Initiatives' reported in 1980 on such matters as the problems created by the annual cost of incremental creep and promotions, the need to find a way to distribute the burden of budget restrictions more uniformly and fairly across the University, and the desirability of restricting optional courses or of

teaching fewer courses at greater depth. The Working Party has made some very controversial proposals, which have been referred to the new Executive Committee for more detailed examination.

In last year's Report, reference was made to the Williams Committee's advice in regard to regular reviews of the educational activities of institutions, and the reviews already carried out by this University were described. A major review of the Central Administration, with which was associated a review of the University's decision-making processes, had been started in 1979, with the assistance of a grant from the T.E.C. under its Evaluative Studies Program. This review was completed, and the recommendations made by the Committee of Administrative Review (the so-called Corbett Committee) were largely adopted by the University Council. The principal decisions, which were foreshadowed in last year's Report, were:

- (1) A new Committee of the Education Committee, to be entitled the Executive Committee, was to be set up to replace 11 existing Committees and to take over the duties formerly entrusted to those Committees. These include academic matters, staffing (other than appointments and promotions), research, publications, equipment and maintenance, grounds, buildings and accommodation, study leave and scholarships.
- (2) The Executive Committee was to have 17 members, comprising a Chairman and five persons appointed by the Education Committee, and the 11 Deans of Faculties. Each of the five members was to have special responsibility for one of the following fields: staffing; research and scholarships; equipment; grounds, buildings and accommodation; and academic matters and study leave.
- (3) The Vice-Chancellor, the Director of the Waite Institute, the Chairman of the Education Committee, and two student members would have the right to attend as voting members when matters of interest and importance to their areas of activity were under discussion. A number of other officers (including the Registrar and Bursar) would similarly have the right to attend as non-voting members.
- (4) Since it was anticipated that membership of the Executive Committee would involve a heavy load of work, members were to be relieved of undergraduate teaching duties, and their Departments would be eligible to receive compensation in the form of a teaching grant.
- (5) The two existing posts of Deputy Vice-Chancellor were to be discontinued at the end of 1980 (since it was expected that most of their duties would be assumed by members of the Executive Committee).
- (6) The Central Administration (at present divided into three sections headed by the Registrar, Academic Registrar and Bursar) would from January 1982 comprise two sections only, headed by the Registrar and Bursar. The existing administrative structure would be reorganised accordingly. In particular, the Executive Committee would be serviced by a group of professional officers under a Secretary, who would all be members of the Registrar's staff. These officers, together with their support staff, would constitute the Secretariat of the Executive Committee.

During the second half of 1980, active preparations were made to ensure that the new Executive Committee would come into existence at the beginning of 1981. Elections were held to choose the Chairman and five members with special responsibilities, the members of the Secretariat were appointed, a detailed system of practices and procedures for the operation of the Committee were framed and approved by the Education Committee and Council, and accommodation was reorganised to enable the Chairman and the five 'Executive Members', together with the members of the Secretariat, to be located together. Several issues, some of which have been outstanding for a long time, have been referred to the Committee for early consideration.

Mr. H. E. Wesley Smith retired from the office of Academic Registrar at the end of February and for the time being one of the Assistant Academic Registrars, Mr. T. J. Somerville, was appointed as Acting Academic Registrar. In preparation for the introduction of the reorganised Administration in 1982, a post of Registrar Designate was advertised, the intention being that during 1981 the person appointed would be the Academic Registrar and would work with the Registrar, Mr. A. E. Shields, on the scheme of reorganisation, so that the new arrangements would be ready to come into effect at the beginning of 1982, when the Academic Registrar would become the Registrar on the retirement of Mr. Shields. Towards the end of the year, the Council appointed Mr. F. J.

O'Neill, Staff Officer of the University of Melbourne, as Registrar Designate, and he was expected to take up duty as Academic Registrar early in 1981.

Another major review, commenced in 1978, was completed in 1980. This was a review of the relationship between the Waite Agricultural Research Institute and the University. It was carried out by a Council Committee under the Chairmanship of the Senior Deputy Chancellor (the Hon. Justice Roma Mitchell). One of the problems faced by the Waite Institute is that while it incorporates the seven academic departments which together comprise the Faculty of Agricultural Science of the University and are responsible for meeting the teaching requirements of that Faculty, its basic activity is research in agriculture, and the teaching/research mix is quite different from the rest of the University. The Council has now decided, on the recommendation of the Review Committee, to give the Institute a greater measure of self-determination by allocating to it an annual recurrent grant to manage as it sees fit within certain constraints, which include restrictions on the amount of money it can spend on staff. Certain matters such as salary levels, conditions of appointment, industrial matters, major and minor capital works, and large items of equipment, will continue to be administered either centrally or in accordance with University policy. For the first three years the Institute will be allocated 10.5% of the University's recurrent grant after deducting the cost of some central items, and this percentage will then be subject to review. Initially, this will result in extra income of about \$170,000 per annum to the Institute. The Review Committee also made recommendations to clarify the functions of the Director and Secretary of the Waite Institute, and the Council has since appointed a Working Party to report on the division of administrative and accounting tasks between the Central Administration and the Waite Administration.

Two other reviews were completed during the year—of the Department of History and of the Department of Animal Physiology. As a result of the latter review, the Council has decided to convert the Chair of Animal Physiology (now vacant) into a Chair of Animal Science. On the appointment of a new Professor, the present Department of Animal Physiology will be disbanded and a new Department of Animal Science will be established, incorporating the present staff of the old Department together with some staff transferred from other Departments in the Faculty of Agricultural Science.

At the end of the year the Council approved procedures for the carrying out of regular reviews of the functioning of departments, and two further reviews (of the Departments of Geology and of Continuing Education) are to be undertaken during 1981. They will be carried out as pilot reviews under the new procedures, which provide both for a general program of reviews covering all departments, as well as for *ad hoc* reviews when the need arises, and for intra-departmental reviews if appropriate.

2. THE UNIVERSITY OF ADELAIDE FOUNDATION

As reported last year, the Council decided in 1979 to set up 'The University of Adelaide Foundation'. In 1980 a formal Constitution for the Foundation was drawn up and approved, and the first set of grants was awarded from the Foundation's funds. It is intended to invite applications for such grants and make awards every six months in future.

The main purpose of the Foundation is to support, promote and enrich the general intellectual and cultural life of the University. The Foundation aims especially to provide grants to those University activities and facilities which are not normally categorised as academic activities supported by recurrent Government funds. The Foundation will especially seek out proposals of an innovatory kind, proposals likely to be of general appeal and interest to the University and proposals likely to promote greater intellectual and cultural diversity within the University community. Normally projects will involve a limited commitment in time and matching grants to supplement grants from outside bodies may be made in appropriate circumstances.

The Foundation's first grant was an allocation of \$30,000 to complete the payment of the cost (\$210,000) of the Cassavant Organ in Elder Hall.

The other grants awarded in 1980 were:

- Politics Department (\$21,000) as support for a Foundation Scholar.
- Elder Conservatorium (\$7,500) as support for a pianist-in-residence in 1981.
- Continuing Education (\$3,830)—University affairs radio program.
- Furnishings for Bonython Hall (\$1,500).
- Theatre Guild (\$990)—hire of a mini-bus for a country tour.

English Department (\$170)—radio program to be broadcast by its writer-in-residence (Ms. Glenda Adams).

The \$21,000 grant to the Politics Department enabled Mr. Jim Dunn (Director of the Foreign Affairs Research Group, Parliamentary Library, Canberra) to complete a major definitive study of Australian-Indonesian relations over East Timor as the University's inaugural Foundation Scholar. Mr. Dunn also gave a number of University lectures and seminars, which were of wide interest.

The Foundation has several classes of membership, which are open to individuals, firms, companies, institutions and associations. Each member will make an annual donation to the Foundation.

The management and conduct of the business and affairs of the Foundation will be the responsibility of a Board of Governors whose members will assume office from 1 January 1981. The Board of Governors will have a President who will be the Chancellor and who will act as Chairman of the Board, and a Vice-President, who will be the Vice-Chancellor and who will act as Chairman of the Board in the absence of the President.

The Foundation is being run till 1 January 1981 by an interim management committee made up of five *ex officio* members.

The newly-established society 'The Friends of the Elder Conservatorium of Music', which came into being during the year, will be the first society to be affiliated with the Foundation. The aim of the society is to increase public awareness of, and support for, the activities of the Conservatorium, and to assist the Conservatorium through various fund-raising activities.

3. THE COUNCIL AND THE SENATE

On 27 March 1980 the House of Assembly elected Mr. I. P. Lewis, M.P. to membership of the Council to replace Mr. F. R. Webster. This was the only change for the year in Parliamentary membership.

Mr. K. M. Bills, Mr. G. R. Ede and Mr. K. J. Hinton, members elected by the undergraduates, retired in October in accordance with the provisions of The University of Adelaide Act, 1971-78, Mr. Bills and Mr. Ede having completed their terms of office and Mr. Hinton having graduated. No ballot was necessary to fill the vacancies as only three nominations were received and, with the concurrence of the candidates and their nominators, Ms. A. Cornwall and Ms. J. Gillard were declared elected for normal two year terms and Mr. A. Frost for a one year term to fill the casual vacancy resulting from Mr. Hinton's mandatory retirement after serving one of the two years for which he had been elected.

At the November election by the Convocation of Electors, five normally occurring vacancies and one casual vacancy were filled. The normal vacancies resulted from the retirement, in accordance with the provisions of the Act, of Professors A. C. Castles and L. W. Cox (in the category 'persons engaged in the employment of the University as members of the academic staff') and Ms. A. Deveson, Mrs. H. R. Pearce and Dr. J. C. Yeatman (in the category 'persons not engaged in the employment of the University'). The casual vacancy, for one year, resulted from the retirement from the academic staff of Professor D. O. Jordan and his consequent retirement from Council membership in terms of the Act. Professors Castles and Cox were re-elected; Mr. I. J. Bettison, Mr. J. R. Steinle and Her Honour Judge I. E. Stevens were elected to fill the normal vacancies; and Dr. P. S. Davis was elected to fill the casual vacancy.

At its meeting in November, the Senate re-elected Mr. W. M. Rogers as its Warden and Mr. T. J. Somerville as its Clerk. Mr. P. Balan, Dr. P. S. Davis, Mr. O. G. Jones and Dr. H. Lander were re-elected as members of the Standing Committee of the Senate.

Following the election of the undergraduate members of Council in 1979, allegations had been made that the ballot had been 'rigged'. After a report from the Returning Officer had been considered, Council was not convinced that the allegations had been substantiated, and decided that no action was desirable or possible in respect of the 1979 election, but it asked its Committee on Elections to consider whether any changes in voting procedures were necessary to ensure that 'ballot rigging' could not take place. Council later accepted the recommendation of the Committee that the voting procedures should be amended to provide for a postal roll of undergraduates (as for Convocation Elections), and Section C of the Rules made by Council under the authority of Clause 10 of Statute LXXXV was amended accordingly.

4. ACADEMIC STAFF

4.1 *Deaths*

The Council has recorded with sorrow the deaths of the following former members of staff:

Mr. R. P. Jepson, Professor of Surgery from 1958-1968; on 20 October.

Emeritus Professor A. R. Alderman, Professor of Geology and Mineralogy from 1936-1966; on 5 August.

Miss Nancy Thomas, who retired as a Lecturer in Music in 1973, having been a Teacher of Singing since 1962; on 27 January.

4.2 *Resignations*

The resignations of the following members of staff took effect during the year:

Mr. P. J. Best, Lecturer in Commerce; Mr. T. J. C. Boulton, Senior Lecturer in Paediatrics, to take up an appointment to a Chair of Paediatrics, University of Newcastle. Mr. K. K. Chau, Senior Lecturer in Oral Pathology and Oral Surgery, to take up an appointment as Reader in Oral Pathology and Oral Medicine at the University of Hong Kong; Dr. G. J. Cocks, Lecturer in Chemical Engineering; Dr. N. J. Hunter, Lecturer in Politics; Dr. J. Kirkwood, Senior Lecturer in Restorative Dentistry, to take up an appointment as Reader in Conservative Dentistry, University of Hong Kong; Professor J. Ludbrook, Dorothy Mortlock Professor of Surgery, to take up an appointment with the Baker Medical Research Institute, Melbourne; Dr. R. W. Nesbitt, Reader in Geology and Mineralogy, to take up an appointment to a Chair of Geology, Southampton University; Mr. J. R. Piggott, Lecturer in Economics, to take up an appointment in the Australian National University; Professor R. W. R. Rutland, Professor of Geology and Mineralogy, to take up an appointment as Director, Bureau of Mineral Resource, Geology and Geophysics; Dr. G. Singh, Lecturer in Anatomy and Histology, to take up an appointment as Associate Professor and Head of Anatomy in the School of Medical Sciences, Universiti Sains Malaysia; Mr. P. J. Telfer, Lecturer in Restorative Dentistry, to take up an appointment as Director of Admissions and Clinics, Royal Adelaide Hospital.

4.3 *Retirements*

The following members of staff retired during or at the end of the year:

Mr. J. S. Dunkerley, who was appointed a Lecturer in Education in 1964; Dr. F. P. Kelly, who was appointed a lecturer in Law in 1976 and promoted to Senior Lecturer in 1979; Mr. W. A. P. Phillips, who was appointed a Lecturer in History in 1957, promoted to Senior Lecturer in 1961 and to Reader in 1968; Mr. H. E. Wesley Smith, who was appointed Guidance Officer for Ex-Service students in 1946, Academic Secretary in 1949, Assistant Registrar (Academic) in 1955, Deputy Registrar in 1964 and Academic Registrar in 1965; Dr. D. O. Crompton, after 19 years as the (part-time) Dr. Charles Gosse Lecturer in Ophthalmic Surgery.

4.4 *New Appointments*

The appointments of the following staff took effect during the year:

Professors: Dr. F. Bochner, who was previously a Senior Lecturer in Medicine at the University of Queensland, to the Foundation Chair of Clinical and Experimental Pharmacology; Mr. D. St.L. Kelly, who was previously a Commissioner of the Australian Law Reform Commission, to a Chair in Law; Dr. A. Kerr, who was previously a Reader in Plant Pathology, to a personal Chair; Dr. K. K. Ruthven, who was previously a Professor of English Language and Literature, University of Canterbury, New Zealand, to a Chair in English; Dr. A. R. Stephens, who was previously a Reader in German, to a personal Chair; Mr. C. Walsh, who was previously a Senior Lecturer in Economics at Monash University, to a Chair in Economics.

Lecturers: Dr. V. J. Carr, Psychiatry; Mr. B. J. Chapman, Economics; Dr. A. G. Davies, Paediatrics; Dr. N. J. C. King, Anatomy and Histology; Mr. T. J. Williamson, Architecture; Mr. J. F. Corkery, Law; Mr. P. A. McNamara, Law; Ms. Deborah White, Architecture.

4.5 *Distinctions*

The title of Emeritus Professor was conferred upon Professor R. W. R. Rutland (Geology & Mineralogy) following his resignation.

The Honorary degree of Doctor of the University was conferred on Emeritus Professor Sir Geoffrey Badger, Mr. V. A. Edgeloe and Mr. H. E. Wesley Smith.

A number of present and former members of the University were accorded New Year and Australia Day honours:

Miss M. B. Kimber (Music) received the award of Officer of the British Empire (OBE) for services to music; Mr. Mervyn K. Smith (Council member) received the award of Commander of the Order of the British Empire (CBE) for services to medicine; Miss V. T. Baddams (Council member) received the award of Member of the Order of Australia (AM) for services to education; Dr. R. J. Best (former staff member) received the award of Officer of the Order of Australia (AO) for services to agricultural science; Mr. C. W. Bonython (Council member) received the award of Officer of the Order of Australia (AO) for services to conservation; Mr. V.A. Edgeloe (Registrar Emeritus) received the award of Member of the Order of Australia (AM) for services to education; Professor Sir Rutherford Robertson, CMG, FRS (former staff member) received the award of Companion of the Order of Australia (AC) for services to biological sciences; and Professor R. E. Vowels (former staff member), Pro-Vice-Chancellor, University of New South Wales, received the award of Officer of the Order of Australia (AO) for services to education.

Professor D. Rowley (Microbiology & Immunology) was awarded a Commonwealth Senior Medical Fellowship by the United Kingdom Commonwealth Scholarship Commission.

Professor R. E. Luxton (Mechanical Engineering) was joint recipient of the George Julius Medal for 1979.

The Director of the Waite Institute, Professor J. P. Quirk, was awarded an Australian Medal of Agricultural Science by the Australian Institute of Agricultural Science.

Mr. M. R. Sims (Dental Health) received the inaugural P. Raymond Begg Award from the Australian Society of Orthodontists Foundation for Research.

Mr. M. J. Tyler (Zoology) was awarded the Royal Society of South Australia's Verco Medal for distinguished scientific research.

Dr. D. B. Keech (Biochemistry) was awarded the Lemberg Medal of the Australian Biochemical Society.

4.6 *Conditions of Service*

As in previous years, salary scales were adjusted in accordance with National Wage increases that occurred in the course of the year. In June the Academic Salaries Tribunal reported on rates of payment for part-time teachers and as a result increased rates of payment became effective from 1 July in some areas, notably marking. In other areas the Tribunal's proposed rates were lower than existing rates and were not implemented during 1980. In November the Tribunal, which had had before it for some time a 'work value' case in respect of full-time academic salaries, recommended an interim increase of 4%.

After due consideration the University established and documented a formal policy and conditions of service relating to limited term positions other than tutoring grade and certain research posts. Such positions may be created to meet temporary needs resulting from the absence (e.g. through secondment or illness) or delayed arrival of a staff member; when repeated attempts to fill a vacancy on the usual basis have failed; when the selected candidate is available only for a limited period, or the funding of the position is short-term; when there is a decrease in or uncertainty about relevant student numbers, or doubt about the viability of a course; to attract professional practitioners or outstanding scholars for specified periods without creating long term commitments on either side. The rights, privileges and responsibilities of appointees are as far as practicable, and except in respect of study leave and departmental government elections, identical with those of tenurable staff.

In response to a growing number of enquiries the University also established formal guidelines for the granting of leave without salary and for an Exchange Lectureship Scheme. In a situation of financial constraint, the academic population must tend to become static, with an increasing age profile, and positive steps need to be taken to safeguard against academic stagnation. It is envisaged that policies encouraging temporary movements of staff members from and to the University will supplement the study leave scheme in this regard.

In the course of the year considerable work was done towards formulating proposals in respect of (i) providing opportunities for the conversion of full-time to fractional appointments in the cases of staff members approaching retirement age; (ii) revised policy concerning extra-mural work; and (iii) early retirement.

4.7 *Staff Establishment*

The effect of the financial situation on academic staffing has already been referred to. As at 31 December 1980, 43 tenured academic posts remained unfilled for financial reasons. This total represents almost 9 per cent of the remaining filled posts.

Staff turnover in academic departments in the University, which has been falling for some time, continued to do so. Turnover of tenured academic posts has fallen from 25 in 1975, to 18 in 1979 and to 13 in 1980; turnover in non-academic departmental staff has fallen from 97 in 1975 to 62 in 1979 and to only 35 in 1980. As stated last year this trend undoubtedly reflects the reduced level of economic activity generally being experienced.

In 1980 the University was forced to provide some staff resources, usually on a short-term basis, for several departments when a vacancy arose which placed the department in a crisis situation, e.g. a whole academic program might be thrown into jeopardy, a basic course might be impossible to give, or the professional recognition of a course might be under threat of withdrawal. Short-term solutions of such problems cannot be other than a temporary measure while the University searches for better ways of meeting its financial difficulties. During 1980 nine departments claimed to be in a 'crisis situation'. Temporary assistance was provided to the departments of Restorative Dentistry, Oral Pathology & Oral Surgery, Paediatrics, Surgery, Geography and Commerce, at the cost of reducing the teaching grant (for temporary teaching staff) of many other departments.

4.8 *Study Leave*

1980 was the first year of operation of the revised Study Leave Scheme which had been amended by the Council in 1979, to take account of the Tertiary Education Committee's recommendations on study leave. Although the main features of the previous Study Leave Scheme were retained, the revised Scheme provided for the closer scrutiny of study leave applications, and special provisions for continuous leave outside Adelaide exceeding six months.

A total of 107 members of staff were granted and commenced study leave in 1980 under the provisions of the revised Scheme, and a total amount of \$221,381 in study leave grants was paid. By comparison in 1979, the last year of operation of the previous Scheme, 117 members of staff took study leave and a total amount of \$252,353 was paid in study leave grants.

The T.E.C. in its report had envisaged that participation in the 'outside studies program' should not exceed 7% of available staff time. The statistical returns, which the University is now required to furnish to the T.E.C., indicate that the incidence of participation by the University of Adelaide has been 7.47% in 1978, 10.68% in 1979, 7.29% in 1980 and a projected 6.58% in 1981.

In line with the recommendation of the T.E.C. that information on study leave should be more generally available, the Study Leave Committee introduced a set of guidelines for the preparation of study leave reports. The guidelines have resulted in a general simplification of the reports and a uniform standard of presentation. All study leave reports are subject to formal consideration by the Study Leave Committee before being reported in the usual way to the Council. Copies of all reports are also sent to the University's radio station (5UV) for public information.

As a result of the general staffing difficulties experienced by the University, members of staff have had less and less opportunity to undertake research. Consequently, the major activity undertaken by members of staff on study leave has been the advancement of research, and 86% of the study leave programs approved for 1980 primarily involved research. Of the remaining study leave programs approved, the majority (11% of the total for 1980) involved visits to other teaching and research institutions and the balance was divided between programs directed to the improvement of teaching and to professional practice. There has been no significant change in the general pattern of leave taken under the revised Study Leave Scheme, with 30% of study leave in 1979 as well as in 1980 being taken wholly or partially within Australia.

5. NON-ACADEMIC STAFF

During 1980 the Australian Conciliation and Arbitration Commission ruled that a significant proportion of the non-academic staff of Australian Universities could not be covered by awards of the Federal Commission in that their work did not come within the definition of 'industry' laid down in the Act. As a result, the Council amended the

University's industrial relations policy by removing the previously stated preference for industrial regulation by the Federal Tribunal, the Australian Conciliation and Arbitration Commission, and substituted the State Industrial Commission.

Negotiations with the Ancillary Staff Association (now re-named the General Staff Association) for the implementation of the University's industrial relations policy were concluded during the year and a new Ancillary Staff Industrial Agreement, incorporating classification according to work value and conditions of employment and salaries derived from the Australian Public Service employment practice, was signed and registered in the Industrial Commission of South Australia. The new Industrial Agreement provided a right of appeal for all employees concerning classification and general grievance matters to an independent tribunal chaired by a Commissioner of the Industrial Commission of South Australia. On the request of the Ancillary Staff Association and in accordance with its amended industrial relations policy the University agreed in principle to the Industrial Agreement being converted into an award. The University also agreed in principle to an award of the Industrial Commission of South Australia covering clerical and related staff, officers of the Federated Clerks' Union of Australia, South Australian Branch, having been associated with that award application. By the end of the year neither application had proceeded to the making of an award.

The new Industrial Agreement requires the University to classify all members of staff covered by the Agreement (about 1100 in all) according to work value on the basis followed in the Australian Public Service. The Agreement did not specify how this should be done, and left this matter open for further discussions. These discussions were instituted but did not make much progress because of differences of opinion between the University and the Association on the detailed method of classification of the clerical and technical grades. The General Staff Association adamantly resisted the use of the Hay system of job evaluation and classification for this purpose, and at the end of the year agreement still had to be reached on the most appropriate way of carrying out this task, including the adaptation, where necessary, of Australian Public Service standards to University requirements.

Negotiations with the Staff Association led to hearings within the Industrial Commission of South Australia during which the University agreed to the arbitration by the Industrial Commission of the conditions of employment of professional staff. Subsequently the President of the Industrial Commission of South Australia, after hearing the Staff Association and the University, ruled that negotiations should proceed on the basis of the work value method of classification and should not be related to academic salaries which had previously been the basis of determination of professional staff salaries. At the end of the year negotiations with the Staff Association were continuing as directed by the Commission.

External employee organisations continued during the year to seek to represent employees of the University. A delegation was received from the United Trades and Labour Council of South Australia which was informed that the University was agreeable in principle to industrial regulation of its employees by awards of the Industrial Commission of South Australia. The University was subject, during the year, to an increasing number of claims before the Industrial Commission of South Australia as employee organisations utilised their right of access to the Industrial Tribunals in order to further the interests of their members.

The Council has agreed to extend the benefit of its new Superannuation Scheme (which had been devised to replace the old FSSU-type scheme) to members of the ancillary staff who were not eligible to join the old FSSU-type scheme. There are slight differences, because of historical considerations, in the application of the Scheme to ancillary staff, but basically the provisions are identical. The extra cost to the University will be of the order of \$160,000 per annum, which of course adds to the financial burdens the University is already grappling with.

The University has been able to alleviate the financial problems associated with the employment of ancillary staff by getting approval to a number of seventeen-week training programs under the Work Experience and Training in Commonwealth Establishments (WETICE) Program, resulting in annual intakes of some 30-40 disadvantaged persons, covering a wide variety of occupational categories, including administrative, technical and computing. Some of these trainees are known to have secured employment subsequently with the University or other employers.

The 'Time-off for Study' Scheme for ancillary staff has been revised in order that the needs of the University and of the staff concerned may be met more efficiently. The scheme now provides clearly for paid absence for study in connection with a staff member's career and enables also release for general educational development either on unpaid leave or on condition that the time is made up.

6. ACADEMIC MATTERS

6.1 *New Courses*

In 1980 the University offered the following new degree courses for the first time (see last year's Report for further details):

- (i) *Bachelor of Architectural Studies*—concerned with studies of the nature of Architecture sufficient to equip graduates seeking employment as administrators in the building industry or in government positions.
- (ii) *Bachelor of Architecture*—concentrating on the professional aspects of architecture for those seeking to qualify as professional architects and for which a pre-requisite is satisfactory completion of the first two years of the course for the degree of Bachelor of Architectural Studies.
- (iii) *Master of Legal Studies*—a postgraduate degree by coursework.

Council approved in 1980 the introduction of a Master of Agriculture degree by coursework, distinct from the Master of Agricultural Science degree. The new degree will provide retraining in the latest knowledge and techniques, and is designed for graduates with Honours degrees or equivalent practical experience who are already in employment and can take a year off to improve their qualifications. At the same time, the degree will provide an excellent basis for research towards a doctorate. The first intake, for candidates concerned with crop protection and pest management, will be in 1983.

6.2 *New Department*

The new Department of Clinical and Experimental Pharmacology was formed on 1 January 1980. The Professor of Clinical Pharmacology, Dr Felix Bochner, took up his appointment in May 1980. The Department occupies the fifth floor of the North Wing of the Medical School. Audiovisual teaching programs have replaced practical classes for medical students and supplement lectures and practicals of science students in the second and third years of Biochemistry.

6.3 *Matriculation*

Because of the unilateral decision of the Public Examinations Board of South Australia in regard to the basis of scaling scores, publication of results and certification of qualification for matriculation, the University was involved in many lengthy debates relating to matriculation which of course is the basic requirement for selection for admission to all first degree courses of the University. The Education Committee was also involved in many other more routine discussions on matriculation matters and on subjects to be available at the Matriculation Examination.

The University also offered comments on the recommendations in the Report of the Enquiry into Education in South Australia (the Keeves Committee Report).

6.4 *Special Entry Scheme*

The Education Committee and Council have agreed that while the over-riding criterion for admission to the University under the Special Entry Scheme will continue to be academic merit, certain other criteria may also be taken into account, namely the extent of any disadvantage which has limited the academic attainment of a candidate, and the candidate's potential contribution to the University community. The proposal to introduce these new criteria arose in part from a desire to offer aboriginal students a better chance of admission. Aboriginal candidates are to be encouraged to apply for admission

under the Special Entry Scheme, and a group of interested members of the University has been established, with the responsibility of assisting such applicants and also for their subsequent guidance and welfare.

6.5 *General Development Grants*

Four further projects were approved for financial support from General Development Grants over the period 1981-83.

- (i) Development of Micro-electronics—appointment of Professional Officer.
- (ii) Lecturer in Viola (financially supported by the Australian Council), to establish a University String Quartet and develop teaching and performance of chamber music.
- (iii) Senior Lecturer in the Faculty of Dentistry to join the University—Royal Adelaide Hospital Dental Patient Management and Care Teaching and Services Unit.
- (iv) Chair in East Asian Studies.

6.6 *Student Quotas*

The quota of students for admission to the Medical Faculty came under scrutiny towards the end of 1980, partly because of discussions taking place in the State Ministry of Health in regard to the number of pre-registration hospital internships and the future supply of medical graduates, and partly because of concern that the freeze on the replacement of academic staff on account of the financial situation was resulting in a serious deterioration in teaching resources in the Medical School. A Special Committee was appointed by the Council to examine the situation, and it confirmed that serious problems were developing in this area. It recommended that the medical student intake quota be reduced from 120 to 105 for the 1982-84 triennium and sooner if possible. The Council acted immediately on the Committee's report and decided to reduce the quota to 105 from 1981. It also asked the new Executive Committee to devise appropriate measures to enable the clinical departments to maintain their present level of staffing and other resources.

Following an examination of the University's available resources and the likely demand for dentists in the community, the Council decided to fix the first-year intake for the Faculty of Dentistry as a whole at 40, which would imply the admission of 30-35 students new to the course. The quota had already been reduced from 65 to 55 in 1977, and the S.A. Government's Report on Dental Manpower recommended that the intake from 1981 should be 25 only. It was felt, however, that this proposal had confused graduation rates with intake quotas, and had ignored the fact that many dental graduates from this University take up practice outside South Australia.

The quota for the Dip.Ed. course was also re-examined, following consideration by the Tertiary Education Authority of South Australia of the future provision of teacher education in the State. The Chairman of the TEASA suggested that an appropriate quota for the University of Adelaide would be 117 full-time students. The Council decided to fix the quota at 100 full-time and 50 part-time students.

6.7 *Collaboration with Flinders University*

An arrangement has been negotiated between the Department of History at Adelaide University and the discipline of American Studies at Flinders University, under which the teaching of American History to Adelaide students will be conducted on the Adelaide campus by Flinders staff.

Co-operation between the Economics Department of Adelaide University and that of Flinders University continued in 1980. Joint seminars were held on a regular basis. The cost of bringing visitors to Adelaide was shared with Flinders University. In addition, it has been agreed to share teaching resources at the honours level. It is hoped that this rationalisation can be expanded in future years.

6.8 *Music*

A significant development during the year was the decision of the Tertiary Education Authority of South Australia to institute an enquiry into advanced music performance education in South Australia. The enquiry will concern the Elder Conservatorium of Music, the Adelaide College of the Arts and Education and the School of Music, Adelaide College of Further Education, and its outcome will have major consequences for post-secondary music teaching.

7. STATUTES AND REGULATIONS

7.1 Statutes

Minor amendments were made to the following Statutes:

- (i) *Chapter IX—Of Matriculation*—to remove an anachronism and to provide for additional subjects at the Matriculation Examination.
- (ii) *Chapter X—Of the Faculties*—to conform with the change in the titles of other institutions effected by Act of Parliament; to provide for election of students to membership of the Faculties; to provide for revised membership of Faculty following the division of a department into two separate departments; and the addition of those whom the Faculties concerned wished to have as members.
- (iii) *Chapter XI—Of Degrees*—to provide for the admission *ad eundem gradum* of graduates of other universities who have acquired a substantial association with the University.
- (iv) *Chapter LXVII—Of the Angus Parsons Prize*—to permit the value of the prize to be changed at any time without the necessity, on each occasion, of amending the Statute.
- (v) *Chapter LXXII—Of the Sir Archibald Strong Memorial Prize for Literature*—to increase the value of the prize and to bring the Statute into line with the provisions of departmental government in the University.
- (vi) *Chapter LXXVII—Of the Baker Scholarship in Law*—to permit the value of the prize to be changed at any time without the necessity, on each occasion, of amending the Statute.
- (vii) *Chapter XXI—Of the Kenneth and Hazel Milne Travelling Scholarship in Architecture*—to increase the value of the award.

7.2 Regulations

(a) The following new regulations were made:

- (i) *Of the degree of Master of Agriculture*—to provide for a new Master's degree by coursework, initially in pest control but with the possibility of extension later to other areas of expertise in agriculture.
- (ii) *Of the degree of Bachelor of Education*—to establish a postgraduate degree of Bachelor of Education in place of the Advanced Diploma in Education which, since 1973, has been available for award to those who have completed the coursework for the degree of Master of Education but do not wish to proceed beyond that to research and thesis writing. No other university in Australia offers the qualification Advanced Diploma in Education but the work prescribed for that qualification by the University is comparable with that of a postgraduate degree of Bachelor in other universities; and the redesignation of the Diploma makes the equivalence apparent and unmistakable.
- (iii) *Of the Diploma in Applied Statistics*—to provide for a postgraduate course, for graduates in a variety of disciplines, to enable them to acquire specialist training and qualification in statistical methodology.

(b) Minor amendments were made to the following regulations:

- (i) *Of the degree of Master of Education*—to permit acceptance of candidates who do not hold the qualifications prescribed for acceptance but who have provided evidence of fitness to undertake the work for the degree; and to require a person holding the postgraduate degree of Bachelor of Education to surrender that degree before being admitted to the degree of Master of Education.
- (ii) *Of the degree of Master of Arts*—to enable the Faculty to require candidates who do not hold degrees of a University to demonstrate their capacity by satisfactorily completing preliminary work or a qualifying examination of Honours standard.
- (iii) *Of the degree of Master of Dental Surgery*—to provide for a revised method for examination of coursework results of candidates proceeding to the degree.
- (iv) *Of the degree of Master of Business Management*—to make provision for any student who had commenced his course under schedules in 1980 to continue under those schedules.
- (v) *Of the degree of Master of Environmental Studies*—to reduce the membership of the Board to what is considered a more appropriate size.

- (vi) *Of the degree of Bachelor of Economics*—in order to clarify the position of students enrolling concurrently for the degrees of B.Ec. and LL.B.
 - (vii) *Of the degree of Bachelor of Laws*—to re-define the subjects as either optional or compulsory.
 - (viii) *Of the degree of Bachelor of Music*—to remove anachronisms referring to regulations no longer in force.
 - (ix) *Of the Elder Conservatorium of Music*—to take account of changes in the organisation of the Department of Music.
- (c) The following regulations were repealed:
Of the Advanced Diploma in Education (see (a) (ii) above).

8. RESEARCH

147 grants were made to members of the staff of the University by the Australian Research Grants Committee for research to be conducted during 1980. These were distributed as follows:

	Projects (No.)	Value (\$)
Humanities and Social Sciences	18	155,494
Physical Science	18	120,785
Chemical Science	27	263,678
Biological Sciences (plant & animal biology)	29	236,764
Biological Sciences (molecular & cell metabolism)	26	304,709
Earth Sciences	17	158,460
Engineering & Applied Sciences	12	122,356

Although the 147 projects represented 9.63 per cent of the Australian total, it was three projects less than in 1979 when the University's share stood at 10.56 per cent of the Australian total. The total value of the ARGC grants (\$1,362,246) was 40 per cent of the total of the research grants obtained by University staff for research. The other major research bodies included:

	Projects (No.)	Value (\$)
National Health & Medical Research Council	25	409,662
Wheat Industry Research Council	16	286,773
Barley Improvement Advisory Committee	2	158,315
Australian Wool Corporation	12	143,328
Australian Meat Research Committee	3	76,841

The decline in ARGC grants has been attributed to a significant degree to the continuing decline in research and support numbers. Included in the losses by resignation have been a number of top-class academic staff who have been strongly supported in the past by ARGC grants. Another disturbing trend has been the decline in the number of new projects approved in recent years.

Year	New projects No.	Cont. projects No.
1978	39	100
1979	44	106
1980	29	118

Most new projects are approved for 3-6 years, so that 35 new projects must be approved each year to maintain a steady figure of around 150 projects. However, despite the decline in 1980, the University, with only 5.9 per cent of the national University staffing in the fields funded by ARGC, was awarded 10.5 per cent of the funds awarded to universities.

Late in the year the ARGC announced a significant change in the administrative arrangements regarding the award and payment of its research grants for 1981. In the past, grants were retrospectively supplemented in respect of salary increases and some cost increases occurring during the award period. From 1981, however, the ARGC will not provide any such supplementation, and recipients of grants will have to make their own

estimates of future salary and price increases, and make allowance for them in their budgets. Unless institutions are prepared to supplement the grants, the result may well be that the effective periods of some grants may have to be reduced. Paradoxically, the more successful an institution is in obtaining ARGC grants, the harder it is likely to be hit by this new policy.

The Australia Council renewed its annual grant of \$60,000 for administrative and operating expenses in connection with the Centre for Aboriginal Studies in Music.

The Department of National Development and Energy through the agency of the Australian Water Research Committee awarded a grant of \$61,872 to Professor W. D. Williams, Department of Zoology, for the project 'Salinity as a water quality criterion and determinant in Australia'. The project will conclude in mid-1983.

Dr. J. R. Hails, Centre of Environmental Studies, is joint investigator with Dr. G. R. Orme, Department of Geology and Mineralogy, University of Queensland, for a project entitled 'Inter-University investigation of sedimentation, water movement, and the evolution and maintenance of shelf characteristics in the northern Great Barrier Reef Province'. A grant of \$120,000 for the project was awarded by the Australian Marine Sciences and Technology Advisory Committee (AMSTAC).

The National Energy Research, Development and Demonstration Council (NERDDC) approved six awards to University staff members including a two year grant of \$180,290 for the project 'Thermal energy system synthesis' under the direction of Professor R. E. Luxton, Department of Mechanical Engineering.

Railways of Australia awarded a three year grant of \$154,000 to Mr. R. Culver for the project 'Vehicle track studies' and the S.A. Department of Industrial Affairs renewed support for the Noise Control Research Program under the direction of Dr. D. A. Bies, Department of Mechanical Engineering, with a grant of \$66,000.

The Research and Publications Committee had at its disposal a budget of \$1.32 million which it allocated to various categories of research endeavour by staff members and to the training of postgraduate students. 56 specific research projects being undertaken by staff members were funded by the Committee with grants totalling \$130,000.

The following table shows the total funds allocated to members of staff of the University in 1980 for specific research projects from various categories of financing agencies:

Source of Funds	Amount (\$)
University of Adelaide	130,000
Federal funding agencies (ARGC, NH & MRC, ERDC, etc.)	2,713,000
Industry funds	508,000
State Government funds	548,000
Others	268,000
Total	<u>\$4,167,000</u>

Forty new postgraduate scholarships were offered by the Research Committee in 1980, the same number as in the previous year. Including the 40 new awards, 143 students received support from University research funds for all or part of the year. In addition, the Commonwealth Government awarded 41 postgraduate research awards.

The Research Committee gave limited support to 35 University staff members proceeding on short overseas conference leave and also assisted with funding of visits to the University by 22 distinguished scholars from overseas.

The Australian Government has granted the University \$20,000 to assist in the conservation of the Mawson Collection of material on Antarctic exploration. The grant will enable the University to engage an archivist to arrange, describe and conserve the Mawson Collection. The Collection is the result of Sir Douglas Mawson's lifetime involvement in Antarctic exploration and research. It consists of manuscripts, correspondence, diaries, ships' logs and navigation books; 8,000-10,000 glass negatives; approximately 100 maps and charts; and about 100 relics, including clothing, scientific and other equipment, biological and geological specimens.

The following are some examples of specific research projects—both short and long term—being conducted in the University. They are mentioned to indicate the range of projects being undertaken by members of staff of the University and are, of course, only a sample of the total research effort. The nature and extent of the University's overall

research effort are well illustrated by the Bibliography of Publications for 1980 by members of the University staff, which is published separately. The Waite Institute publishes biennially a full report on its activities, and a copy of the latest issue (for 1978-79) can be supplied to anyone interested.

1. The Waite Agricultural Research Institute has released the new prime soft variety wheat 'Bindawarra', the third new wheat variety to be released in the last five years, following the re-establishment of the wheat breeding program in 1966. Wapimba, released in 1975, is now on the recommended list in both South Australia and Western Australia and it represents a significant improvement over the hard wheats which it is replacing. The more recent release of the Hard Wheat Warigal (1978) is rapidly gaining acceptance by farmers in South Australia. In trials it has been shown to be a major improvement over the two wheat varieties most widely grown in the four southern Australian wheat growing States. In 1979 this advantage was of the order of 10% increase in yield. As the gross value of wheat production in these areas exceeds \$1000 million, it is probable that Warigal will be a major contributor to national productivity. Bindawarra is a soft wheat with similar ability to Warigal. It also represents a major improvement over the soft wheats currently available, and will complement Warigal in the longer season areas in south-eastern Australia. A fourth line, WR/24/43 is being multiplied for release. This is an A.S.W. line which has slightly outyielded Warigal in trials.

The outstanding grain-breeding achievement of the Waite Institute in the last 20 years has been the release of Clipper, now the leading barley variety in Australia. Clipper was released in 1969 and by 1977 it occupied 70% of the total area sown to barley in South Australia, and in that year was sown on 1.6m ha or 57% of the total Australian area. An officer of the South Australian Department of Agriculture calculated for the 1974 season, that the area sown to Clipper in South Australia lifted production by 158,000 tonnes. This represented a conservative \$14 million (1974 prices) recurrent extra income to farmers. Clipper was rapidly accepted into Queensland and is now recommended for N.S.W., W.A. and Victoria. Clipper's improved grain quality has established it as one of the leading malting barleys in the world, and it is in demand by name in world trade. Three Waite Institute bred varieties have followed Clipper—Ketch, an early maturing variety released specifically for marginal areas, Cutter released in Rhodesia and Corvette released in Queensland. A more recent selection, W12231 is being multiplied for release as a feed barley and it will be the first Australian variety to incorporate resistance to cereal cyst nematode.

The wheat and barley breeding programs have been leaders in the development of cereal breeding technology in Australia and foremost in the revolution of breeding elsewhere. The annual increment in yield through breeding in wheat, which was about 0.5% per annum for the two decades from the mid-1940s, now approaches 2% per annum.

The release of the triticale Coorong and the field bean Fjord are major contributions towards establishing these species as alternative crops for southern Australian farmers. Both will initially be animal feeds and Australia has had a smaller proportion of the world coarse grain trade than would be expected from the size of the local wheat industry. Crops such as these will form a valuable buffer for farmers in the event of a serious downturn in markets for wheat and barley as well as providing cheap sources of carbohydrate and protein for the intensive animal industries.

2. The research carried out in geostatistics by Dr. P. I. Brooker (Economic Geology) since 1973 has been a spur to the adoption of new methods of sampling and estimation of ore resources in the Australian mining industry. The essence of the geostatistical method is that it provides estimates along with an associated confidence interval whereas traditional methods give estimates without any idea of their accuracy. Sample spacing can be designed to yield a desired level of accuracy of estimates, and in several Australian operations it has been demonstrated that the existing level of sampling is unnecessarily high. Frequent consultations have occurred with industry and lectures have also been given to an ore reserves group of the Australian Mineral Industries Research Association, and to C.S.I.R.O. Mathematical Statistics and Mineral Chemistry Divisions, and course material has been prepared for an Australian Mineral Foundation Workshop and a B.H.P. in-house series.

3. An Aboriginal Research Centre has been established by the University and run by a board of management comprised of academics and members of the Aboriginal community. The Centre arose from requests of the Aboriginal community who wanted a centre to which they could direct suggestions for research which the Aboriginal community considered relevant and essential. The first project conducted by the centre is being undertaken by Professor Fay Gale (Geography), Sister Deidre Jordan (Education) and Ms. Rebecca Bailey (Law) on an ARGC grant. They are studying Aboriginal children and adolescents in S.A. with particular reference to juvenile delinquents and children under welfare control.
4. Dr. I. J. Forbes (Medicine) and his team at the Queen Elizabeth Hospital have developed a new technique for recognising cell surface molecules which will assist in answering some basic questions of cancer research. The work concerns the study of subpopulations of lymphocytes—cells responsible for generating immunity. Of special importance for the QEHL work is that some kinds of leukaemia and solid cancers are caused by the development of malignancy in lymphocytes. Dr. Forbes' technique allows for speed and simplicity in detecting cell surface molecules and consequently of studying departures from normal in the membranes of malignant lymphocytes. Dr. Forbes' laboratory is using the technique to study a variety of types of cancer of the lymphoid tissues.
5. Work conducted by Dr. R. D. Goldney (Psychiatry) among women aged 18-30 years who attempted suicide by taking a drug overdose has shown that all suicide attempts by young women, no matter what the physical medical consequences, should be taken seriously. He compared four groups—one which had taken only a few tablets, those who had taken a lethal dose and had been admitted to intensive care, a group who had taken sufficient overdose to be admitted for observation and a group of women attending a health clinic. Dr. Goldney found the person's sense of hopelessness correlated significantly with the lethality of the overdose.
There were a number of other findings, but the overall conclusion was that it was unwarranted to dismiss the less lethal group as simply 'a cry for help'. In general the similarities between the attempted suicide patients of differing lethality overdoses are more striking than the differences. Dr. Goldney believes that the clinical attitude to the low lethality group should be reassessed and treated far more seriously.
6. Slow learner classes of two technical colleges have successfully improved the work skills of a number of mildly-retarded employees of the Bedford Industries Vocational Rehabilitation Association. The courses were undertaken as part of a training scheme by Psychology Department staff members Dr. N. H. Kirby and Dr. T. J. Nettlebeck to reduce learning problems in the mentally retarded. The program involved increased training supervision achieved by teaching smaller groups in screened off areas to reduce distraction. In addition, the job is broken down into a number of small segments which are taught separately and then put together, thus reducing the load on memory. The trainee begins with a simple task and then gradually works up to more complicated ones.
7. Dr. R. M. Douglas (Community Medicine) is directing a project to determine whether a vaccine should be introduced in Australia as a routine childhood immunisation to protect children against pneumonia, ear infections and a form of meningitis. Dr. Douglas was a member of the research team which directed studies of vaccine volunteers in the United States in the 1970s. The Adelaide study is aimed at finding out how much ear, sinus and chest disease in infancy the vaccine prevents.
8. Very worthwhile inter-disciplinary programs have developed from the fundamental work on physical dating techniques undertaken by the archaeometry group led by Professor J. R. Prescott (Physics). So-called 'thermoluminescent dating' is based on the measurement of energy stored in artifacts and released in the form of light on heating the sample. The amount of light is a measure of the time elapsed since the sample was last heated and enables dating of pottery, hearths, oven stones and similar materials. The group does basic research on the physics of the technique and also has collaborative programs for dating Murray Valley aboriginal sites (with the S.A. Museum), South Pacific pottery (with the Department of Anthropology, University of Auckland), and marine sediments (with the Department of Geology and the Centre for Environmental Studies, University of Adelaide).

A joint program to compare thermoluminescent dates with the well-established radiocarbon dates is carried out in collaboration with the Radiocarbon Laboratory of the Australian National University.

9. The Industrial Noise Control group in the Department of Mechanical Engineering, funded by the South Australian Government, purchased and commissioned a punch press to investigate ways of reducing the noise levels of such machines, which are widely used in South Australian industry. Already a promising concept has been evolved which permits significant reductions in noise level and which can be easily applied to existing machines. Work continued on the control of the noise radiated from circular saws, such as those widely used in the timber industry in the south-east of the State and in Government workshops, with further refinement of the highly successful saw guard. The guard has been patented in Australia and overseas, and enquiries have come from Europe, Scandinavia and the United States as well as from within Australia. A prolonged study of the sound absorbing characteristics of porous materials was conducted, resulting in a design manual now widely used by Acoustic Consultants in Australia and in some parts of the United States.
10. Research in energy systems was also strongly active in the Department of Mechanical Engineering. Development of a new type of acoustically-enhanced burner for liquid or pulverised solid fuels continued with great success. Current work is directed towards the installation of a full-scale burner in one of the steam generators at the ETSA power station at Port Augusta. The work is jointly funded by the State and Federal Governments. The Federal Government also provided support for a new project to develop a comprehensive synthesis method for the design of thermal energy systems that can be used to optimise the design and operation of heating, cooling and thermal power plant of all kinds. The optimal plant can be synthesised for any numerical objective (e.g. a conservation or cost objective) and to any required degree of practical detail. The aim is to provide an efficient, unified procedure that will replace the *ad hoc* design methods currently in use. The Federal Department of Aboriginal Affairs provided support for research into a solar powered bore pump for use in remote areas by technologically unsophisticated people. Work is now at the construction stage.
11. Energy systems are also an active focus in Chemical Engineering. Dr. C. P. Jeffreson received a grant from the Australian Iron and Steel Company for an industrial application of previous work on the simulation and control of thermal regenerators. The project involves the supply of a computer simulation 'package' (to run on A.I.S. machines) which will predict the behaviour of a set of blast furnace stoves under varying load conditions with appropriate control systems. Also recommendations are required for an improved stove control system for the Port Kembla No. 5 Blast Furnace. A preliminary report of some 250 pages was submitted near the end of the year and the simulation package is running now on the A.I.S. company's IBM370 computer. The work will be continued in 1981 both from a theoretical and applications view point. The work should result in considerable energy savings and a better allocation between natural gas and blast furnace gas.
12. Dr. Roach's work on absorption cooling continued in Chemical Engineering with the aid of an additional grant from the State Energy Research Advisory Committee. The work has reached a stage at which its potential is clear but there is a possibility of further energy savings before final design is settled.
13. The ongoing research activities of the Department of Civil Engineering were supplemented in 1980 by a number of new projects which have attracted outside sponsorship. The Australian Welding Research Association is funding an investigation of the high cycle fatigue strength of fillet weld groups with varying root gaps which commenced in 1980.
14. A computer simulation study of the dynamics of train derailments has been undertaken by Messrs. R. Culver and L. J. Schmid, with substantial financial support from the Railways of Australia. The work is being carried out in conjunction with vehicle stability studies by the N.S.W. Public Transport Commission and parametric track studies on the new Kwinana line by Western Australian Government Railways.

15. A three-year prototype wave data collection, analysis and prediction program was commenced in 1980 by Mr. R. Culver under sponsorship of the Coast Protection Board. The Department's computer installation is being used to control and collect data from remote sites and to provide on-line analysis facilities.
16. In the Electrical Engineering Department, development has begun of a communication and control system, operated by eye movements, for use by non-vocal physically-handicapped persons. Signals from a television camera directed at the user's eye are processed to determine the direction of his gaze. The user will be able to select a character, word or control function from a matrix display in front of him simply by looking at it for a short time. Communication rates approaching 30 words a minute seem feasible.
17. Research on the design of microwave active lens antennas has revealed the existence of a fundamental aberration due to mismatch effects that applied to all lens shapes. This type of antenna is being developed in the USA together with essential monolithic microwave integrated circuit (MMIC) technology for a number of space-based systems that will be placed in orbit with the aid of the Space Shuttle. The mismatch aberration is a basic importance in the design of MMIC modules for incorporation in this type of antenna. Related experimental investigations are proceeding in the Department of Electrical Engineering's microwave anechoic chamber which, with computer controlled instrumentation, is developing into the best facility of its type in Australia.
18. Wool harvesting from Australia's 140 million sheep is a major activity in this key industry. The critical influence of the costs involved have emphasized the need for the industry to investigate the factors that would be involved in alternative wool harvesting technologies. In automated harvesting it is necessary to sense the shape of the surface of a sheep's skin to guide a cutting device. Forward sensing, i.e. sensing ahead of cutting is highly desirable for fast and safe operation. The Department of Electrical Engineering is investigating the use of pulses of ultrasound in a radar-like system for sensing through the fleece. This research is being done with support from the Australian Wool Corporation. In principle, short ultrasound pulses are transmitted, focused in the direction of interest and scattered from the surface of the skin. Some of the scattered energy is collected by an acoustic lens and focused on to a microphone. The time taken from transmission to reception gives an indication of the distance to the skin in the relevant direction, and with a system of such transmitters and receivers a suitable picture may be built up of the surface shape. Some of the problems are very similar to those encountered in radar. However, the presence of the fleece introduces additional fundamental problems in the design of suitable signals and estimation devices. For example, there is serious frequency-selective attenuation which varies significantly from point to point, and there is strong scattering from inhomogeneities in the fleece. The design of suitable focusing means has also been challenging as acoustic lenses for use in air have to be realized without media of the desired velocities and densities being available, while the bandwidth expressed in octaves is considerably wider than that handled by optical systems.
19. The Middleback Field Centre, under the control of Dr. R. T. Lange (Botany), has been set up for the study of arid zone vegetation and is now being used intensively for teaching and research. A field day was run for the International Dry Lands Agricultural Congress. Dr. Lange initiated the work at Middleback with generous assistance from the pastoralists A. and D. Nicolson. Financial support for the Centre has come from the South Australian Government and this has been augmented by donations and concessions from numerous organizations (especially the Broken Hill Proprietary Co. Ltd., Whyalla) and individuals (especially J. M. Loveday, who donated all architectural input).
20. Dr. P. E. M. Allen (Physical Chemistry) is continuing his work on the synthesis of polymers of controlled chain size and configuration. A joint project with the Materials Science unit of the Department of Chemical Engineering has shown that bulk properties of polymers depend on molecular size and chain configuration, and already has resulted in enhancement of the toughness of perspex by addition of the same polymer (polymethyl methacrylate) of controlled configuration.

21. Dr. J. R. E. Wells (Biochemistry) has recently returned from a period of study leave at the Molecular Biology Laboratory of the Medical Research Council, Cambridge U.K. He worked with J. B. Gurdon who has developed a major technique by which purified genes can be used to express their information in amphibian eggs. Dr. Wells is currently using their technique in projects which involve recombinant DNA.
22. Professor J. R. Prescott (Physics) and his cosmic ray research group operate a detecting array at the Buckland Park Field Station which records the arrival of cosmic rays, 24 hours a day, 365 days a year, and also looks at the visible light generated by their passage through the atmosphere. Recent work has shown that the composition of cosmic rays changes from a mixture of nuclei to what may be almost pure protons as the energy increases.
23. Professor H. B. S. Womersley (Botany) is studying the rich and highly endemic marine algae flora of southern Australia. The first part of this project involving Chlorophyta and sea grasses, has been completed. Monographic studies are under way on red algae (Rhodophyta), and ecological problems of subtidal and intertidal algae on coasts near Adelaide are being investigated.
24. The work of Professor A. L. J. Beckwith (Organic Chemistry) on organic free radical chemistry culminated in the publication during 1980 of a set of guidelines for radical reactions which rationalise steric and stereo-electronic effects. These guidelines provide, for the first time, a sound basis for the prediction of the regio- and stereo-chemical course of radical processes, and allow the rational design of complex syntheses based on such processes. The application of the rules is now being illustrated by work on the synthesis of prostaglandins and β -lactam antibiotics.

9. THE BARR SMITH LIBRARY

In spite of the fact that the University Library, because of financial difficulties, was obliged to keep at least eight positions unfilled throughout the year 1980, and for much of the year eleven positions, it was able to improve on its previous record in several important areas of service, and maintain a high level of performance in all others.

A complete count of library users cannot be made. However, a check made in September showed an average of 6,453 people leaving the Barr Smith Library building each day, Monday to Friday.

The Library issued 289,816 extramural loans to personal borrowers, an increase of 7.9% compared with the figure for 1979. Additional items lent for use only within the Library included 87,324 from the Undergraduate Reserve (a decrease of 3.5%), 18,989 from the Medical Library Reserve (an increase of 10.6%), and 4,365 from the Special Collections Section (a decrease of 64.4% from the abnormal total reached in 1979). The Library satisfied 38,212 requests for interlibrary loans, an increase of 5.9% compared with the previous highest total, which was reached in 1979. The items lent included 30,559 to libraries within South Australia, and 7,653 to libraries in other States and countries. The Library received 3,468 loans from other libraries.

In the course of carrying out the Library's teaching program in subject bibliography and library use, members of the staff presented 63 seminars which catered for 453 advanced students and academic staff members; and they conducted 315 tours and seminars which catered for 2,550 undergraduates.

As part of its campaign to keep readers informed of resources and available services, the Library presented a series of attractive book and pictorial exhibits, and produced three issues of *University of Adelaide Library News* as well as numerous bibliographies and library guides.

Research workers showed increasing interest in the reference use of machine-readable data bases, a service which has been offered for several years. The Medical Library carried out 170 MEDLINE searches of files held in Canberra, and the Information Services Department of the Barr Smith Library 74 DIALOG and ORBIT searches by telecommunication with the U.S.A.

Accessions of catalogued items in 1980 numbered 60,671 including 36,452 bound volumes, the equivalent of a further 23,987 volumes in microform, and 232 musical

works in sheets. The apparent increase in intake was 41.8% above that of 1979 and 7.7% above that of 1976, the previous peak in the Library's rate of acquisition. The Library's purchasing power in 1980 was maintained at about the same level as in 1979, except for current serials, and the notable boost to library holdings was due mainly to the overtaking of some arrears in cataloguing, and completion of several long-standing projects which had been well advanced by the end of 1979. While the University has asked the Library to ensure that a larger proportion of its total acquisitions is in microform, the proportion added in microform in 1980 (39.5%) was abnormally high as a consequence of the overtaking of arrears in accessioning microforms.

As in other years the collections benefited from numerous gifts and bequests. An equipment grant of \$135,000, an important supplement to the recurrent book grant, was used to buy small collections, multi-volume reference works and back runs of periodicals.

Some 18,655 serial titles were being regularly received during 1980, the lowest total since 1973 and a net reduction of 452 compared with the figure for 1979. The Library was still able to place 544 new subscriptions, but the number of cancellations and of titles which ceased to be published was much greater. The gradual running down of the Library's periodicals collection, hitherto a strong one heavily used by many institutions besides the University of Adelaide, will have grave consequences for research.

Holdings of the library system at the end of 1980 were as follows: Central Library 874,221 volumes; Law Library 67,843; Medical Library 95,136; Music Library 2,603 bound volumes of scores and 15,197 pieces of music in sheets; and the Waite Agricultural Research Institute Library 37,228 volumes; making total holdings equivalent to 1,092,288 volumes. This total includes items in microform equivalent to 113,912 volumes, and allows for the fact that 791 volumes were withdrawn from the collection during the year.

As required by university policy the Library began a program of removing infrequently-used publications to storage in order to alleviate accommodation problems in the Barr Smith Library. By the end of the year 57,000 serial volumes had been shelved in the store, with their location shown in the *Serials List* print-out, and a daily recall system was operating.

The Library's small computer was put into service early in the year. By the end of the year the on-line bibliographic project, *Biblion*, was well advanced with catalogued records for the whole undergraduate collection (77,000 volumes) stored in machine-readable form, all new cataloguing for the undergraduate collection being prepared on-line, and planning was in hand for records of stored material to be included in the data base. The Library was also ready for participation in the forthcoming Australian Bibliographic Network pilot project which it was hoped would lead rapidly to important advances in shared cataloguing and on-line inquiry services for libraries in the network.

Expenditure on salaries, books, periodicals, binding, computing services, equipment and other library requirements from all sources amounted to \$3,773,186.

10. COMPUTING

As reported last year, it had been agreed in 1978 to purchase three VAX 11/780 computers, and the General Development Grant was used to buy 120 terminals and establish laboratories in order to begin interactive teaching of computing in 1980. The entire system has cost almost \$1 million. The new facilities were formally opened by the Vice-Chancellor on 10 March 1980. During the year, some 1800 students and their teachers were registered to use the VAX machines, with a consequential mass departure from the old Cyber machine. The users come from the Arts and Economics Faculties, as well as from the more conventional mathematics, science and engineering students. The VAX facility replaces obsolete punch card technology for teaching purposes and relieves the main Cyber machine to provide more time for research and administration. A team led by Dr. C. J. Barter of the Department of Computing Science has been producing new software tailored to the needs of Adelaide students.

The new system has had a most dramatic effect on the teaching of Computing Science by exposing undergraduate students to modern computing techniques based on interactive computing. The Computing Science Department is now able to supervise its students effectively in practical programming work under laboratory conditions. It is expected that with the arrival of extra VAX memory for 1981 the response of the system

should be substantially improved. The Ludwig screen editor for the VAX computer system, produced locally, was used successfully from the beginning of 1980 by all students.

The Computing Centre found it necessary during the year to investigate issues concerning the ownership of computing programs and conditions of use of University machines, and a detailed code of advice for users was drawn up. It also published new or revised manuals for users and conducted a number of short courses of instruction for students.

Because of the increasing demand for detailed up-to-date management information for administrative purposes, it was agreed that a sum of \$130,000 be set aside to provide computing and word processing facilities for the University Administration. A Steering Committee, comprising computing experts and members of the Administration was set up to determine what equipment would best serve the University's needs in this area and to draw up detailed specifications, with a view to calling for tenders as soon as possible. Since it was expected that a final decision on this matter would not be possible before April 1981, whereas the new Executive Committee would be urgently in need of improved word processing facilities when it began operations in January 1981, it was decided that, pending the eventual decision on administrative computing equipment, and without prejudice to that decision, steps should be taken to provide additional word processing equipment for the Administration early in 1981. The cost of this equipment was to be financed largely from the salary savings that it was expected to generate over the next three years.

11. GROUNDS, BUILDINGS & ACCOMMODATION

The absence of any major building grants during the current triennium has meant that there was a relatively small amount of constructional activity during the year. However, the adaptation of the old Medical School to provide accommodation for hard-pressed departments elsewhere in the University continued, using minor works allocations to meet the cost. The main project was the refurbishing of the third floor of the old building, and the re-location in this area of the Anthropology Department which, since its inception in 1974, has been seriously hampered by insufficient space. The Department of Philosophy was moved into the area vacated by Anthropology, thus making available additional space for two other hard-pressed Departments, Law and Classics. In addition, space was provided in the Medical School Building for storing infrequently used publications from the Library, thus relieving some of the pressure on the latter. Other minor works grants enabled a Chromatography Laboratory to be provided for the Department of Agricultural Biochemistry, and a large strong floor test area to be completed in the Chapman Laboratory of the Civil Engineering Department. This strong floor is a slab of solid concrete approximately 30m by 7m by 1.5m deep, prestressed in all three major directions to provide added rigidity. A gridwork of holding down bolts on the floor provides a versatile testing arrangement for large scale and prototype structural components and assemblages for which the strong floor acts as a rigid reaction frame. A special jacking system with electronic-hydraulic-servo controls, still to be installed, will provide the means for applying either static or dynamic forces to test specimens. The test facility will become operational during 1981, and will enable fatigue and dynamic tests of full scale structures under simulated real load conditions to be carried out.

In 1979, the University Safety Committee drew up a report on a number of University buildings constructed during the 1960s, when asbestos insulation was widely used. The S.A. Health Commission was consulted, and it was determined that the material in the majority of these buildings was in a good stable condition and did not present a problem. However, in a number of buildings the presence of blue asbestos, particularly in ceilings to which access was often required, was considered to present an unacceptable risk to the occupants, and it was decided that the material in these buildings should be replaced or treated with an alternative insulating material as expeditiously as possible. The total cost of this work was estimated at over 1 million dollars, for which no source of funds was immediately available. The Universities Council was acquainted with the problem, but there did not appear to be much likelihood that it would be able to assist. It was therefore decided that the cost of treating the smaller and less expensive areas should be met from the University's recurrent budget over the next few years, but that a special submission should be made to the Universities Council for funds to deal with the major problem areas. In the meantime it was decided to go ahead immediately with work on what was

regarded as the most urgent project, namely the Fisher Building, costing about \$250,000. Work began during the long vacation at the end of the year, all the occupants having been provided with temporary accommodation in the old Medical Building.

The University's program for the renovation and restoration of Martindale Hall and the Coach House received substantial support during the year from the S.A. Heritage Commission, which offered the University a grant of \$37,500 towards the cost of this work, as well as three loans of \$50,000 p.a. over the period 1980-82 for the purpose of providing a heating system for the Hall and for the repair and renovation of the external brick and stonework.

Reference was made in last year's Report to the death, in July 1979, of Mrs. D. E. Mortlock who, with her late husband Mr. J. T. Mortlock, had been major benefactors of the University. Just how large were their benefactions only became evident during 1980. Apart from the donations made by Mrs. Mortlock, both anonymously and otherwise, during her lifetime, she left to the University in her will one fifth of her residual estate, the total value of which was about \$3 million, to be allocated equally to the Faculty of Medicine and to the upkeep of Martindale Hall. In addition, Mrs. Mortlock's death meant that the University came into possession of the benefaction made by Mr. Mortlock when he died in 1950, leaving half of his residual estate to the University, subject to the life interest of Mrs. Mortlock, for use in connection with the Waite Institute. This estate consisted of about 3,750 hectares of land near Clare (including Martindale Hall and the neighbouring land) and other property, valued at about \$4.5 million in all. The University Council entered into negotiations with the other beneficiary, as a result of which the University took over the land, and the other party received the rest of the estate. The University has thus acquired, through the generosity of Mr. & Mrs. Mortlock, a very large block of good farming land. It is intended to manage this property on a commercial basis through a wholly-owned subsidiary company, Martindale Holdings Pty. Ltd., and it is expected that the farm operation will be of a high standard, as well as profitable, so that in due course it will be making major financial contributions to the Waite Institute, for the benefit of which the bequest was made by Mr. Mortlock.

The Engineering Services Management Group was established in 1977 and has been functioning well since then. It has to a large extent got the University's house in order by identifying the problem areas in relation to the management of engineering services, planning and executing cost beneficial solutions, and establishing efficient on-going management procedures. Considerable monetary savings have been effected by such measures as changing from oil fired to gas fired heating systems, conservation of chilled water, barring of S.T.D. telephone calls, improving lift maintenance, and economising on the use of electricity. One of the main problems now is to sustain the initial enthusiasm for these measures and to maintain within the University community an awareness of the need to use energy sparingly and to continue the efficient management and control of building services. Energy audits in a number of University buildings have focussed attention on ways and means of doing this. The most important project in hand for the immediate future is the replacement of the University's rented internal PABX telephone system by a University-owned system. Among other advantages, this will result in better management control of telephone services, and the saving of about \$80,000 p.a. in operating costs.

12. FINANCIAL MATTERS

Despite the continuing gloom, engendered in the University as a result of the problems caused by decreasing grants and increasing costs, the financial picture disclosed purely by the annual accounts for 1980 is a satisfactory one, mainly as a result of a further significant improvement in outside earnings. The accounts show a surplus carried forward to 1981 of \$293,000. On top of that the University itself set aside a further \$1.5 million out of income for 1979 and 1980 for future expenditure, and at the end of 1980 this amount had not yet been spent. This should not be interpreted as being a hidden surplus; what it is is a real effort by the University to obtain maximum advantage from the resources at its command, as the decision making groups in the University use the triennial budgeting system to move moneys from the year of receipt to the year of greatest utility. This very process compounds itself by enabling the University to earn income on those temporarily unused resources, and as it happens the current rates of interest are at a very high rate of real return, which in effect makes the purchasing power of the invested funds grow. It should

also be noted that as part of the \$1.5 million carried forward, \$450,000 has been set aside to meet liabilities arising in 1980 but not yet quantified at the time the accounts were prepared, viz. the reclassification exercise for the General Staff.

Schedule C of the accounts sets out the expenditure incurred on reticulated services (engineering services). Total expenditure was \$1,282,828. As a result of the efforts of the Engineering Services Management Group referred to in section 12, that figure would have been some \$224,000 more; those savings have been put into a fund which the Engineering Services Management Group is empowered to use in order to make yet more efficient use of these expensive services.

There was no expenditure during the year on major capital works. Expenditure on minor works was only \$298,000. Expenditure on equipment was \$2,281,000.

The University's endowment funds had a satisfactory year. At the end of the year, the market value of the 'Composite Fund' was \$8,462,353, reflecting a 31.8% growth due to capital appreciation during the year; in addition the Fund earned and distributed income of 6.1% on year end market value. The Composite Fund is shown in the Balance Sheet at cost; in future years its market value will be disclosed as a note on the accounts. The improvement in earnings can be seen on the income statement.

The new Superannuation Scheme for academic and related staff commenced at the end of 1979 and during 1980 it held its first triennial meeting at which audited accounts and an actuarial valuation were presented to members. The situation disclosed by these accounts is highly satisfactory.

The main points of the reports were—

- (a) The valuation deficiency disclosed by the Actuary had fallen from \$15.4 million at 31 December 1977 to \$8.9 million at 30 June 1980, the major reason for the large reduction being the extremely good return achieved on investments since April 1978, when the endowment assurances were cancelled.
- (b) The assets of the fund as at 30 June 1980 amounted to \$33.6 million (market value), mainly invested in the No. 2 funds of major Australian Life Offices.

13. STATISTICS

I. Staff

*Equivalent full-time staff numbers** as at 30 April 1980 are shown in the following table:

All Full-Time Staff (Filled Positions as at 30 April 1980)

	Males	Females	TOTAL
Academic Activities			
(i) Teaching and Research:			
Academic	565.25	86.5	651.75
Non-Academic supporting			
Academic Activities:			
Technical	227.5	99.5	327
Administrative	5.0	128.3	133.3
(ii) Research Only (Funded by U.R.G. or Outside Grants):			
Academic	57.5	10.4	67.9
Non-Academic supporting			
Academic Activities	76.4	76	152.4
Sub-Total—Academic Activities	931.65	400.7	1,332.35
Academic Services			
<i>Figures in parentheses are professional staff and are included in the main figures</i>			
Library	42 (12)	100.83 (30)	142.83 (42)
Computing Centre	19 (14)	11.5 (1)	30.5 (15)
Other**	80 (10)	11.1 (—)	91.1 (10)
Sub-Total—Academic Services	141 (36)	123.43 (31)	264.43 (67)
Student Services***			
Professional	8	3	11
Other	4	7	11
Sub-Total—Student Services	12	10	22

*Figures include recognised fractional positions (half-time or more) but do not include casual part-time staff.

**Includes Waite Institute Admin., Advisory Centre for University Education, Animal Houses, and Instrument Workshops.

***University Health Service, Centre for Physical Health, Student Counselling, and Careers Advisory Services.

All Full-Time Staff (Filled Positions as at 30 April 1980) (Continued)

	Males	Females	TOTAL
General University Services			
(i) Central Administration:			
Professional	38	8.5	46.5
Clerical, Typing, etc.	27	97	124
(ii) Buildings and Grounds:			
Professional	3	—	3
Tradesmen	26	—	26
Caretakers, cleaners, maintenance, etc.	35	6.9	41.9
Sub-Total—General University Services	129	112.4	241.4
Public Services*			
Academic/Professional	14	2	16
Other	2	11.1	13.1
Sub-Total—Public Services	16	13.1	29.1
Total Staff (Financed from University Funds or Outside Grants)	1,229.65	659.63	1,889.28

*Includes Adult Education, Radio Station and Anti-Cancer Foundation.

II. Students

(All statistics in this Section have been prepared as at 30 April 1980, the reference date for the submission of statistics to the Tertiary Education Commission. Figures in this section refer to persons, and not to weighted student units)

Number of Students:

The total number of students was 9,034 (including 207 single-studies students at the Elder Conservatorium of Music), which is 62 less than the enrolment in 1979.

The composition of the student body is shown in the following table:

	Males	Females	Total	%
Full-time	3,852	2,177	6,029	66.7
Part-time	1,468	1,095	2,563	28.4
External	107	26	133	1.5
Staff	76	26	102	1.1
Elder Conservatorium	86	121	207	2.3
Total Students	5,589	3,445	9,034	100.0

Distribution into Courses:

Each student is counted once only—in the category appropriate to his principal course. The figures in brackets refer to the number of females included in the totals.

A. Higher Degree Candidates:

	Higher Doctor				Ph.D.				Master				Total				
	F/T	P/T	Staff	Ext.	F/T	P/T	Staff	Ext.	F/T	P/T	Staff	Ext.	F/T	P/T	Staff	Ext.	Total
Agricultural Science	—	—	—	—	40(8)	8(-)	2(-)	2(-)	18(3)	3(1)	1(-)	15(1)	58(11)	11(1)	3(-)	17(1)	89(13)
Architecture	—	—	—	—	2(-)	—	1(-)	—	3(-)	—	—	—	5(-)	—	1(-)	—	6(-)
Town Planning	—	—	—	—	—	—	—	—	—	5(1)	—	—	—	5(1)	—	—	5(1)
Arts	—	—	—	—	39(15)	20(5)	13(8)	7(5)	53(25)	40(20)	5(3)	4(-)	92(40)	60(25)	18(11)	11(5)	181(81)
Education	—	—	—	—	—	—	—	—	8(2)	64(27)	4(2)	4(2)	8(2)	64(27)	4(2)	4(2)	80(33)
Dentistry	—	—	—	—	5(1)	—	1(-)	—	10(-)	4(-)	3(2)	—	15(1)	4(-)	4(2)	—	23(3)
Economics	—	—	—	—	5(2)	1(-)	2(-)	3(-)	6(3)	10(2)	3(1)	3(-)	11(5)	11(2)	5(1)	6(-)	33(8)
Business Management	—	—	—	—	—	—	—	—	16(1)	83(6)	1(-)	2(-)	16(1)	83(6)	1(-)	2(-)	102(7)
Engineering	—	—	—	1(-)	15(-)	2(-)	4(-)	1(-)	22(-)	42(-)	—	6(-)	37(-)	44(-)	4(-)	8(-)	93(-)
Applied Science	—	—	—	—	—	—	—	—	3(-)	3(-)	1(-)	1(-)	3(-)	3(-)	1(-)	1(-)	8(-)
Law	—	—	—	1(-)	—	—	—	—	3(1)	21(5)	2(-)	1(-)	3(1)	21(5)	2(-)	2(-)	28(6)
Medicine	3(-)	5(-)	9(2)	15(2)	7(1)	2(1)	5(1)	2(-)	—	—	—	—	10(1)	7(1)	14(3)	17(2)	48(7)
Music	—	—	—	—	5(3)	2(-)	—	—	17(9)	9(4)	4(1)	2(1)	22(12)	11(4)	4(1)	2(1)	39(18)
Science	—	1(-)	—	2(-)	135(25)	7(-)	15(2)	9(2)	37(10)	22(2)	3(1)	20(1)	172(35)	30(2)	18(3)	31(3)	251(43)
Mathematical Sciences	—	—	—	1(-)	28(5)	2(1)	12(2)	1(-)	15(2)	5(-)	2(-)	2(1)	43(7)	7(1)	14(2)	4(1)	68(11)
Environmental Studies	—	—	—	—	—	—	—	—	27(11)	5(-)	—	—	27(11)	5(-)	—	—	32(11)
Total	3(-)	6(-)	9(2)	20(2)	281(60)	44(7)	55(13)	25(7)	238(67)	316(68)	29(10)	60(6)	522(127)	366(75)	93(25)	105(15)	1,086(242)

B. Candidates for Bachelor Degrees:

	Honours (a)			Ordinary			Total			
	F/T	P/T	Ext.	F/T	P/T	Ext.	F/T	P/T	Ext.	Total
Agricultural Science ...	7(1)	—	—	175(59)	35(16)	—	182(60)	35(16)	—	217(76)
Architecture	23(4)	1(-)	—	176(35)	8(2)	—	199(39)	9(2)	—	208(41)
Arts	105(59)	—	—	1,078(709)	679(423)	16(6)	1,183(768)	679(423)	16(6)	1,878(1,197)
Dentistry	3(-)	—	—	237(50)	22(5)	—	240(50)	22(5)	—	262(55)
Economics	14(8)	—	—	378(75)	328(62)	1(-)	392(83)	328(62)	1(-)	720(145)
Engineering	73(5)	—	—	479(22)	52(2)	—	552(27)	52(2)	—	604(29)
Law	26(8)	6(3)	—	550(213)	84(34)	—	576(221)	90(37)	—	666(258)
Mathematical Sciences	29(9)	—	—	364(96)	90(21)	1(-)	393(105)	90(21)	1(-)	484(126)
Medical Science	1(1)	—	—	—	—	—	1(1)	—	—	1(1)
Medicine	—	—	—	713(237)	5(3)	—	713(237)	5(3)	—	718(240)
Music	11(6)	3(2)	—	127(79)	10(6)	—	138(85)	13(8)	—	151(93)
Science	90(29)	—	—	712(274)	174(76)	1(-)	802(303)	174(76)	1(-)	977(379)
Total	382(130)	10(5)	—	4,989(1,849)	1,487(650)	18(6)	5,371(1,979)	1,497(655)	18(6)	6,886(2,640)

(a) Final Year honours only.

C. Candidates for Postgraduate Diplomas:

	Full-time	Part-time	External	Total
Education (Dip.Ed.)	92(55)	86(46)	2(1)	180(102)
Education (Adv.Dip.Ed.)	1(1)	17(8)	—	18(9)
Computing Science	21(4)	27(5)	—	48(9)
Applied Psychology	12(8)	22(14)	—	34(22)
Psychotherapy	—	—	—	—
Total	126(68)	152(73)	2(1)	280(142)

D. Students taking Miscellaneous Subjects:

	Full-time	Part-time	External	Total
Masters' Qualifying	1(-)	5(2)	—	6(2)
Arts	4(2)	79(45)	1(1)	84(48)
Agricultural Science	—	—	—	—
Economics	1(-)	88(11)	—	89(11)
Music	—	1(-)	—	1(-)
Law	—	4(1)	—	4(1)
Mathematical Sciences	—	7(2)	—	7(2)
Science	1(1)	17(6)	—	18(7)
Music (Elder Conservatorium)	—	207(121)	—	207(121)
Miscellaneous Work SAIT (a)	—	155(118)	2(-)	157(118)
Visiting Students (b)	3(-)	201(108)	5(3)	209(111)
Total	10(3)	764(414)	8(4)	782(421)

- (a) Students taking university subjects as part of a degree course at the S.A. Institute of Technology.
- (b) Students admitted under the provisions of clause 13 of Chapter XXV of the Statutes.

Comparison with preceding years: The following figures of total enrolments in the various faculties and courses are provided to show changes in University enrolments over the last five years:

Course (a)	1976	1977	1978	1979	1980
Undergraduate, diploma, and miscellaneous students:					
Agricultural Science	224	199	208	204	217
Architecture	176	188	189	188	208
Arts	2,908	2,699	2,418	2,262	2,199
Dentistry	313	309	287	289	263
Economics	752	770	761	810	809
Engineering	617	621	616	599	604
Law	609	639	642	658	670
Mathematical Sciences	414	418	457	485	539
Medicine	810	781	741	732	719
Music	166	138	148	172	152
Science	1,109	1,082	1,004	999	995
Technology	2	—	—	—	—
Miscellaneous (SAIT) (c)	123	141	160	152	157
Elder Conservatorium (d)	210	210	192	202	207
Visiting Students (e)	150	149	192	206	209
	8,583	8,344	8,015	7,958	7,948
Higher degree candidates (b)	1,222	1,211	1,161	1,138	1,086
Total	9,805	9,555	9,176	9,096	9,034

- (a) Each student is counted once only, in the category appropriate to his principal course.
- (b) Excludes Masters' qualifying candidates.
- (c) Students enrolled in subjects as part of a degree course at the S.A. Institute of Technology.
- (d) Students not also enrolled for degree or diploma subjects.
- (e) Students admitted under the provisions of clause 13 of Chapter XXV of the Statutes.

It will be seen that since 1976, when the number of students at the University was at its maximum, the student population has been steadily decreasing. A more detailed study of the figures indicates that this decline is not due to a reduction in the number of students new to the University; the quota for new admissions has been filled every year, with the exception of a small shortfall in the Faculty of Agricultural Science. The reduction is primarily due to an increase in the number of students who fail to re-enrol after completing their first year. For instance, in 1979, 26% of all students who commenced a bachelor's degree in 1978 failed to re-enrol. However, the latest indications are that the re-enrolment rate has begun to improve somewhat. It is interesting to note that the number of failures to re-enrol was greatest among part-time students. On the other hand the number was particularly small in the Faculties of Medicine and Dentistry.

Overseas Students:

In 1980, 345 overseas students enrolled at the University. As in previous years the largest numbers came from Malaysia, Singapore, India and Hong Kong. Most of the overseas students were enrolled in the Faculties of Engineering, Economics and Science.

14. ADMISSION TO DEGREES

Degrees were conferred and diplomas granted at four Commemoration Ceremonies during the year. Two Ceremonies were held on 30 April 1980 (at 11 a.m. and 3 p.m.), the Speakers at which were, respectively, Emeritus Professor Sir Geoffrey Badger, on whom the degree of Doctor of the University was conferred, and the Chair of the Adelaide

University Union Council, Mr. K. J. Hinton. Two further Ceremonies were held on 7 May (at 11 a.m. and 3 p.m.), the Speakers at which were, respectively, the Senior Deputy Chancellor, the Honourable Justice Roma F. Mitchell, and the recently retired Academic Registrar, Mr. H. E. Wesley Smith, on whom the degree of Doctor of the University was conferred. In addition, degrees were conferred and diplomas granted at two of the regular Council meetings held during the year, on 11 July and 19 December 1980 respectively.

In all, 174 (34) candidates were admitted to higher degrees by examination or thesis; 1,371 (475) bachelor degrees were conferred by examination; and 204 (96) diplomas were awarded.

A summary by faculty of degrees conferred and diplomas granted during 1980 is as follows:

	Higher Doctorate	Ph.D.	Master	Bach. (Hons.)	Bach. (Ord.)	Postgrad. Diplomas
Agricultural Science .	—	14(-)	9(-)	3(2)	30(6)	—
Architecture	—	—	20(7)	10(2)	22(2)	—
Arts	—	14(4)	20(11)	84(44)	301(184)	187(94)
Dentistry	—	—	—	5(-)	55(9)	—
Economics	—	1(-)	14(1)	9(3)	106(20)	2(-)
Engineering	—	7(-)	12(-)	47(-)	48(-)	—
Law	—	—	—	16(7)	109(42)	—
Mathematical Scs.	1(-)	7(1)	—	26(6)	81(19)	15(2)
Medicine	3(1)	1(-)	1(-)	3(1)	119(29)	—
Music	—	—	4(2)	15(9)	32(20)	—
Science	2(-)	34(6)	5(1)	83(20)	167(50)	—
Environmental St.	—	—	5(1)	—	—	—
	6(-)	78(11)	90(23)	301(94)	1,070(381)	204(96)

In addition 3 (0) Doctorates of the University were conferred during the year.

(The figures in brackets refer to the number of females included in the total.)

15. UNIVERSITY HEALTH SERVICE

(1) *General*

This year has seen an increase in the usage of the Health Service by students and staff and greater demands have been placed on the Medical Officers, the Sister and the Secretary.

From the beginning of July there was an increase in the number of viral infections and these fell into four distinctive types—glandular fever, severe gastro-enteritis, influenza, and an illness which clinically appeared like glandular fever but did not show the typical blood tests which designate an attack of glandular fever. All of these viral infections persisted right through the August exams, third term and the November exams, and there was a doubling of the number of applications for supplementary exams for both the August and November examinations.

However, there was a decrease in the number of stress-related supplementaries applied for, but as usual there were the supplementaries resulting from a severe crisis within the home or living situation.

During the year there have been fewer laboratory injuries, and fewer cleaning staff and ancillary staff injuries, but there has been an increase in the number of staff suffering from dermatitis resulting from exposure. Here a number of cases appeared to be from continuous use of detergents for cleaning purposes.

Special attention has been paid to the care of severely handicapped students. One Department even went to the trouble of providing large typing and large spacing for examination papers for an almost blind student and it is pleasing to note that she passed with distinction. Handicapped students are often given extra time for examinations on the basis of a recommendation from the Health Service.

The routine medical examinations have continued as usual and there is continuing to be a good response from students who do not participate in any exercise and who are

recommended to go to the Mark Mitchell Centre for Physical Health and involve themselves in some type of exercise which suits them.

There have been fewer drug problems in 1980. Some students admit to taking marijuana occasionally, but by far the greatest drug problem stems from the abuse of alcohol or of diazepam. This situation is, however, not a major problem.

(2) *Statistics*

The total number of individual services rendered during the year was 15,059 (14,811 in 1979), including 1,969 (1,936) routine examinations of students and staff; 6,062 (5,951) casualties, 3,245 (3,870) return visits from casualty service, 1,115 (516) poliomyelitis immunisations, 341 (392) tetanus injections, 1,761 (1,600) Mantoux tests, and 566 (546) other immunisations. Of the 6,062 (5,951) casualties, 5,207 (4,998) were illnesses, 705 (849) accidents, and 150 (104) sports injuries.

16. STUDENT COUNSELLING SERVICE

In a period of erosion of staff resources throughout the University generally the Student Counselling Service has been fortunate in retaining its staff and so being able to continue to offer students a diversity of personality, skill and experience. Requests for individual consultation were higher than for the previous year, involving 1,590 hours of recorded contact with 977 students who visited the service on a total of 1,664 occasions.

At the same time the trend away from student participation in group activities has continued, to the point where this form of assistance tends to be sought not in response to advertisement of service but only under pressure of shared concern among students who are already acquainted with one another. A women's group concerned with sexual difficulties and an overseas student group concerned with language and socialisation problems came into being on this basis during the year and were subsequently given intensive assistance. It is plausible that anxiety about employment prospects translates into anxious preoccupation with course requirements and issues to the exclusion of engagement in the developmental activities with which the Counselling Service would wish to supplement its individual counselling.

Despite minor variations in service in response to requests or perceived opportunity, the counselling function in an established service remains essentially the same from year to year, a matter primarily of maintenance of services previously developed and now expected. In this vein the part-time service to the Waite Institute has been maintained, though its cost relative to student use is less favourable there than for the main campus. Counsellors have continued to make effective contributions to campus programs of staff, student and mixed initiative, e.g. the Information Day and Pre-enrolment Course and Subject Sessions for incoming students, Orientation Camps, and projects of the Student Services and Union Welfare Committees. The English Expression Program, funded from the General Development Grant, has continued with the support and under the administrative aegis of the Counselling Service, in response to a need which exceeds the resources that are available to deal with it. The success of the program only serves to highlight concern whether resources will be available to continue in future years the service of which an expectation and appreciation have now been firmly established.

17. CONTINUING EDUCATION

(1) *Department of Continuing Education*

The following is a summary of the activities of the Department during the year.

An innovation which was approved during the year, was the inclusion of three Continuing Education units in the University's MEd. course. By the year's end many potential students had expressed interest in enrolling.

Seminars on issues of moment varied from a few hours to twenty hours over three days. Over 600 students attended three Matriculation Seminars, over 200 attended a seminar on Pompeii and almost 300 attended four social history seminars—total enrolment in all seminars 1516.

A Natural History School, enrolment 40, concentrating mainly on ornithology, spent five days along the River Murray; a residential school for Australian script writers, held in conjunction with Writers' Week of the Adelaide Festival of Arts, attracted 45 writers from all parts of Australia, and the 7-day Spring School studying natural history subjects along the Heysen Trail, enjoyed an enrolment of 64-149 students in all schools.

Courses for the general public in languages, the humanities and sciences enrolled 1223 students, while 76 students were enrolled in nine discussion courses which used packages of notes, tapes and books.

Fourteen courses for *professional and occupational groups* attracted an enrolment of just over 400 in face-to-face meetings, while 776 were enrolled in radio courses—total 1184.

Radio 5UV, the University of Adelaide's education station, had to face problems caused by Ethnic Broadcasters moving to their own station, with a consequent loss of 40 hours per week of programming. However, by introducing a magazine program from 6.45 a.m. to 9.00 a.m. and expanding Fine Music in the latter part of the mornings, 5UV was able to broadcast 105 hours weekly through most of the year, compared with 120 in 1979. Income from donations and course enrolments exceeded \$30,000; there was also increased support from the corporate sector through sponsorships and from institutional users such as Flinders University and the Adelaide College of Arts and Education. In addition, an ongoing annual grant from a public radio support scheme initiated by the S.A. Minister for the Arts more than compensated for the loss of a block grant from the S.A. Department of Education. As a direct consequence of these new funding sources, there was a small credit on the year's financial operations.

An independent survey by Peter Gardner & Associates supported earlier findings that over 40,000 residents of metropolitan Adelaide listen to 5UV each week. More specific interest was shown by the 776 students who paid for notes associated with extension courses, the 147 who registered for language and general courses, and the 1000 odd listeners who bought the three books arising from 5UV program series. These publications were contributed to and edited by DCE staff. As well, 800 'Friends' showed their continuing interest by making a generous annual donation to 5UV.

Publications—Three publications were issued in addition to those mentioned above; *Martindale Hall* by Elizabeth Warburton being the most successful in terms of favourable reviews, and sales of over 1000 copies in the first few months. Two issues of the journal *Studies in Continuing Education*, approximately 80 pp in each, were published and distributed to subscribers through Australia and overseas.

(2) Other Courses

Two short courses for practising structural engineers were offered by the Dept. of Civil Engineering in 1980, and were very well received. In May, approximately 35 engineers attended a short course on structural analysis and finite elements.

In October, a short course on the design of masonry and brickwork structures was carried out in conjunction with the Concrete Institute of Australia.

The Microprocessor Group of the Electrical Engineering Department continues to be active in developing and running both undergraduate and post-experience courses. Courses have been restricted on a unit basis ranging from 'awareness' to more advanced applications. Post-experience courses to date have been attended by a total of almost 400 participants and are to be continued in every vacation period. The group is also busily engaged in equipping teaching, applications and research areas to provide substantial support for both hardware and software on a multi-terminal basis. Facilities should be operational by late 1981.

During 1980 the Electrical Engineering Department hosted a Residential Summer School in Power System Engineering, sponsored by the Electricity Supply Association of Australia. This event was highly successful and generated some income which, with a special grant from the University, has enabled a substantial re-equipping of the Power Laboratory to be initiated. With the delivery of new machines the laboratory will provide a greatly improved facility for teaching, project work and research in the electrical power field.

Development of the Department of Chemical Engineering's expanded interest in digital process control continued and was further stimulated by two overseas visitors who assisted in running a highly successful Course in Digital Process Control for engineers in industry. The course, which was held in August, attracted 57 enrolments from companies and research institutions around Australia.

A Satellite Symposium of the Tenth International Congress on Acoustics was held in the Department of Mechanical Engineering in July, the topic being 'Control of Industrial Noise'.

18. CAREERS ADVISORY BOARD

It is becoming clear that the development of Australian natural resources will mean a significantly increased demand for technically qualified people over many years to come, and already the demand for some Engineers has been very great, with some new graduates in this field able to command twice the salary of graduates in other professional fields. But this keen demand is still confined to somewhat limited areas, and the overall unemployment rate in South Australia continues to be high. Because of this, generalist graduates are still taking some time to find satisfactory employment, and to assist them a 'Market Yourself' Kit was prepared. This covers such topics as the general strategy for the year after graduation, the general employment prospects for graduates, and how to go about job hunting in an effective way. Emphasis is placed on the importance of preparing a well laid-out job application which can give the employer a good idea of the sort of person who is applying, and what he or she has to offer to an organisation. Suggestions are also included on how to prepare for an interview, and the sort of questions to expect. This kit has been well received by students, and about 700 have been asked for. It has also received favourable reviews in *The News* and *The Australian*.

The Annual Survey of the first destination of graduates and diplomates showed that 8.4% were unemployed or casually employed as at 30 April 1980, with 48 (12.7%) Arts graduates, 38 (10.6%) Science graduates, 6 (6.3%) Engineering graduates and 19 (11.9%) of the Diplomates in Education unemployed or casually employed and seeking full-time employment. The corresponding figures in 1979 were 10.2% unemployed or casually employed, including 71 (15.7%) Arts graduates, 49 (12.5%) Science graduates, 10 (8.7%) Engineering graduates and 28 (13.0%) Diplomates in Education. The total number of degrees and diplomas awarded was 1,709 and the overall survey response rates for the first time was 100%. A follow-up survey of the graduates who were unemployed at 30 April was carried out to see whether they had found employment by 1 September, and this showed that the unemployment rate had fallen to 3.3% with 24 (6.3%) Arts graduates, 17 (4.8%) Science graduates, 0 Engineering graduates and 6 (3.8%) of the Diplomates in Education unemployed or casually employed and seeking full-time employment.

For the second year a follow-up survey of the graduates of the Faculties of Law and Medicine was carried out to see their destination after they had completed the additional training required upon graduation. The survey of the 1978 Law graduates as at 1 September 1980 indicated that most graduates were finding satisfactory employment. Of the M.B., B.S. graduates who completed their internship at the end of 1979, it appears that some graduates did have difficulty in April of 1980 in finding hospital appointments, and this is largely responsible for the fact that eleven of these graduates went overseas to obtain their experience. It should be noted, however, that when vacancies were advertised later in the year there were insufficient applicants to fill the posts.

19. STUDENT SERVICES

As part of the program to increase awareness among the University community of the various student services available on campus, a series of seminars was arranged by the Student Services Committee. The first was for Course Advisers and not only did it provide an opportunity for representatives of the various services to describe the help that they could offer, but it also enabled the Course Advisers from each of the Faculties to meet one another and to gain a better understanding of their various procedures. A similar seminar was held for Tutors to provide information for them which would be of use in their day-to-day contact with students.

A further seminar, prompted by the cases of hardship which the Director of the Health Service had encountered, was held on the question of course overloads. This was attended by staff and students and, as a result, a recommendation was sent to Deans urging that students be given the best possible counselling before undertaking a heavy overload, and a statement concerning overloads was inserted in the 1981 Calendar.

The University Council asked the Student Services Committee in 1979 to assume the responsibilities formerly carried by the Committee on Student Finances. In this capacity and in collaboration with the Students' Association and the Union Welfare Officer, the Committee has initiated an enquiry into TEAS and student finances in general.

The University Student Loan Fund is designed to provide financial assistance to needy students who might otherwise be unable to continue successfully with their academic work. During 1980 there were 52 (114) applications for assistance from the Fund, in

response to which \$25,105 (\$42,410) was made available in repayable loans. In addition, an Emergency Loan Fund assisted 281 (219) students for whom repayable loans totalling \$12,154 (10,204) were approved. (The figures in brackets are for 1979.) Almost all students to whom loans have been given have proved diligent in repaying them, and very few loans have had to be written off as irrecoverable. It would seem that in the difficult financial situation of students, many who are in need are becoming unwilling to commit themselves to repayable loans and look for other alternatives.

20. MISCELLANEOUS

- (1) The year was again a particularly good one for student achievements in the academic field. Students of Adelaide University once more had great success in obtaining scholarships in open competition with students of other Australian Universities. Among these successes were the following:
 - (a) Only two Shell Postgraduate Scholarships are available each year for Australia-wide competition, one in Arts and one in Science. The Scholarship for Science was awarded to an Adelaide student, S. W. Westwood (Organic Chemistry).
 - (b) Under the Commonwealth Scholarship and Fellowship Plan, three of the 27 U.K. awards available to Australian graduates were made to K. M. Bills (Politics), S. C. Crawley (Computing Science), and K. J. Hinton (Mathematical Physics).
 - (c) The Rhodes Scholarship for South Australia was awarded to Ms. U. A. Goggs (French) and that available for Australia-wide competition was awarded to Ms. V. M. Drapac (History).
 - (d) The Caltex Woman Graduate of the Year Scholarship for South Australia was awarded to Ms. H. J. Burns (Applied Mathematics).
 - (e) Of ten 1851 Exhibition Science Research Scholarships available throughout the British Commonwealth, one was awarded to D. J. M. Stone (Organic Chemistry).
 - (f) The International Telephone & Telegraph Corporation Fellowship available in Australia-wide competition was awarded to J. F. Canny (Electrical Engineering).
- (2) A Council Committee has produced a report on access to personal records, the recommendations of which have been accepted in principle. The main intentions of the report are that members of staff and students should, in general, have direct or indirect access to information about themselves kept on University files, and should have an opportunity to comment on the accuracy of such information before it is used in any way prejudicial to them. Several exceptions are provided for, however—referees' reports on applicants for appointment or promotion will remain confidential unless the writer has given approval to the disclosure of the contents, as will other documents written on the understanding that they will remain confidential; and special provisions will apply to medical reports on staff and students. The report has been accepted by Council in regard to centrally maintained records, and has been referred to departments, etc. for comments on its implications for their records.
- (3) In August the Vice-Chancellor opened the University's Electron Optical Centre and formally commissioned the Centre's new electron microprobe analyser. The two events mark a major step in the University's long-term plan to rationalise the service of electron beam analysis equipment.

The electron microprobe (EMA) joins the Centre's scanning electron microscope (SEM) in a specially-designed suite of rooms in the basement of the recently-completed North Wing of the new Medical School Building.

The suite has space set aside for a transmission electron microscope (TEM), which it is hoped will be installed in the Centre in the near future following a rationalisation of TEM facilities in the University. The TEM will complete the range of electron beam equipment available in the Centre.

The present stage of the Centre's development has been achieved through the concerted efforts of staff from a number of departments. The electron microprobe will also be used by Flinders University.
- (4) There were a number of distinguished visitors to the Elder Conservatorium of Music in 1980. Notable amongst these was Professor Lionel Bowman from the University of Stellenbosch, who gave a series of piano master classes and performed Beethoven's 4th piano concerto at the John Bishop Memorial Concert in July, which featured the John Bishop Memorial Commission "In Memoriam" by Malcolm Fox, with Ronald Woodcock as soloist.

The Elder Conservatorium, in conjunction with the School of Music, Adelaide College of Further Education, presented Smetana's opera *The Bartered Bride* in October. This was the first major operatic production at the University since 1975, and illustrated recently-established liaison between the two institutions. Being a year of the Adelaide Festival of Arts, 1980 was a particularly prolific year for public performances. The Conservatorium gave a total of over 200 concerts, including a special series of 28 recitals for the Festival and the ever-popular University Music Society.

21. FINANCIAL STATEMENTS

An abstract of the income and expenditure of the University during 1980 is annexed to this Report, together with a further statement showing the actual position of the University with respect to its property, funds and liabilities at the close of 1980.

Signed on behalf of the Council,

J. J. BRAY,

Adelaide,
1 September, 1981.

Chancellor.

THE UNIVERSITY OF ADELAIDE

FINANCIAL STATEMENTS FOR THE YEAR 1980

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20 July, 1981

D. R. BEECHER,
Bursar.

THE UNIVERSITY

Income and Expenditure Account for the

INCOME				
NORTH TERRACE	<i>Schedule</i>	1980	1979	
		\$	\$	\$
<i>Government Grant for:</i>				
(1) Recurrent Expenditure		39,780,008		36,493,817
Research		515,138		492,567
		<hr/>	40,295,146	<hr/>
<i>Private Income:</i>				
<i>Interest—</i>				
Treasury of South Australia		29,904		168,720
Agent General		4,279		2,609
Electricity Trust of S.A.		—		27,160
S.A. Gas Co.		3,137		8,469
(2) Income brought forward		57,665		—
<i>Composite Fund—</i>				
Dividends and Interest		475,880		381,435
Investment of other Funds		1,368,324		768,452
Student Conservatorium Fees		20,000		17,065
Other Income	F	277,505		291,949
		<hr/>	2,236,694	<hr/>
<i>TOTAL INCOME:</i>				
			42,531,840	38,652,243
<i>Deduct:</i>				
Credits to Special Funds	G		683,357	466,111
			<hr/>	<hr/>
			41,848,483	38,186,132
<i>Deduct:</i>				
Part Deficits—prior years			—	168,569
Composite Fund Non-Specific				
Bequests		127,885		—
(3) Appropriations towards future				
Expenditure		1,072,443		633,497
Repayment of A.M.P. Loan for				
Union Building		44,672		44,672
		<hr/>	1,245,000	<hr/>
			40,603,483	37,339,394
Surplus (transferred to				
Appropriation Account)			293,290	—
			<hr/>	<hr/>
			\$40,310,193	\$37,339,394

(1) Includes General Development Grant \$300,000.

(2) 1978 Allocation for Plant Maintenance not spent in 1979.

(3) For itemised appropriations See Page 1248.

OF ADELAIDE

year ended 31 December, 1980

EXPENDITURE				
NORTH TERRACE				
	<i>Schedule</i>		1980	1979
		\$	\$	\$
<i>Departmental:</i>				
Salaries and Wages	A	25,365,417		23,226,435
Tavelling Expenses—				
New Appointments		32,021		48,082
Laboratory Maintenance	A	1,373,364		1,302,058
Furniture and Minor Equipment	A	97,392		21,065
Equipment (ex GDG)		74,464		143,226
		<hr/>	26,942,658	<hr/> 24,740,866
<i>Library:</i>				
Salaries and Wages		1,905,433		1,773,257
Books and Binding		1,014,400		934,232
		<hr/>	2,919,833	<hr/> 2,707,489
<i>Administrative Salaries:</i>			2,794,932	2,582,736
<i>Research:</i>				
Salaries and Wages	A	122,467		61,180
Maintenance	A	551,880		478,986
Conferences and Vis. Scholars	A	153,373		132,619
Scholars	A	394,960		374,510
		<hr/>	1,222,680	<hr/> 1,047,295
<i>Maintenance of Property:</i>				
Caretaking and Cleaning		1,334,329		1,202,302
Building Repairs		642,944		526,537
Maintenance of Site and Gardeners' Wages .		124,927		113,141
Sports Grounds		156,037		147,202
		<hr/>	2,258,237	<hr/> 1,989,182
<i>Sundry:</i>				
Payroll Tax		1,460,202		1,315,567
Examinations		59,666		65,276
General Expenses	B	684,534		714,360
Engineering Services	C	1,030,522		981,945
Insurance	D	251,500		162,141
Special Grants	E	101,606		56,528
Supplementary Superannuation		9,370		16,191
Supplementary Pensions		105,984		546,540
Other Pensions		19,713		16,435
Long Service Leave		223,486		205,475
Study Leave		225,270		191,368
		<hr/>	4,171,853	<hr/> 4,271,826
			<hr/> <u>\$40,310,193</u>	<hr/> <u>\$37,339,394</u>

THE UNIVERSITY

Income and Expenditure Account for the

INCOME			
WAITE AGRICULTURAL RESEARCH INSTITUTE			
	<i>Schedule</i>	1980	1979
	\$	\$	\$
<i>Government Grant for:</i>			
(4) Recurrent Expenditure.....	4,337,992		4,076,183
Research	84,862		55,433
	<hr/>	4,422,854	<hr/>
<i>Private Income:</i>	41,714		4,131,616
			27,963
<i>Other Income:</i>	9		45
	<hr/>	41,723	<hr/>
		4,464,577	28,008
		<hr/>	<hr/>
Less Private Income		4,464,577	4,159,624
Carried Forward		(41,714)	—

<hr/> <hr/>	<hr/> <hr/>
\$4,422,863	\$4,159,624

- (4) The amount for Government Grant is a balancing figure on this account. It is not a sum calculated by the Government and earmarked for the purposes of Waite Institute.

OF ADELAIDE

Year Ended 31 December, 1980

EXPENDITURE

WAITE AGRICULTURAL RESEARCH INSTITUTE		1980	1979
	Schedule	\$	\$
<i>Departmental:</i>			
Salaries and Wages	A	2,551,161	2,180,480
Laboratory Maintenance	A	139,576	137,042
Furniture & Minor Equipment	A	721	194
		<u>2,691,458</u>	<u>2,317,716</u>
<i>Library:</i>			
Salaries and Wages		65,751	59,280
Books and Binding		79,697	75,123
		<u>145,448</u>	<u>134,403</u>
<i>Administrative Salaries:</i>		214,548	427,187
<i>Research:</i>			
Salaries and Wages	A	23,368	28,449
Maintenance	A	52,209	53,709
Conference & Vis. Scholars	A	16,184	11,632
Scholars	A	103,550	79,363
		<u>195,311</u>	<u>173,153</u>
<i>Maintenance of Property:</i>			
Caretaking and Cleaning		129,055	116,184
Building Repairs		98,769	83,380
Maintenance of Site and Gardeners' Wages..		41,413	38,031
		<u>269,237</u>	<u>237,595</u>
<i>Sundry:</i>			
Payroll Tax		152,304	143,318
General Expenses	B	82,287	87,029
Engineering Services	C	252,306	216,031
Insurance	D	34,633	18,321
Supplementary Pension		1,377	12,895
Other Pensions		3,966	—
Long Service Leave		15,571	50,230
		<u>542,444</u>	<u>527,824</u>
<i>Farm:</i>			
Wages		232,206	206,208
Maintenance		18,654	19,100
		<u>250,860</u>	<u>225,308</u>
<i>Mortlock Experiment Station:</i>			
Salaries and Wages		93,483	97,338
Maintenance and Travel		20,074	19,100
		<u>113,557</u>	<u>116,438</u>
		<u>\$4,422,863</u>	<u>\$4,159,624</u>

OF ADELAIDE

and Waite Institute for the Year Ended 31st December 1980

EXPENDITURE

\$		North Tce	1980	Total	\$
		\$	Waite	\$	
	<i>Departmental</i>				
	Salaries & Wages.....	25,365,417	2,551,161	27,916,578	
	Travelling Expenses—				
	New Appointments.....	32,021	—	32,021	
	Laboratory Maintenance ..	1,373,364	139,576	1,512,940	
27,058,582	Furniture & Minor Equip.	97,392	721	98,113	
	Equipment (ex GDC).....	74,464	—	74,464	29,634,116
	<i>Library</i>				
2,841,892	Salaries and Wages.....	1,905,433	65,751	1,971,184	
	Books and Binding.....	1,014,400	79,697	1,094,097	3,065,281
3,009,923	<i>Administrative Salaries</i>	2,794,932	214,548	3,009,480	3,009,480
	<i>Research</i>				
	Salaries and Wages.....	122,467	23,368	145,835	
	Maintenance.....	551,880	52,209	604,089	
	Conference and Vis.				
1,220,448	Scholars.....	153,373	16,184	169,557	
	Scholars.....	394,960	103,550	498,510	1,417,991
	<i>Maintenance of Property</i>				
	Caretaking-Cleaning.....	1,334,329	129,055	1,463,384	
	Building Repairs.....	642,944	98,769	741,713	
2,226,777	Maintenance of Site				
	and Gardeners' Wages...	124,927	41,413	166,340	
	Sports Grounds.....	156,037	—	156,037	2,527,474
	<i>Sundry</i>				
	Payroll Tax.....	1,460,202	152,304	1,612,506	
	Examinations.....	59,666	—	59,666	
	General Expenses.....	684,534	82,287	766,821	
	Engineering Services.....	1,030,522	252,306	1,282,828	
	Insurance.....	251,500	34,633	286,133	
	Special Grants.....	101,606	—	101,606	
	Supplementary				
	Superannuation.....	9,370	—	9,370	
	Supplementary Pensions...	105,984	1,377	107,361	
4,799,650	Other Pensions.....	19,713	3,966	23,679	
	Long Service Leave.....	223,486	15,571	239,057	
	Study Leave.....	225,270	—	225,270	4,714,297
	<i>Farm</i>				
225,308	Wages.....	—	232,206	232,206	
	Maintenance.....	—	18,654	18,654	250,860
	<i>Mortlock</i>				
116,438	Salaries and Wages.....	—	93,483	93,483	
	Maintenance and Travel...	—	20,074	20,074	113,557
<u>\$41,499,018</u>					<u>\$44,733,056</u>

General notes on the Accounts

	\$	Cumulative \$
1. Appropriations towards future expenditure		
(a) Sundry Savings Carried Forward.....	119,577	258,140
(b) Income Carried Forward—		
Services Staffing Committee.....	43,000	98,000
(c) Engineering Services Savings—North Terrace	224,098	167,069
(d) Engineering Services Savings—		
Waite over expenditure.....	(5,332)	19,098
(e) Administration Computer	130,000	130,000
(f) Earmarked Grant—		
Transmission Electron Microscope	40,000	40,000
(g) Provision for A.P.S. 4% award		
retrospective to May 1980	303,000	303,000
(h) Provision for Long Service Leave.....	42,000	42,000
(i) Provision for Early Retirement.....	49,400	49,400
(j) Provision for A.P.S. Classification.....	147,700	147,700
(k) Income carried forward—		
Departmental Staffing Committee.....	(21,00)	252,000
(l) Planned Maintenance	—	42,335
	<u>\$1,072,443</u>	<u>\$1,548,742</u>

2. The above expenditure does not include expenditure for research and educational purposes of Grants received from Outside Sources totalling \$4,376,549 detailed on pages 1271-1302 inclusive of these accounts.

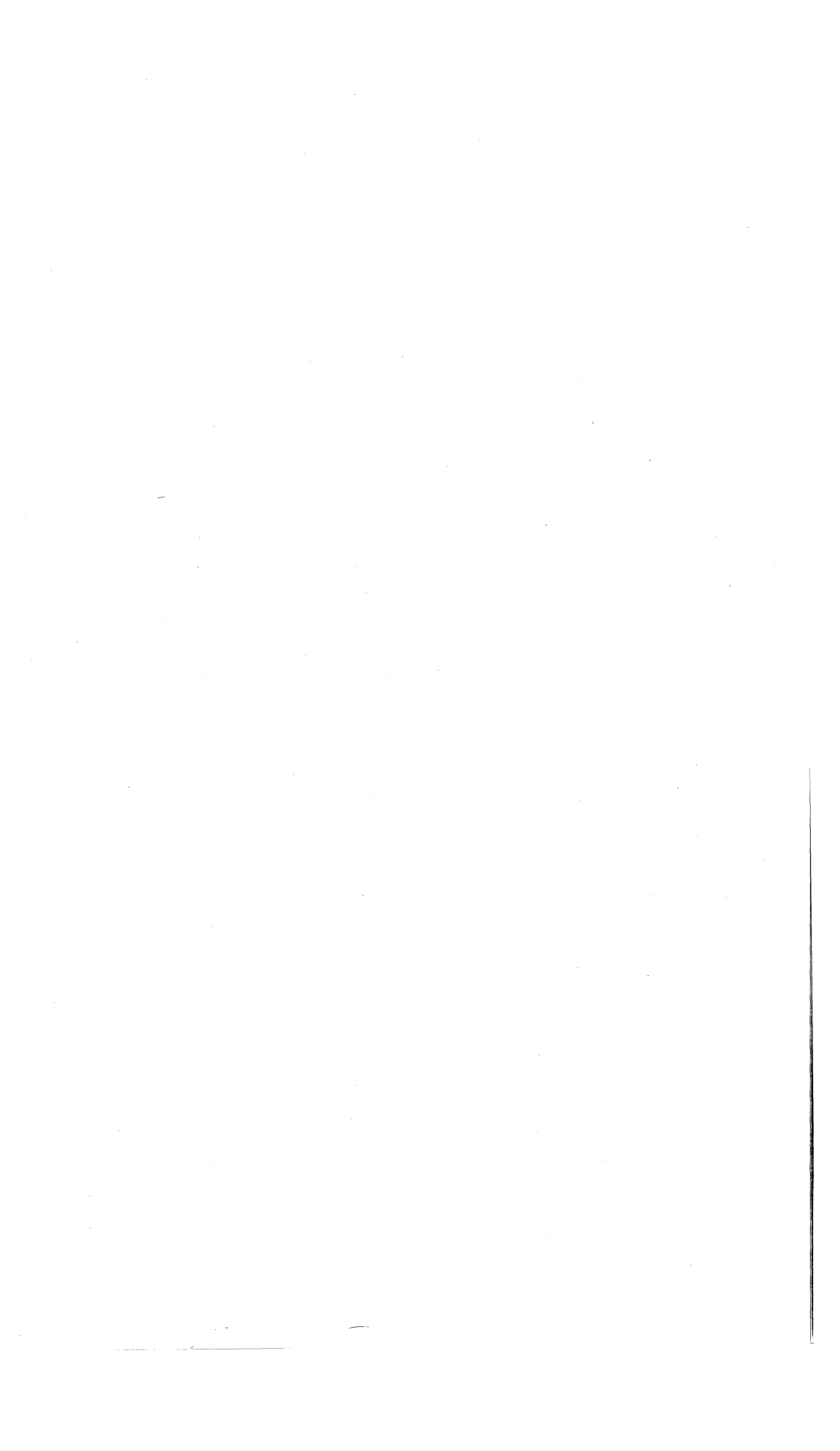
D. R. BEECHER,
Bursar.

We report that we have audited the various Books of Account and other records relating to the Income and Expenditure of The University of Adelaide in respect of the year which ended 31 December, 1980 and we certify the above statement to be a correct abstract of such Income and Expenditure during the above period.

We further certify that in terms of sections 6 and 7 of the States Grants (Tertiary Education Assistance) Act 1978 and subsequent amendments, in relation to the year 1980, the above financial statement correctly sets out the Commonwealth Grants received by the University of Adelaide, that the Commonwealth Grant for recurrent purposes paid to the University in that year has been applied for expenditure (other than for the purposes of land, buildings and equipment expenditure as defined in the Act) on University purposes and that the Commonwealth grant of \$600,000 has been applied for expenditure on special research purposes.

DELOITTE HASKINS & SELLS, Chartered Accountants.
TOUCHE ROSS & CO, Chartered Accountants.

Adelaide, 20 July, 1981.



1980—INCOME AND EXPENDITURE ACCOUNT—SUPPORTING SCHEDULES
DEPARTMENTAL FUNDS EXPENDED—1980

SCHEDULE A
NORTH TERRACE

1250

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture and Minor Equipment	Salaries and Wages	Maintenance	Conference and Vis. Scholars	Scholars	
<i>ARCHITECTURE</i>	526,214	17,708	1,712	7,173	2,820	6,263	6,019	567,909
<i>Arts</i>								
Anthropology	356,821	11,471	—	—	4,834	2,835	26,761	402,722
Centre for Asian Studies	129,470	1,565	—	—	853	2,222	—	134,110
Classics	268,251	2,486	363	—	212	747	—	272,059
Education	568,432	9,978	63	2,341	10,181	5,235	—	596,230
English	667,897	6,509	1023	16,352	5,496	12,676	21,177	731,130
French	238,877	600	—	18,277	2,798	3,543	3,774	267,869
Geography	366,989	22,574	219	9,874	7,130	1,108	7,402	415,296
German	263,877	2,531	150	—	2,343	5,318	—	274,219
History	817,631	10,343	120	4,496	5,077	5,206	19,287	862,160
Language Laboratory	85,276	3,924	—	—	58	300	—	89,558
Philosophy	212,453	18	—	—	2,734	—	—	215,205
Politics	422,989	5,982	29	—	5,691	2,860	19,719	457,270
Psychology	755,635	41,155	4,544	14,169	14,032	6,587	13,447	849,569
Faculty	—	336	—	—	—	—	—	336
Napier Building Management Committee	—	647	—	—	—	—	—	647
<i>DENTISTRY</i>								
Dental Health	301,182	6,116	240	—	3,218	185	—	310,941
Oral Biology	190,263	15,268	50	—	3,956	1,979	6,191	217,707
Oral Pathology & Oral Surgery	177,736	6,800	176	—	4,620	2,122	1,716	193,170
Restorative Dentistry	540,501	7,274	1,203	—	4,632	1,043	—	554,653
Faculty	—	4,186	—	—	—	—	—	4,186
<i>ECONOMICS</i>								
Commerce	406,167	8,595	231	43	5,627	1,843	—	422,506
Economics	935,164	11,172	743	1,239	7,550	4,965	1,657	962,490

(Continued next page)

FINANCIAL STATEMENTS

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture and Minor Equipment	Salaries and Wages	Maintenance	Conference and Vis. Scholars	Scholars	
<i>ENGINEERING</i>								
Chemical	462,931	22,150	1,721	—	7,903	2,859	4,222	501,786
Civil	719,353	33,529	3,030	2,097	7,640	5,805	8,188	779,642
Electrical	623,179	38,619	1,714	—	18,563	3,378	15,128	700,581
Mechanical	625,194	23,417	476	2,984	6,571	3,286	16,888	678,816
Workshop	—	13,247	—	—	—	—	—	13,247
Faculty	—	268	—	—	—	—	—	268
<i>LAW</i>	1,045,965	23,248	3,969	6,138	2,700	5,036	—	1,087,056
<i>MATHEMATICAL SCIENCES</i>								
Applied Mathematics	489,717	9,351	1,369	176	5,543	8,662	3,429	518,247
Computing Science	425,040	19,481	1,617	—	6,591	2,048	8,975	463,752
Mathematical Physics	163,244	2,854	—	—	3,844	4,511	8,187	182,640
Pure Mathematics	400,757	2,347	469	13,746	429	3,834	13,982	435,564
Statistics	237,790	1,300	—	175	1,545	1,438	—	242,248
<i>MEDICINE</i>								
Anatomy	495,999	20,812	652	—	4,660	1,019	—	523,142
Clinical Pharmacology	207,131	17,395	1,197	256	6,096	800	—	232,875
Community Medicine	170,174	2,311	—	—	4,937	124	—	177,546
Medicine	529,450	19,851	36	3,897	5,713	2,682	—	561,629
Medical Workshop	83,916	2,082	263	—	—	—	—	86,261
Medical Animal House	62,645	12,651	—	—	—	—	—	75,296
Obstetrics & Gynaecology	365,601	8,515	159	—	12,477	1,623	5,333	393,708
Paediatrics	355,685	2,359	—	—	12,081	419	—	370,544
Pathology	331,806	7,430	453	—	7,520	400	—	347,609
Psychiatry	338,144	9,564	719	—	3,983	1,655	—	354,065
Surgery	413,220	12,133	1,050	—	2,858	2,522	—	431,783
Surgery—Hospital Animal House	648	4,174	—	—	—	—	—	4,822
<i>MUSIC</i>								
Music	780,797	22,011	388	—	4,441	2,024	16,261	825,922
Performing Arts	46,658	1,541	191	—	—	—	—	48,390

(Continued next page)

SCHEDULE A (Continued)

DEPARTMENTAL FUNDS EXPENDED—1980—NORTH TERRACE

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture and Minor Equipment	Salaries and Wages	Maintenance	Conference and Vis. Scholars	Scholars	
<i>SCIENCE</i>								
Biochemistry	540,159	46,534	5,027	—	29,457	4,374	37,342	662,893
Botany	518,832	40,204	3,606	1,370	24,258	1,310	8,855	598,435
Economic Geology	237,644	13,052	288	—	9,173	1,786	11,663	273,606
Genetics	366,100	18,614	11	1,417	8,484	84	7,291	402,001
Geology and Mineralogy	543,647	25,408	1,574	—	11,592	1,621	20,043	603,885
Mawson Institute	115,503	12,124	128	57	5,035	448	5,507	138,802
Microbiology	366,789	19,271	856	—	13,872	606	22,197	423,591
Organic Chemistry	616,802	52,329	1,052	7,941	12,025	2,990	11,139	704,278
Physical and Inorganic Chemistry	853,736	51,266	3,566	1,485	27,176	6,439	13,463	957,131
Physics	1,058,683	60,988	2,616	4,631	26,275	4,906	9,176	1,167,275
Physiology	359,323	22,001	543	—	9,152	1,881	5,566	398,466
Zoology	594,406	30,986	1,358	—	16,742	3,839	14,975	662,306
Protein Sequencing—Botany	—	4,413	—	2,133	468	—	—	7,014
Faculty	—	119	—	—	—	—	—	119
<i>OTHER DEPARTMENTAL SERVICES</i>								
Advisory Centre for University Education	105,033	6,355	—	—	306	251	—	111,945
Central Animal House	109,926	29,890	98	—	—	—	—	139,914
Centre for Physical Health	86,963	1,680	—	—	—	—	—	88,643
Computing Centre	502,383	270,910	37,998	—	—	—	—	811,291
Health Service	100,109	2,593	989	—	546	289	—	104,526
Medical School Administration	78,974	4,259	—	—	—	—	—	83,233
Student Counselling Service	106,848	2,613	—	—	—	—	—	109,461

(Continued next page)

SCHEDULE A (Continued)

DEPARTMENTAL FUNDS EXPENDED—1980—NORTH TERRACE

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture and Minor Equipment	Salaries and Wages	Maintenance	Conference and Vis. Scholars	Scholars	
<i>MISCELLANEOUS</i>								
Administration	—	10,692	246	—	—	—	—	10,938
Continuing Education (including Radio Station)	289,992	30,500	—	—	—	—	—	320,492
Electron Microscope	52,120	5,469	—	—	1,613	192	—	59,394
Electron Optical Centre	—	2,819	1,406	—	—	—	—	4,225
Glass Blowing Service	31,869	259	—	—	—	—	—	32,128
Environmental Studies	106,490	3,041	—	—	3,200	607	—	113,338
Social Biology	—	279	—	—	—	—	—	279
Library	—	71,399	5,691	—	—	588	—	77,678
Library Books for Research Purposes	—	—	—	—	95,469	—	—	95,469
Library Complex Management Committee	—	344	—	—	—	—	—	344
Maternity Leave	9,943	—	—	—	—	—	—	9,943
Radiation Safety	—	1,638	—	—	—	—	—	1,638
Vice Chancellor's Emergency Fund	6,274	1,437	—	—	—	—	—	7,711
Publications	—	—	—	—	36,589	—	—	36,589
William Culross Prize	—	—	—	—	491	—	—	491
	\$25,365,417	1,373,364	97,392	122,467	551,880	153,373	394,960	28,058,853

(Continued next page)

1980—INCOME AND EXPENDITURE ACCOUNT—SUPPORTING SCHEDULES
DEPARTMENTAL FUNDS EXPENDED—1980

SCHEDULE A
WAITE INSTITUTE

Faculty and Department	LABORATORY			RESEARCH				TOTAL \$
	Salaries and Wages	Maintenance	Furniture and Minor Equipment	Salaries and Wages	Maintenance	Conference and Vis. Scholars	Scholars	
<i>AGRICULTURAL SCIENCE</i>								
Agricultural Biochemistry	431,269	11,525	81	312	9,983	3,079	15,198	471,447
Agronomy and Plant Breeding	500,480	22,893	77	1,223	6,528	1,015	6,376	538,592
Animal Physiology	160,894	7,426	—	551	2,284	820	3,879	175,854
Biometry	88,486	5,538	—	15,386	104	327	—	109,841
Entomology	339,473	22,715	—	4,048	11,761	3,783	30,609	412,389
Plant Pathology	433,079	16,844	—	—	7,543	4,083	15,731	477,280
Plant Physiology	267,299	11,804	107	1,821	9,251	2,555	31,757	324,594
Soil Science	191,492	7,157	137	27	3,886	479	—	203,178
<i>MISCELLANEOUS</i>								
Animal Facilities	—	4,976	—	—	—	—	—	4,976
Electron Microscope	—	1,468	—	—	—	—	—	1,468
Engineering Workshop	30,949	98	—	—	—	—	—	31,047
Faculty Laboratory	15,552	14,890	—	—	—	—	—	30,442
Glasshouses	—	5,272	—	—	—	—	—	5,272
Meteorology Station	—	80	—	—	—	—	—	80
Radiation Hazards Committee	—	101	—	—	—	—	—	101
South Wing Basement	—	1,319	—	—	—	—	—	1,319
Director's Laboratory Administration	45,344	1,578	—	—	869	43	—	47,834
Photographic Services	28,928	3,682	181	—	—	—	—	32,323
Electronic Workshop	17,916	—	—	—	—	—	—	17,916
Library	—	68	138	—	—	—	—	206
TOTAL WAITE INSTITUTE	\$ 2,551,161	139,576	721	23,368	52,209	16,184	103,550	2,886,769
TOTAL NORTH TERRACE	\$ 25,365,417	1,373,364	97,392	122,467	551,880	153,373	394,960	28,058,853
TOTAL	\$ 27,916,578	1,512,940	98,113	145,835	604,089	169,557	498,510	30,945,622

General Expenses

Total	1979			1980		
	Waite	North Terrace		North Terrace	Waite	Total
28,700	—	28,700	S.A.T.A.C.	33,211	—	33,211
4,429	—	4,429	Overseas Study Awards	2,900	—	2,900
38,420	23,036	15,384	Miscellaneous Charges	32,398	16,744	49,142
204,246	37,853	166,393	Printing and Stationery	203,133	39,213	242,346
40,027	2,144	37,883	Advertising	31,931	1,296	33,227
9,947	—	9,947	Bank Charges, Duty Stamps and Exchange	18,557	—	18,557
133,693	9,999	123,694	Postages	102,914	11,853	114,767
4,588	—	4,588	Maintenance of Office Machines	8,199	—	8,199
5,179	—	5,179	Senate and other Elections	4,059	—	4,059
70,055	—	70,055	Calendar	73,286	—	73,286
16,487	2,263	14,224	Laundry Services	12,475	2,890	15,365
19,189	7,576	11,613	Travelling Expenses	8,696	5,165	13,861
28,589	—	28,589	Australian Vice-Chancellors' Committee Expenses	34,020	—	34,020
46,082	500	45,582	General Vehicle Running Costs	3,856	1,000	4,856
—	—	—	Subscription to A.I.N.S.E.	7,100	—	7,100
—	—	—	Medical Examinations—New Staff	4,000	—	4,000
25,257	—	25,257	Entertainment Expenses	22,759	—	22,759
6,088	—	6,088	Rent of Premises	6,999	—	6,999
33,276	—	33,276	Rubbish Collection	8,096	—	8,096
6,970	—	6,970	Teaching Hospital Fees	7,093	—	7,093
10,997	—	10,997	Dental Hospital Fees	10,332	—	10,332
25,317	—	25,317	Superannuation Consultant's Fees	13,642	—	13,642
17,200	—	17,200	Auditors' Fees	19,200	—	19,200
2,420	2,420	—	Photography	—	2,302	2,302
1,238	1,238	—	Workshops' Overhead	—	1,824	1,824
9,334	—	9,334	Legal Expenses	2,381	—	2,381
15,000	—	15,000	Contribution to Organ	15,775	—	15,775
<u>802,728</u>	<u>87,029</u>	<u>715,699</u>		<u>687,012</u>	<u>82,287</u>	<u>769,299</u>
(1,339)	—	(1,339)	Deduct Discount Received	(2,478)	—	(2,478)
<u>\$801,389</u>	<u>\$87,029</u>	<u>\$714,360</u>		<u>\$684,534</u>	<u>\$82,287</u>	<u>\$766,821</u>

1980 Income and Expenditure Account—Supporting Schedules

SCHEDULE C

Engineering Services

Total	1979			1980		Total
	Waite	North Terrace		North Terrace	Waite	
506,078	126,489	379,589	Electricity.....	410,071	141,755	551,826
27,091	1,308	25,783	Gas.....	24,482	2,198	26,680
9,827	5,054	4,773	Heating Oil.....	5,041	7,793	12,834
173,243	43,582	129,661	Water.....	135,763	50,708	186,471
73,035	—	73,035	Air Conditioning and Ventilation.....	74,550	—	74,550
52,556	—	52,556	Maintenance of Lifts.....	57,733	4,626	62,359
15,524	872	14,652	(1) Fire Protection Charges.....	—	—	—
340,622	38,726	301,896	Telephones.....	298,453	45,226	343,679
—	—	—	Telex.....	22,647	—	22,647
—	—	—	Steam.....	1,782	—	1,782
<u>\$1,197,976</u>	<u>\$216,031</u>	<u>\$981,945</u>		<u>\$1,030,522</u>	<u>\$252,306</u>	<u>\$1,282,828</u>

(1) Transferred to Building Repairs 1980.

SCHEDULE D

Insurance

Total	1979			1980		Total
	Waite	North Terrace		North Terrace	Waite	
95,450	6,322	89,128	General.....	100,071	8,528	108,599
(1) 85,012	11,999	73,013	Workmen's Compensation.....	151,429	26,105	177,534
<u>\$180,462</u>	<u>\$18,321</u>	<u>\$162,141</u>		<u>\$251,500</u>	<u>\$34,633</u>	<u>\$286,133</u>

(1) 1979 Workmen's Compensation Insurance Premium relates to 6 months only due to a rearrangement of payment from 12 months in advance to 6 months in advance.

THE UNIVERSITY OF ADELAIDE

1980 Income and Expenditure Account—Supporting Schedules

SCHEDULE E

Special Grants

1979		1980
12,499	The University of Adelaide Club.....	12,529
11,000	Theatre Guild.....	11,162
9,450	S.A. Postgraduate Medical Assoc. Inc.....	6,300
9,131	Planning.....	—
6,600	(1) Aust. Inst. of Nuclear Science & Engineering.....	—
100	Adelaide University Regimental Band.....	100
7,648	Waite Institute Cafeteria.....	7,809
100	University of Adelaide Women's Club.....	100
—	Student Services.....	273
—	Organ.....	42,000
—	Fellowship in Music.....	5,000
—	Anthropology.....	1,704
—	Centre for Aboriginal Studies in Music.....	12,629
—	Writer in Residence.....	2,000
<u>\$56,528</u>		<u>\$101,606</u>

(1) Transferred to General Expenses 1980.

SCHEDULE F

Other Income

1979		1980
5,667	Calendar Sales.....	5,573
1,482	Hire of Rooms.....	—
4,133	Statements of Academic Record.....	4,187
1,000	W.E.A. Office Rent.....	1,000
10,297	Commission.....	11,300
5,312	Late Fees.....	4,739
183,001	Computing Centre.....	156,865
71,607	Anatomy (S.A.I.T.) Special Subsidy.....	77,897
	Administration Charge Australian Music	
5,439	Examinations Board.....	5,742
—	Sundry.....	1,132
670	Special Subsidy—S.Y.E.T.P.....	—
3,341	Administration Charge—S.A.T.A.C.....	3,570
	Administration Charge—Anti-Cancer	
—	Foundation of the Universities of	
	South Australia.....	5,500
<u>\$291,949</u>		<u>\$277,505</u>

SCHEDULE G

Credits to Special Funds

1979		1980
154,701	Scholarships and Prizes.....	182,779
124,189	Medical Research Committee.....	205,018
35,888	Library Funds.....	47,245
151,333	Other Trust Funds.....	198,315
—	The University of Adelaide Foundation.....	50,000
<u>\$466,111</u>		<u>\$683,357</u>

THE UNIVERSITY
Statement of Balances of Capital

LIABILITIES AND TRUSTS

NORTH TERRACE

	<i>Schedule</i>	1980	1979
		\$	\$
<i>Contributions to Land and Buildings:</i>			
Endowments and Donations.....		2,859,345	2,859,845
Australian Government.....		13,322,894	13,041,005
Government of South Australia		8,369,261	8,288,477
Accumulated Funds.....		1,456,920	1,537,767
		26,008,420	25,727,094
 <i>Endowments, Special Funds & Credit Balances:</i>			
Endowments		5,757,669	5,039,493
Fund for Replacement of Major Plant		29,206	129,206
Grant for Medical Sciences Building		7,616,568	7,500,342
Accumulated Funds for Building Projects ...		265,831	566,251
Bank of A.N.Z.—Current Account		2,082,404	1,513,318
Scholarship Funds..... (1)		418,616	339,497
Library Funds	(2)	79,301	93,318
Special Funds..... (3)		8,226,628	5,180,231
Superannuation Funds (balance)		1,046,634	523,746
Appropriation Account.....		293,290	—
		25,816,147	20,885,402
Carried Forward		51,824,567	46,612,496

OF ADELAIDE

Accounts at 31 December, 1980

ASSETS

NORTH TERRACE

	<i>Schedule</i>	1980	1979
	\$	\$	\$
<i>Land & Buildings:</i>			
University Site & Improvements	266,414		266,414
University Buildings	25,289,902		25,016,122
Other Land and Buildings	452,104		444,558
		26,008,420	25,727,094
 <i>Investment of Other Endowments and Special Funds and Debit Balances:</i>			
Composite Fund Investments (at cost)	5,501,700		3,799,120
Short Term Investments	8,922,866		5,295,964
General Investments	1,341,618		1,341,935
<i>Current Balances:</i>			
Irving Trust Company, N.Y.	35,132		29,920
Agent General for S.A., London	9,849		28,542
Cash Debtors and Stocks (5)	1,573,544		1,460,288
Buildings in Progress..... (6)	8,431,438		8,929,633
		25,816,147	20,885,402
Carried Forward		51,824,567	46,612,496

THE UNIVERSITY
Statement of Balances of Capital

LIABILITIES AND TRUSTS

NORTH TERRACE

	<i>Schedule</i>	1980	1979
	\$	\$	\$
Brought Forward.....		51,824,567	46,612,496
<i>Funds Provided for Equipment & Furniture:</i>			
Donations and Grants.....	5,825,777		5,209,363
Australian Government.....	12,001,275		9,873,023
Government of South Australia	4,959,192		4,959,192
Accumulated Funds.....	324,999		324,999
<i>Funds Provided for Library Books:</i>			
Donations and Grants.....	406,176		327,417
Australian Government.....	6,186,774		4,941,825
Government of South Australia	3,440,043		3,440,043
Accumulated Income.....	173,075		173,075
Gifts and Collections	1,675		1,675
		33,318,986	29,250,612
WAITE AGRICULTURAL RESEARCH INSTITUTE			
Endowments		3,142,028	731,092
<i>Funds provided for Buildings:</i>			
Endowments, Grants and Donations	1,006,190		786,830
Australian Government.....	1,065,387		1,018,887
Government of South Australia	651,945		651,945
Accumulated Income.....	185,708		185,708
<i>Funds Provided for Equipment and Furniture:</i>			
Grants and Donations	1,720,292		1,505,168
Australian Government.....	1,202,588		1,064,257
Government of South Australia	996,374		996,374
Accumulated Income.....	74,780		74,780
<i>Funds Provided for Library:</i>			
Australian Government.....	485,111		405,414
Government of South Australia	290,017		290,017
Accumulated Income.....	22,246		22,246
Unexpended Funds..... (4)		849,381	423,235
		11,692,047	8,155,953
		\$96,835,600	\$84,019,061

OF ADELAIDE

Accounts at 31 December, 1980

ASSETS			
NORTH TERRACE			
	<i>Schedule</i>	1980	1979
	\$	\$	\$
Brought Forward.....		51,824,567	46,612,496
<i>Equipment:</i>			
Equipment and Furniture	23,111,243		20,366,577
Library Books and Binding.....	10,207,743		8,884,035
		33,318,986	29,250,612

WAITE AGRICULTURAL RESEARCH INSTITUTE

Share and Stock Investments	2,739,523	1,835
Other Investments	831,326	749,083
Funds held by Trustees	230,207	230,207
Land and Site Improvements	204,133	204,133
Buildings	2,705,097	2,439,237
Buildings in Progress.....	139,708	134,476
Equipment and Furniture	3,994,034	3,640,579
Library.....	797,374	717,677
Current Balances:		
Cash, Debtors and Stocks..... (7)	50,645	38,726

11,692,047	8,155,953
\$96,835,600	\$84,019,061

LIABILITIES AND TRUSTS

Contingent Liabilities

In respect of guarantees given by the University for Staff Housing.

Liability for Long Service, Holiday and Sick Leave

The Commonwealth Government provides from recurrent grants the funds for Long Service, Holiday and Sick Leave in the year the expenditure is incurred. No provision therefore has been made in the accounts by way of contingency funds for these liabilities except that the underspending on long service leave for 1980 has been transferred to a provision account.

Unfunded Liability—Superannuation Scheme A

The unfunded liability of \$770,000 as at 1/1/80 has been reduced by a further payment of \$105,000 from recurrent funds in 1980 to a Trustee for the pensioners. The remaining unfunded liability of \$665,000 will be found out of future recurrent funds.

Contingency

Bequests in Deceased Estates, subject to Life and Other Interests:

C. Phillipson
 G. M. Dowling
 L. A. Shanasy
 R. A. M. McConnochie
 E. C. E. Munton
 G. E. I. Borthwick
 M. F. Simms
 F. Beeching
 P. S. Hossfeld
 R. M. Laffer
 J. S. Davies
 C. T. K. Turner
 W. H. Essex
 C. T. Fisher
 H. Hughes (Balance)
 E. MacMeikan (Balance)
 R. F. Mortlock (Balance)
 P. Waite (Balance)
 R. T. Melrose (Balance)
 W. H. Sandland (Balance)

We report that we have examined the above statement showing the financial position of The University of Adelaide in respect of Capital Funds as on 31 December, 1980, and have compared same with the entries in the various Books of Account and other records relating to the affairs of the University, and as a result of our examination and audit we do certify that the above statement is a correct abstract of the Books of Account. We further report that the securities, et cetera, representing the investments shown in the above statement, as well as the Land Grants and Certificates of Title belonging to the University, have been verified by us.

OF ADELAIDE

Accounts at 31 December, 1980

ASSETS

*Contingency**Bequests in Deceased Estates, subject to Life and Other Interests:
"as listed opposite"*

D. R. BEECHER,
Bursar.

TOUCHE ROSS & CO., Chartered Accountants.
DELOITTE HASKINS & SELLS, Chartered Accountants.

Adelaide, 20 July, 1981.

THE UNIVERSITY OF ADELAIDE

NORTH TERRACE

Schedules—Capital Accounts

SCHEDULE 1

Prizes and Scholarships

Name	Opening Balance 1/1/80	Income	Expenditure	Closing Balance 31/12/80
<i>(Prizes unless indicated)</i>	\$	\$	\$	\$
AGRICULTURAL SCIENCE				
Aust. Institute of Agricultural Science S.A. Board.....	20 Dr.	—	—	20 Dr.
D. B. Adam Memorial	412	101	30	483
K. P. J. Barley Memorial Award	519	610	500	629
R. K. Morton Scholarship	481	311	150	642
T. E. Barr Smith Travelling Scholarship.....	4,164 Dr.	2,528	—	1,636 Dr.
C. J. Everard Scholarship.....	23,843	23,740	17,406	30,177
ARCHITECTURE				
Aust. Gypsum Plaster Award	—	300	300	—
Dean W. Berry	50 Dr.	50	50	50 Dr.
James Hardie	150 Dr.	300	150	—
Royal Aust. Institute of Architects (S.A. Chapter).....	300 Dr.	400	100	—
S.A. Gas Company.....	100	575	675	—
Wormald Bros.	—	100	100	—
Clive E. Boyce Scholarship.....	5,067	1,499	418	6,148
Kenneth and Hazel Milne Travelling Scholarship.....	15,262	3,633	—	18,895
ARTS				
A. J. Schulz	120 Dr.	200	80	—
Andrew Scott	46	28	—	74
Anna Florence Booth	1,837	333	300	1,870
Sir Archibald Grenfell Prize.....	68	26	10	84
Australian Psychological Society	—	—	100	100 Dr.
Barr Smith.....	186	49	25	210
Bundey	431	83	50	464
Byard.....	420	105	60	465
Charles Fenner.....	34	23	—	57
Edith A. Puddy.....	79	32	18	93
Edith Hubbe and Harriet Cooke	771	177	—	948
E. W. Benham Prizes & Medal	200	200	200	200
Hope Crampton.....	67	26	14	79
J. G. Cornell	591	250	300	541
James Gartrell	555	95	36	614
Jefferis Memorial Medal.....	18	12	—	30
John Howard Clark	1,482	248	50	1,680
John Lewis	10 Dr.	10	10	10 Dr.
Lynda Tapp—History.....	319	483	325	477
M. Rees George Memorial.....	382	78	20	440
Natalia Davies.....	—	63	40	23
Roby Fletcher	2	33	20	15
Shell Prize in Applied Psychology	—	100	100	—
Sir Archibald Strong Memorial.....	1,312	231	130	1,413
Tormore	133	39	24	148
Violet de Mole Scholarship.....	62	97	82	77
Weimar-Ohlstrom.....	43	67	45	65
G. H. Lawton	84	103	13	174
B. R. Elliott	1,130	114	100	1,144
John F. Kennedy Memorial Scholarship.....	1,342	519	150	1,711
Pauline Price Scholarship.....	355	527	—	882
Mountford Award	3,441	1,803	1,000	4,244
P. W. Rice Scholarship	32,633	8,366	16,262	24,737
Tinline Scholarship.....	1,320	328	65	1,583
Fred Johns Scholarship.....	14,115	1,711	—	15,826
United Nations Prize.....	1,176	138	70	1,244

(Continued next page)

THE UNIVERSITY OF ADELAIDE

NORTH TERRACE

Schedules—Capital Accounts

Prizes and Scholarships

Name	Opening Balance 1/1/80	Income	Expenditure	Closing Balance 31/12/80
Schedule 1 (continued) (Prizes unless indicated)	\$	\$	\$	\$
<i>DENTISTRY</i>				
Austin Bazely.....	147	65	—	212
Australian Dental Association.....	5 Dr.	105	100	—
Australian Society of Orthodontists.....	10	—	110	100 Dr.
Dental Board of S.A.	383	243	275	351
General Practice Study Group.....	—	40	40	—
Malcolm Joyner.....	50 Dr.	50	50	50 Dr.
Thomas D. Hannon.....	287	55	30	312
R. G. Willoughby Award.....	1,598	783	290	2,091
Oliver Rutherford Turner Award.....	4,892	4,194	3,550	5,536
G. O. Lawrence—Scholarship or Fellowship.....	15,617	7,475	8,500	14,592
Herbert Gill-Williams Scholarship.....	4,881	6,340	5,225	5,996
J. L. Eustace Scholarship.....	19,080	4,272	6,288	17,064
A. M. Horsnell Student Travel *.....	385	1,406	862	929
Australian Society of Dentistry for Children.....	—	—	50	50 Dr.
* Capitalisation of income				
<i>ECONOMICS</i>				
Aust. Society of Accountants.....	150 Dr.	150	150	150 Dr.
E. A. Russell Memorial.....	111	487	350	248
Economic Society.....	42 Dr.	42	42	42 Dr.
I.B.M.—Economic Statistics.....	—	40	40	—
Institute of Chartered Accountants.....	40 Dr.	—	50	90 Dr.
John Lorenzo Young Scholarship.....	1,112	171	30	1,253
Professor J. H. B. Tew.....	90	29	10	109
Chamber of Commerce & Industry.....	100	100	200	—
Shell.....	100 Dr.	100	100	100 Dr.
Young Accountants' Group.....	—	—	50	50 Dr.
Archibald Mackie Bursary.....	305	50	—	355
George Thompson Bursary.....	655	95	—	750
John Creswell Scholarship.....	4,536	713	—	5,249
Joseph Fisher Medal & Lecture.....	3,137	1,553	857	3,833
<i>ENGINEERING</i>				
Albright & Wilson.....	63 Dr.	63	—	—
Australian Welding Institute.....	40 Dr.	40	40	40 Dr.
Cable Makers Association.....	—	21	21	—
Chamber of Commerce & Industry.....	300 Dr.	200	50	150 Dr.
E.T.S.A.....	42 Dr.	42	21	21 Dr.
E.T.S.A.—Electrical Power Engineering.....	79 Dr.	100	121	100 Dr.
Esso Standard Oil.....	40 Dr.	140	100	—
E. V. Clark.....	184	18	150	52
Gerard Industries.....	—	—	100	100 Dr.
Humes.....	100 Dr.	100	100	100 Dr.
Institute of Engineers Aust.....	100 Dr.	100	100	100 Dr.
James Hardie.....	150 Dr.	150	150	150 Dr.
Johns-Perry.....	42 Dr.	42	—	—
Lokan.....	139	34	18	155
Petroleum Refineries—Chem. Eng.....	—	450	450	—
Petroleum Refineries—Mech. Eng.....	—	150	150	—
Philips Electrical Industries—Elements of Electronics.....	—	—	50	50 Dr.
Philips Electrical Industries—Electronics.....	200 Dr.	200	150	150 Dr.
Rutter Jewell—Thomas Medal and Prize.....	938	176	90	1,024
Shell—Chemical Engineering.....	200 Dr.	200	100	100 Dr.
Shell—Mechanical Engineering.....	—	—	100	100 Dr.
Sir Robert Chapman.....	91	94	50	135
Tubemakers of Aust. Ltd.....	50 Dr.	50	50	50 Dr.
Western Mining Corporation.....	150 Dr.	150	300	300 Dr.
R. J. Jennings Memorial.....	—	269	200	69
Dow Chemical (Aust.) Scholarship.....	—	500	500	—
Frank Bull Scholarship.....	1,200 Dr.	1,200	1,200	1,200 Dr.
Sir William Goodman Scholarship.....	4,760	1,106	417	5,449
Angas Engineering Exhibition.....	6,144	1,415	—	7,559
Frank Perry Scholarship.....	7,692	5,318	2,000	11,010

(Continued next page)

THE UNIVERSITY OF ADELAIDE

NORTH TERRACE

*Schedules—Capital Accounts**Prizes and Scholarships*

Name	Opening Balance 1/1/80	Income	Expenditure	Closing Balance 31/12/80
Schedule 1 (continued) <i>(Prizes unless indicated)</i>	\$	\$	\$	\$
<i>LAW</i>				
Angas Parsons.....	1,074	288	100	1,262
Bonython Prize.....	—	200	200	—
Justin Skipper.....	428	71	40	459
Roy Frisby Smith.....	366	237	—	603
R. W. Bennett Prizes & Medal.....	530	153	60	623
Stow.....	216	122	120	218
Taxation Institute of Australia.....	—	—	100	100 Dr.
Thomas Gepp.....	480	88	50	518
Law Society Centenary.....	100 Dr.	100	100	100 Dr.
Baker Scholarship.....	15,506	2,551	—	18,057
<i>MATHEMATICAL SCIENCE</i>				
Amin Hasan Abdi.....	138	83	—	221
E. A. Cornish Memorial.....	208	131	75	264
J. R. Wilton.....	26	36	—	62
<i>MEDICINE</i>				
Archibald Watson.....	151	49	16	184
Barbara Meyler Memorial.....	180	218	200	198
Bertha H. Sudholz.....	4,082	807	100	4,789
Carnation Company.....	—	—	50	50 Dr.
Christopher & John Campbell.....	305	131	75	361
Dr. Chas. Gosse Lectureship.....	2,418	759	92	3,085
Dr. Davies-Thomas.....	289	149	80	358
Everard.....	569	257	150	676
Elder.....	—	20	20	—
Eugene Abraham Matison.....	903	190	—	1,093
Frank Hone Memorial.....	—	—	32	32 Dr.
H. K. Fry.....	108	88	50	146
Ian Furler.....	283	320	598	5
J. B. Cleland.....	95	36	10	121
Keith Sheridan.....	2,475	727	320	2,882
Lister.....	185	38	12	211
Lynda Tapp—Physiology.....	694	513	325	882
Mead Johnson Paediatrics.....	53	—	—	53
Roche Products.....	—	—	20	20 Dr.
Ruth Heighway Memorial.....	248	162	182	228
Shorney.....	632	263	—	895
Sir Trent de Crespigny Memorial.....	—	—	50	50 Dr.
Smith Kline and French.....	100 Dr.	100	100	100 Dr.
T. L. Borthwick Memorial.....	107	31	32	106
W. A. Dibden.....	—	—	50	50 Dr.
William Gardner.....	315	417	370	362
Wood Jones & Herbert John Wilkinson.....	6,271	1,429	662	7,038
Sir Hugh Cairns Memorial.....	1,540	446	110	1,876
Everard Terence Hearn Studentship.....	—	154	—	154
John Barker Scholarship.....	7,372	1,337	—	8,709
T. G. Wilson Travelling Scholarship.....	2,290	729	—	3,019
Alfred & Ferrers Scammell Fellowship.....	4,950	—	4,950	—
<i>MUSIC</i>				
Adelaide Choral Society.....	—	17	—	17
Clement Q. Williams.....	273	132	70	335
Dr. Ruby Davy.....	586	158	—	744
Florence Cooke Violin.....	131	42	—	173
H. Brewster-Jones.....	181	67	—	248
Lucy Josephine Bagot.....	175	122	66	231
Iris M. Colly.....	1,062	99	200	961
John Robert Mitchel Violin.....	—	22	—	22
Robert Whinham.....	133	42	15	160
Alexander Clark Memorial.....	456	137	49	544
Alex Burnard Scholarship.....	751	242	200	793

(Continued next page)

THE UNIVERSITY OF ADELAIDE

NORTH TERRACE

Schedules—Capital Accounts

Prizes and Scholarships

Name	Opening Balance 1/1/80	Income	Expenditure	Closing Balance 31/12/80
Schedule I (continued) (Prizes unless indicated)	\$	\$	\$	\$
Anders & Reimers Scholarship.....	1,491	374	297	1,568
Angela Lakin Memorial Scholarship.....	1,390	358	—	1,748
Daisy Burmeister Salotti Scholarships.....	2,975	771	200	3,546
E. Harold Davies Scholarship.....	690	207	41	856
Eugene Alderman Scholarship.....	752	250	99	903
Frederick Bevan Memorial Scholarship.....	582	233	99	716
Frederick E. Baxendale Scholarship.....	541	248	120	669
Gladys Lloyd Thomas Scholarship.....	492	176	72	596
Guli Magarey Scholarship.....	379	145	60	464
Josephine Christiansen Organ Bursary.....	413	109	150	372
Lieunau.....	243	268	—	511
Maud Puddy Scholarship.....	585	204	81	708
Mrs. Arno Pontt (May Gepp) Scholarship.....	228	123	—	351
Norman Chinner Scholarship.....	311	167	—	478
Selborne Moutray Russell Scholarship.....	1,878	483	90	2,271
J. Varley Scholarship.....	1,456	435	198	1,693
William Silver Scholarship.....	1,642	699	124	2,217
L. Richardson Scholarship.....	909	77	250	736
Allans Music Scholarship.....	2	400	300	102
E. W. Stevens Scholarship.....	364	920	500	784
James Whitehead Scholarship.....	3	89	—	92
Michael Robert Poag Scholarship.....	—	21	—	21
Athol Lykke Award.....	1,294	458	—	1,752
Elder Overseas Scholarship.....	9,734	2,964	3,600	9,098
Peter Battye Donation.....	1,513	151	—	1,664
John Bishop Memorial Fund.....	13,609	1,286	1,750	13,145
Thelma Dent Memorial Scholarship.....	—	260	—	260
<i>SCIENCE</i>				
C.S.R. Chemicals.....	—	200	200	—
Elsie Marion Cornish.....	632	114	—	746
Ena Orrock Lewcock Award.....	61	81	50	92
J. G. Wood Memorial.....	555	138	95	598
Michael Smyth Memorial.....	38	245	200	83
Sir Kerr Grant Memorial.....	25	25	25	25
* Sir Ronald Fisher—Genetics.....	476	78	420	134
Tate Memorial Medal Fund.....	210	30	92	148
Professor Sir Geoffrey Badger.....	132	314	200	246
Constance Eardley.....	—	514	—	514
Ernest Ayers Scholarship.....	2,291	629	116	2,804
James Barrans Scholarship.....	3,043	885	475	3,453
John Bagot Scholarship & Medal.....	2,670	363	242	2,791
Rennie Scholarship.....	182	86	35	233
* Includes capitalization of accumulated income				
<i>MULTI-DISCIPLINARY</i>				
Mabel Tapp—Matriculation Maths.....	267	158	100	325
William Culross.....	441	541	100	—
Chapman Memorial Scholarship.....	2,238	617	200	2,655
Eric Smith Scholarship.....	756	206	—	962
Hartley Studentship.....	660	181	70	771
J. E. Jenkins Scholarship.....	3,965	2,075	1,800	4,240
John L. Young Scholarship.....	633	386	150	869
J. R. Barker Scholarship.....	583	1,874	1,350	1,107
R. K. Morton Scholarship.....	721	333	150	904
Sir Ronald Fisher Memorial Scholarship.....	1,741	425	110	2,056
St. Alban Scholarship.....	536	83	619	—
Thornber Bursary.....	427	131	45	513
W. Donnithorne Award.....	9,841	1,644	—	11,485
Bailleau Research Scholarship.....	14,877	3,087	—	17,964
David Murray Scholarship.....	1,767	987	500	2,254
George Fraser Scholarship.....	4,877	6,673	2,328	9,222
George Murray Scholarship.....	3,638	43,930	34,653	12,915
A. R. Riddle Scholarship.....	—	34,362	4,330	30,032
	\$339,497	\$219,511	\$140,392	\$418,616

THE UNIVERSITY OF ADELAIDE

NORTH TERRACE

Schedules—Capital Accounts

SCHEDULE 2

Library Funds

	\$
T. E. Barr Smith Endowment Income.....	15,028
Sir William Mitchell Endowment Income.....	8,354
Elizabeth Jackson Fund Income.....	1,148
A.M.A.	7,717
A.M. Simpson Income	2,683
Bedford Industries	322
Australian Dental Association	2,122
Herbert Shorney Memorial	243
Library Deposits	428
Sir Henry Newland Bequest	651
Sir Mark Mitchell—Periodicals Income	439
General Donations	604
G.M. Badger	11,296
Violet de Mole.....	830
A. J. Schulz.....	6,720
Sir Mark Mitchell Bequest	2,121
J. C. Earl Estate	7,928
Special Collection	10,667
	<u>\$79,301</u>

SCHEDULE 3

Special Funds

	\$
A.M.P. Loan for Union Building.....	603,073
Flexibility Fund (private income).....	93,040
Income Carried Forward.....	629,058
Engineering Services Programme Fund.....	569,711
Consulting and Research	157,434
Endocrinology	429,792
Medical Research Committee	260,635
Anonymous Donation—Medical School.....	135,645
Australian Journal.....	37,551
E. W. Benham Bequest—Income	2,972
J. S. Davies Bequest—Income	636,546
Reginald Walker Bequest.....	9,923
Other Special Purposes.....	813,449
Realization of Surplus & Obsolete Equipment	31,222
Long Service Leave Provisions (Outside Grants etc.)	43,374
Outside Research Grants	631,046
Provisions for 27th Fortnight & 4% Work Value	825,756
Workmen's Compensation Reimbursement.....	148,580
Xerox Copying—Accumulated Net Income.....	36,313
Government Grant, Teaching Hospital 1980	243,000
Commonwealth Grant for Students.....	136,992
Composite Fund Income	127,885
Postgraduate Foundation in Medicine	82,646
Animal Products Research Foundation	5,703
Vehicle Replacement Account.....	24,839
Public Examinations in Music	7,834
Suspense Account	190,272
Nickel Mines of Australia	29,912
Adelaide University Science Assoc. Trust Fund	24,686
Provision for Long Service Leave	43,397
Insurance Refunds.....	17,918
Student Loan Fund.....	29,449
Postgraduate Committee in Dentistry.....	4,074
Gwen Michell Medical Research.....	160,075
Lady Barr Smith Memorial Fund	8,162
Surplus on sale of Shares	709,019
Provision for Administration Computer	130,000
Provision for Transmission Electron Microscope.....	40,000
University of Adelaide Foundation	43,631
Early Retirement Fund.....	49,400
Mrs. D. E. Mortlock (Martindale Hall).....	21,119
Friends of the Elder Conservatorium.....	1,495
	<u>\$8,226,628</u>

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

WAITE INSTITUTE

SCHEDULE 4

<i>Unexpended Funds</i>	\$
Private Income carried forward	41,714
Insurance Refunds	3,166
J. S. Davies Bequest	108,902
Engineering Services Savings	19,098
A. Hannaford Estate—Income	30,952
Outside Grants	270,601
Consulting Funds	9,466
Motor Vehicle Replacement Fund	37,788
Realization Surplus & Obsolete Equipment	3,472
Sundry Balances	141,222
Funds provided for Charlick Property	148,000
J.A.T. Mortlock Estate Income	35,000
	<u>\$849,381</u>

NORTH TERRACE

SCHEDULE 5

<i>Cash, Debtors and Stocks</i>	\$
Petty Cash	500
Petty Cash—Departmental	8,376
Stores, Uniforms and Petrol	20,854
Investment Interest accrued	18,682
Superannuation Investment Interest accrued	84,873
Short Term Investment Interest accrued	208,465
Commonwealth Government 1980 Recurrent Grant—Balance due	459,000
Sundry debtors	125,875
Anti-Cancer Foundation	62,527
Advance Payments	73,078
Sundry Balances	290,532
Commonwealth Student Loans	48,518
Non-Collegiate Housing Board	131,669
Patent Accounts	20,265
S.A.T.A.C.	20,330
	<u>\$1,573,544</u>

THE UNIVERSITY OF ADELAIDE

Schedules—Capital Accounts

NORTH TERRACE

SCHEDULE 6

Buildings in Progress

	\$
Union Complex Additions	603,073
101 Finnis Street	61,989
R.A. Fisher Laboratories	37,509
Medical Sciences Building	7,601,831
148 Mackinnon Parade	103,413
122 Mackinnon Parade upgrading	23,623
	<u>\$8,431,438</u>

WAITE INSTITUTE

SCHEDULE 7

Cash, Debtors and Stocks

	\$
Petty Cash	100
Advance Account	1,000
Imprest for Casual Wages	5,000
Sheep	10,721
Bulk Solvents	7,661
Mortlock Sheep	19,562
Morlock Cattle	4,900
Mortlock Cattle Account	1,701
	<u>\$50,645</u>

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>ARCHITECTURE and TOWN PLANNING</i>	South Australian Housing Trust	Research into aspects of low/medium density metropolitan housing	12	—
	Premier's Department	S.A. Urban & Regional Planning Register	572	—
	Department of Home Affairs	History of brickmaking	—	5,233
	Department of Transport	N.E.A.P.T.R. severance study	4,685	—
	Department of Environment	National Estate grants	5,678	990
	State Heritage Commission	History of winery buildings	—	8,517
<i>ARTS</i> Anthropology	Australian Research Grants Committee	Urbanization processes in a regional context	11,602	5,559
	Central Adelaide Regional Council for Social Development	Grant for research	521	—
Centre for Asian Studies	The Japan Foundation	Tutorship in Asian Studies	13,142	6,757
	Australian Research Grants Committee	Rural development planning in China	6,668	268
Classics	Australian Research Grants Committee	Pompeii—a study of its houses and their decoration	—	16,662
Education	Education Research & Development Committee	Ethnic families and children's achievements	—	2,500
	Education Research & Development Committee	The Hindmarsh Project	6,297	97
	Curriculum Development Centre	Rationale for education of a multi-cultural society	3,908	—
English	Australian Research Grants Committee	William Blake's use of the Bible; his illustrations to Young's night thoughts	6,795	7,067
	Australian Research Grants Committee	Early imprint project South Australia	13,758	18,169
	Australian Research Grants Committee	Aspects of Australian culture and society	13,988	4,263
	Ian Potter Foundation	Support for overseas study—Dr. A. Brissenden	500	—
	Australia Council—Literature Board	Writer-in-residence	—	2,200

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
ARTS (Ctd) Geography	Australian Research Grants Committee	Aboriginal children and adolescents in South Australia with particular reference to juvenile delinquents and children under welfare control	—	17,788
	Australian Research Grants Committee	Regional variations in weathering and land-form development on granitic rocks	8,636	8,135
	Department of Aboriginal Affairs Department of Local Government	Employment Survey of recent trends and forecasts of population development applicable to planning in South Australian Local Government areas	—	4,457
	Department of Housing and Urban Affairs	Low rent board and lodging in Adelaide	4,832	645
History	Australian Research Grants Committee	The correspondence of Sir John Lowther 1688-1698, edited for the British Academy	—	7,469
	Australian Research Grants Committee	Fascism and society: the case of the Netherlands 1931-1940	—	344
	S.A. Department of Agriculture & Fisheries	History of bovine pleuro-pneumonia	7,205	—
Politics	Australian Research Grants Committee	Thomas Playford (1837-1915): A biography of a colonial and federal politician	6,587	—
	Advisory Council on Inter-Government Relations	Research assistance	929	—
Psychology	Australian Research Grants Committee	Choice, preference, and control as motivational determinants in the context of sensory reinforcement behaviour	13,246	15,367
	Australian Research Grants Committee	Attention, strategy and reaction time, with special reference to the effects of fatigue, age, and mental handicap	14,740	12,986
	Bedford Industries Inc. Education Research & Development Committee	Research Fellowship Grant for research	16,293 2,210	17,107 —
	Office of Aboriginal Affairs The Nuffield Foundation	Grant for research Investigation of characteristics of hyperactive children	— 34,449	545 5,935

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$	
<i>ARTS</i> (Ctd)	Department of Transport S.A. Department of Transport	Postgraduate scholarship Psychological factors in the design of workable road closure schemes	10,037 120	— 4,215	
	Neurosurgical Research Foundation Channel 10 Research Foundation	Hyperkinetic impulse disorder in children Hyperactive impulse disorder in children: performance measures and a test of a motivational theory	— —	1,000 6,700	
	Australian Associated Brewers	Predisposing and precipitating female alcoholism	—	308	
	Education Research and Development Committee	Psychological effects of unemployment in school leavers	—	5,994	
	<i>DENTISTRY</i> Dental Health	The Australian Society of Orthodontists' Foundation for Research and Education Colgate Palmolive Pty. Ltd. Australian Dental Research & Education Trust	Grant for research Research in dental health A morphometric and stereological investigation of the animal and human periodontal ligament	— 36,932 —	1,148 6,415 9,542
Oral Biology		Australian Research Grants Committee	A comparative study of storage and release of neurohypophysial hormones in the laboratory rat and some xeric native rodents e.g. <i>notomys alexis</i> and <i>pseudomys australis</i>	6,615	4,908
		N.H. & M.R.C. N.H. & M.R.C.	Postgraduate scholarship Microenvironmental effects on epithelial cell responses relative to tissue integrity	— 19,761	9,971 —
	N.H. & M.R.C.	Studies on the cariogenic microorganism, <i>streptococcus mutans</i>	1,639	1,732	
	N.H. & M.R.C.	Genetic studies of craniofacial morphology and growth	12,603	900	
	Australian Dental Research & Education Trust	Microbiological studies on the epidemiology of dental caries	138	95	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>DENTISTRY</i> (Ctd)	National Heart Foundation	The role of hyaluronic acid and the link proteins in the maintenance of arterial integrity	10,588	12,000
	Anti-Cancer Foundation South Australian Government } Australian Federal Police }	Grant for research Forensic odontological studies in criminal investigation and mass disaster identification	643	1,409
			—	48,240
Restorative Dentistry	N.H. & M.R.C.	Long-term clinical success and failure rates of newer dental materials	400	—
	N.H. & M.R.C. Australian Dental Research and Education Trust	Postgraduate scholarships Grant for equipment	8,260 1,886	11,310 5,649
<i>ECONOMICS</i> Economics	Australian Research Grants Committee	Technological change in Australian agriculture development	4,393	7,484
	Australian Research Grants Committee	Industrial relations under Prime Minister Chifley (1945-9)	6,437	7,935
	Australian Research Grants Committee	A study of innovative behaviour in the diffusion of trace element technology	4,502	—
	Department of Transport	Professional Fellowship	—	44,137
	Reserve Bank—Economic and Financial Research Fund	Impacts of Australian monetary policy	6,457	1,676
	Reserve Bank—Economic and Financial Research Fund	The effects of concentration and tariffs on manufacturing industry	—	88
	Reserve Bank—Economic and Financial Research Fund	Economic effects of tax policy	—	13,906
	Wool Research Trust Fund	Postgraduate programme in wool economics	23,669	20,568
	Wool Research Trust Fund	Fellowship—diffusion of objective measurement	7,609	7,096
	S.A. Department of Transport	Scholarship	4,257	4,355
S.A. Department of Transport	Survey of bicycle usage	200	506	
S.A. Department of Transport	Economic futures study	2,500	—	
Reserve Bank—Rural Credits Development Fund	The structure of the market for Australian wool	447	208	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>ECONOMICS</i> (Ctd)	Reserve Bank—Rural Credits Development Fund	Diffusion of trace element technology	3,695	—
	Reserve Bank—Rural Credits Development Fund	Investigation into Australian transport industry	462	—
	Reserve Bank—Rural Credits Development Fund	Market size and auction price—an experiment	—	882
	Australian Financial System Inquiry	Consultancy on foreign banks	—	4,141
	Australian Road Research Board	An analysis of traveller decision making	—	7,561
<i>ENGINEERING</i> Chemical Engineering	Australian Research Grants Committee	Very low-pressure pyrolysis of unsaturated hydrocarbons	19,653	22,118
	Australian Research Grants Committee	Alloy carbide precipitation in austenitic manganese steels	—	18,473
	Esso Standard Oil (Aust.) Ltd.	General support for research in Chemical Engineering	192	524
	State Energy Research Advisory Committee	Alternative sources of energy	17,922	—
	State Energy Research Advisory Committee	Fluorocarbon absorption systems	—	6,752
	N.H. & M.R.C. Australian Iron and Steel Pty. Ltd.	Postgraduate scholarships Blast furnace stoves	14,128 —	9,917 13,338
Civil Engineering	Australian Research Grants Committee	A method for field measurement of strength and settlement parameters for stiff clays	7,512	13,537
	Australian Research Grants Committee	Fatigue resistance of partially prestressed concrete members	—	13,328
	Australian Road Research Board	Shrinkage and creep of high strength concrete	125	1,100
	Australian Road Research Board	Design charts for large span metal arch culverts	3,028	2,444
	Engineering & Water Supply Department South Australian Salt Damp Research Committee	Management of water resources in the Little Para river area Salt damp research	4,116 14,389	10,609 13,688

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>ENGINEERING</i> (Ctd) Civil Engineering (Ctd)	Australian Welding Research Association	The effect of root gaps on static and cyclic strengths of cruciform welded joints	—	284
	Department of Transport	Scholarship	999	306
	Victorian Railways	Culvert research—flexibility culvert structures	37,904	27,076
	S.A. Department for the Environment	Operation of a computer based wave recording system	—	16,438
	Coast Protection Board	Vehicle/Track interaction studies	—	17,294
	Railways of Australia	Redcliff wave studies	—	1,223
	S.A. Department of Marine and Harbours	Torrens Weir calibration model	—	7,887
Electrical Engineering	Australian Research Grants Committee	Passive code responding devices	5,835	15
	Australian Research Grants Committee	A study of memory hierarchies at the micro-code control store level	—	3,535
	Esso Standard Oil (Aust.) Ltd.	General support for research	—	200
	Electrical Research Board	System voltage and damping control	2,194	—
	Electrical Research Board	Controllers for multi-machine power systems	13,981	670
	Radio Research Board	Fast real time digital processor hardware	837	—
	Radio Research Board	Integration of the passive subharmonic transponder	653	408
Mechanical Engineering	Radio Research Board	Method of measuring unbalance in balanced antenna configurations and evaluation of influence on unwanted side lobes	—	5,022
	Radio Research Board	Splicing speech signals in N dimensions	2,095	4,029
	Australian Wool Corporation	Research Fellowship—study of ultrasonic ranging systems—measurement performance in a device to provide guidance information for an automatic wool shearing system	—	21,174
	Channel 10 Children's Medical Research Foundation of S.A. Inc.	Communication aids and control devices utilising eye movements	—	968
	Australian Research Grants Committee	Gravitational stability and atmospheric turbulence	18,760	17,352
	Australian Research Grants Committee	Effects of flow disturbances on noise radiation from pipes	21,024	7,471

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>ENGINEERING</i> (Ctd) Mechanical Engineering (Ctd)	Australian Research Grants Committee	Study of sound radiation by holography	9,620	18,232
	Australian Research Grants Committee	Natural-convective heat transfer in an inclined channel with flow restrictions at inlet and exit	300	300
	Australian Research Grants Committee	Flow control in wide angle diffusers	13,951	—
	National Coal Research Committee	Research on a coal-fired rotating fluidised bed combustor	7,909	—
	S.A. Dept. of Industrial Affairs and Employment Grant, Spence & Associates Pty. Ltd.	Noise control research programme	41,011	74,321
	State Energy Advisory Committee	General support for the advancement of engineering	—	1,259
	Department of Aboriginal Affairs	Mixing mechanisms and their enhancement for combustion of fuels	30,766	27,523
	Department of National Development and Energy	Solar powered bore pump	—	8,294
	Department of National Development and Energy	Thermal energy systems synthesis	—	13,864
<i>LAW</i>	Department of National Development and Energy	Mixing enhancement for combustion flows	—	26,339
	Department of National Development and Energy	Coal fired rotating fluidised bed combustion	—	108
	Australian Research Grants Committee	An annotated bibliography of primary and secondary source materials on Australian legal history	16,300	11,318
<i>MATHEMATICAL SCIENCES</i> Applied Mathematics	Government of South Australia	Royal Commission into the non-medical use of drugs	857	—
	Department of Environment	Environmental impact procedures project	2,528	—
	Australian Research Grants Committee	Development of three dimensional spatial model of tide propagation in shallow waters	4,100	5,335
	Australian Research Grants Committee	Mathematical models for performance and congestion control in overload telecommunications networks	17,613	—

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>MATHEMATICAL SCIENCES</i> (Ctd) Applied Mathematics (Ctd)	Australian Research Grants Committee	A new analytical method for the calculation of body-induced free-surface water waves, and its experimental verification	12,708	11,774
	Australian Research Grants Committee	Study of fracture in fibre reinforced materials	6,338	7,530
	Australian Research Grants Committee	The boundary integral equation method for the numerical solution of problems in engineering	12,527	13,245
	Australian Research Grants Committee	Application of the mathematical analysis to the non-invasive study of the in vivo mitral valve tissue	8,067	13,482
	S.A. Department of Transport	Fellowship	—	19,312
Mathematical Physics	Australian Research Grants Committee Department of Science	Massless fields and C.C.R.'s Queen Elizabeth II Fellowship—Lohe	19,248 22,205	21,320 15,674
Pure Mathematics	Department of Science Rothmans University Endowment Fund	Queen Elizabeth II Fellowship—Carey Fellowship	20,320 —	251 3,804
<i>MEDICINE</i> Anatomy	N.H. & M.R.C.	Effect of lactation on ovarian follicular activity in the mouse	891	13,143
Clinical Pharmacology	N.H. & M.R.C.	Drug toxicology in isolated hepatocytes	10,144	11,017
	N.H. & M.R.C.	Clinical pharmacology of salicylates in patients with rheumatoid disease	—	11,201
	N.H. & M.R.C.	Extra neuronal uptake and metabolism of catecholamines	—	13,967
	National Heart Foundation The Wenkart Foundation	Catecholamine metabolism in blood vessels The effect of total and partial blindness on patient compliance with medication requiring self-administration	9,244 —	10,467 2,050

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>MEDICINE</i> (Ctd) Community Medicine	Australian Research Grants Committee	A biography of Timothy Augustine Coghlan	320	280
	Australian Research Grants Committee	The practice of obstetrics and gynaecology in Australia 1850-1975	9,133	2,622
	A.N.Z.S.C.H.E.R.C.H.	Grant for research	1,101	6,524
	Commonwealth Department of Health	Evaluation of home help services	3,649	46,080
	Commonwealth Department of Health	Kit evaluation of primary care	10,021	23,051
	Education Research & Development Committee	Teachers, their context and how they cope with it	15,268	—
	Hospitals & Health Commission	Randomised control trial of home help	8,868	—
	S.A. Health Commission	Accommodation, domiciliary care and medical rehabilitation of the elderly	—	1,244
Medicine	Sudden Infant Death Research Foundation	To explore the thesis that some SIDS death may be due to toxins from isolated cases of clostridal food poisoning	—	3,804
	N.H. & M.R.C.	Studies on the specific local and systemic antibody responses to enteric bacteria in ulcerative colitis	17,327	—
	N.H. & M.R.C.	Postgraduate scholarships	12,151	23,861
	N.H. & M.R.C.	Postgraduate scholarship	1,756	—
	Queen Elizabeth Hospital Research Foundation	Studies of the B ₁ -B ₂ differentiation step	—	3,000
	Smith, Kline & French Laboratories Ltd.	H ₂ -receptor antagonists & agonists	28,274	29,629
	Pharmaceutical Industry Donors	General support for research in clinical pharmacology	22,215	18,481
	Australian Tobacco Research Foundation	The effects of smoking on colostral and milk antibody preparation	66	—
	Australian Tobacco Research Foundation	The effect of smoking on plasma lipoproteins in heart patients	—	9,208
	Education Research and Development Committee	The development of problem-based criterion referenced test of the clinical competence of medical students	10,570	—

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>MEDICINE</i> (Ctd) Medicine (Ctd)	Fishing Industry Research Committee	Study of mercury compounds in fish	1,245	170
	Anti-Cancer Foundation	Studies in B ₁ and B ₂ lymphocyte differentiation in vitro	—	1,457
	Anti-Cancer Foundation	Chemistry of photoradiation therapy in malignant tumors	—	8,831
Obstetrics & Gynaecology	N.H. & M.R.C.	Deuterium-labelled steroids for study of steroid hormone production and metabolism in humans	—	24,048
	N.H. & M.R.C.	The role of the pineal gland in reproduction	14,190	36,812
	N.H. & M.R.C.	Intra ovarian factors in the regulation of ovarian function	15,112	18,697
	N.H. & M.R.C.	Specific versus non-specific treatment of pelvic congestion	158	158
	N.H. & M.R.C.	Development and use of an in vitro placental perfusion model for the study of the endocrinology or parturition in the human	6,033	11,369
	N.H. & M.R.C.	Neonatal body water turnover as an index of perinatal morbidity	9,966	12,060
	Hospitals & Health Services Commission	Assessment of the efficiency & effectiveness of obstetric services	39,133	19,339
Paediatrics	George Aitken Research Trust	General support for research	—	1,228
	Sandoz Australia Pty. Ltd.	General support for research	—	410
	Adelaide Children's Hospital Research Trust	Lipid & apoprotein composition of plasma lipoproteins in relation to diabetes & familial hypercholesterofaemia in childhood	2,498	6,119
	Adelaide Children's Hospital Research Trust	Research in paediatrics	23,628	4,189
	Adelaide Children's Hospital Research Trust	Bioavailability of cimetidine, metronidazole and tinidazole in children	—	8,472
The Life Insurance Medical Research Fund	Adelaide Children's Hospital Research Trust	Immunological and neurochemical studies in hyperbilirubinaemic guinea rats	—	3,354
	The Life Insurance Medical Research Fund	The biochemical basis of mode of action of various coronary vasodilators	476	76

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
MEDICINE (Ctd) Paediatrics (Ctd)	Channel 10 Children's Medical Research Foundation	Blood & urinary catecholamines in small-for-dates babies	64	3,299
	Channel 10 Children's Medical Research Foundation N.H. & M.R.C.	Receptor assay for serum somatomedin	—	4,508
	Clive and Vera Ramaciotti Foundation	Immunopharmacology of antimicrobial compounds Grant for research	— —	13,788 1,000
Pathology	National Heart Foundation	Study of vascular smooth—muscle cells in culture	482	—
	Anti Cancer Foundation	Investigation of the factors controlling transformation <i>in vitro</i> of human cervical epithelium by <i>Herpes Simplex Virus</i> and the relationship of these events to progression of human cervical neoplasms	—	11,621
	N.H. & M.R.C.	Postgraduate scholarships	9,828	11,403
	N.H. & M.R.C.	Investigation of the factors controlling transformation <i>in vitro</i> of human cervical epithelium by herpes simplex virus	—	12,141
	N.H. & M.R.C.	Effect of particulate materials of orthopaedic interest on tissues and cells <i>in vivo</i> and <i>in vitro</i>	—	11,764
Psychiatry	Department of Science and the Environment	Environmental factors inducing changes in the reproductive cycle of the Australian sea lion <i>neophoca cinerea</i> —a threatened species	—	1,168
	N.H. & M.R.C.	Depression and chronic pain	12,741	13,574
	N.H. & M.R.C.	Psychophysiological functioning in pain clinic patients	—	12,681
Surgery	Roche Products Pty. Ltd.	General support for research in psychiatry	100	—
	Anti-Cancer Foundation	Readership in clinical oncology	50,155	56,097
	Anti-Cancer Foundation Australian Associated Brewers	Grant for research Effects of alcohol on pancreatic blood flow in dogs	6,951 —	2,512 2,000

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>MEDICINE</i> (Ctd) Surgery (Ctd)	N.H. & M.R.C.	Heart rate and venous return as determinants of cardiac output	—	15,889
	N.H. & M.R.C.	Haemorrhage and the open-loop sinus baroreceptor reflex in the unanaesthetized rabbit	14,280	—
	N.H. & M.R.C.	Effects of hormonal stimulation on changes of regional pancreatic blood flow in unanaesthetized dogs	—	5,057
	N.H. & M.R.C.	Carotis baroreceptor reflexes in the conscious rabbit during exercise	1,979	—
	Clive and Vera Ramaciotti Foundations	Peripheral and central interactions with the carotid sinus baroreceptor reflex	—	10,909
<i>MUSIC</i>	Australian Research Grants Committee	The life and work of Jean-Nicolas Bouilly (1763-1842)	7,491	4,382
	Australian Research Grants Committee	The music of German expressionism and its relation to Jugendstil	4,560	6,433
	Australia Council	Fellowship in composition	5,331	18,421
	Australia Council	Programme in music—education for Aborigines in South Australia	75,576	66,825
	Australia Council	Drama Festival	3,670	—
	Premier's Department	Programme in music—education for Aborigines in South Australia	1,208	—
	Department of Aboriginal Affairs	Special work project—interpreter for Aboriginal music programme	1,276	—
	Premier's Department S.A.	Composition fellowship	15,758	—
	S.A. Churches of Christ Youth Choir	Aboriginal music programme	125	13
	S.A. Premier's Department } Aboriginal Arts Board } The Myer Foundation }	Evaluation of the history of the Centre for Aboriginal studies in music	15,447	—
	Arts Grants Advisory Committee	Music studies programme	—	43,130
	Arts Grants Advisory Committee	Music camps	—	3,129
	C/W Department of Education	Music studies programme	—	2,505
Aust. Catholic Relief	Music studies programme	—	870	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
SCIENCE Biochemistry	N.H. & M.R.C.	A study of the cause of acute intermittent porphria with a view to rational therapy	32,872	37,035
	N.H. & M.R.C.	C. J. Martin travelling fellowship	12,370	25,386
	N.H. & M.R.C.	Human collagen genes and their control in disease	—	28,728
	Australian Research Grants Committee	The virus-host relationship as studied with temperate coliphages	15,488	14,670
	Australian Research Grants Committee	Vectorial transport of proteins across membranes, with special interest in the messenger RNA for extracellular proteins	44,999	23,042
	Australian Research Grants Committee	Isocitrate synthetase; its regulatory properties in the control of lipid synthesis	—	9,259
	Australian Research Grants Committee	Structure and function of RNAs of tripartite plant viruses	—	27,369
	Australian Research Grants Committee	Biochemistry of infection of the multi-component cucumber mosaic virus	11,899	—
	Australian Research Grants Committee	Nucleotide sequences and the co-ordinated control of specific eukaryotic genes	5,490	21,167
	Australian Research Grants Committee	Organisation and possible dosage compensation mechanisms of ribosomal genes in marsupial species	1,330	170
	Australian Research Grants Committee	Mechanism of exopenicillinase synthesis in <i>staphylococcus aureus</i> —is a leader peptide encoded in the exopenicillinase gene?	1,500	—
	Australian Research Grants Committee	Comparative study of the kinetic properties of the biotin-containing carboxylases	12,413	13,949
	Australian Research Grants Committee	The organisation of avian keratin genes	14,219	16,008
	Australian Research Grants Committee	Evolutionary relationships in the structure of the biotin enzymes	7,962	9,204
Australian Research Grants Committee	Structure and function of viroids	—	10,363	
Australian Wool Corporation	The use of recombinant DNA techniques for the isolation and characterization of structural genes for hair and wool keratin proteins	17,871	19,757	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
SCIENCE (Cont) Biochemistry (Ctd)	Australian Wool Corporation	Biochemical studies of mammalian skin	2,379	9,419
	Prime Minister's Department	Queen Elizabeth II Fellowships	20,008	23,715
	Reserve Bank—Rural Credits Development Fund	Virus biochemistry and molecular biology	570	—
	Reserve Bank—Rural Credits Development Fund	Development of rapid indexing methods for avacado sunblotch viroid and citrus exocortis viroid	—	6,398
	Department of Science and the Environment	Grant for travel	—	1,534
SCIENCE (Cont) Biochemistry (Ctd)	Department of Science	Queen Elizabeth II fellowship—Molloy	21,211	12,283
	Clive & Vera Ramaciotti Foundation	Investigations into the mechanism of hair growth	9,759	9,948
Botany	Australian Research Grants Committee	Biostratigraphy and palaeobotany of three southern Australian tertiary megafossil floras	3,121	2,139
	Australian Research Grants Committee	An analysis of petrified coniferous remains from the Winton area of Queensland	4,272	763
	Australian Research Grants Committee	Limnology of Adelaide water supply reservoirs	1,537	2,248
	Australian Research Grants Committee	Cuticular analysis of eocene vegetation	4,455	—
	Australian Research Grants Committee	Amino acid sequences of plant proteins	8,829	9,387
	Australian Research Grants Committee	Links between metabolism and ion uptake in plant cells	7,212	6,152
	Australian Research Grants Committee	Ion movements and phosphorylation in plant mitochondria and chloroplasts	11,343	10,062
	Australian Research Grants Committee	The comparative morphology, taxonomy and relationships of the marine algae of southern Australia. (a) An algal flora (b) Critical survey of the <i>rhodophyta</i> (c) Completion of certain generic revisions	20,791	21,465
	Australian Research Grants Committee	Basis for intervention against arid zone vegetation deterioration	—	25,520
State Electricity Commission of Victoria	Study of macroplant fossils in the Latrobe Valley—coal measures	19,719	22,207	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$	
SCIENCE (Ctd) Botany (Ctd)	Department of the Environment	The phenology and productivity of three dominant Southern Australian <i>phaeophyta</i> in Gulf St. Vincent	—	4,942	
	C.S.I.R.O.	Arid zone research	—	51	
	S.A. Department of the Environment	Arid zone research	2,202	7,938	
	Australian Water Resources Council	Natural populations of phytoplankton and inorganic particles	1,171	—	
	Alcoa of Australia Ltd.	Study of fossils in brown coal deposits at Anglesea, Victoria	16,483	7,044	
	Wool Research Trust Fund	Trend analysis in sheep station vegetation productivity	7,103	75	
	Wool Research Trust Fund	The grazing of vegetation in arid areas	213	588	
	Economic Geology	Australian Research Grants Committee	A geochemical study of lead-silver-zinc vein deposits in the Willyama Complex, Broken Hill, N.S.W.	—	1,123
		Australian Research Grants Committee	Remote sensing of geological targets using vector analysis of LANDSAT band ratios based on airborne spectroradiometer data	30,685	4,620
		Australian Research Grant Committee	Application of thermoluminescence (TL) of quartz and carbonates to problems in Economic Geology	—	11,820
Esso Exploration (Aust.) Ltd.		Studentship	550	2,650	
Broken Hill Mining Managers' Assoc.		General support for research in Economic Geology	1,150	—	
E.R.D.D.G.		Airborne detection of natural maise oil seepages	—	370	
India Australia Science Agreement		Grant in aid	2,308	—	
Genetics	Australian Research Grants Committee	Genetics of somatic cell hybrids. II. Detailed cytogenetic and biochemical characterization of marsupial X eutherian hybrids	17,663	—	
	Australian Research Grants Committee	Nature and structure of genes controlling obligate parasitism	21,713	9,137	
	Australian Research Grants Committee	Scientific correspondence of R.A. Fisher	20,563	21,191	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
SCIENCE (Ctd) Genetics (Ctd)	Australian Research Grants Committee	Genetics of the marsupial <i>sminthopsis crassicaudata</i>	7,591	7,855
	Anti-Cancer Foundation	Comparison of a number of alkylating agents	—	1,248
	M.A. Ingram Trust	Genetic systems in marsupials	—	650
Geology	Australian Research Grants Committee	Australian late precambrian glaciations in southern and central Australia	2,834	151
	Australian Research Grants Committee	Biostratigraphy and palaeontology across the precambrian-cambrian boundary in Australia	391	—
	Australian Research Grants Committee	Comparative investigation of the structure and magnetic fabrics of the basement inliers of the Adelaidean orogeny	—	718
	Australian Research Grants Committee	Nature of Archaean Crustal development: a geo-chemical-petrological investigation of silicic volcanic and plutonic complexes	19,665	19,394
	Australian Research Grants Committee	Study of reactions involving aluminosilicates and related phases in pelitic metamorphites of the Adelaide and Olary regions	591	—
	Australian Research Grants Committee	Uranium/lead isotope budget in an uranium mineralised province.	—	3,307
	Australian Research Grant Committee	Tectonic significance of the Halls Creek and King Leopold orogenic domains, Western Australia	8,566	4,900
	Australian Research Grant Committee	U/PB mineral dating of the Wootana volcanics	11,231	1,080
	Australian Research Grant Committee	Geochemical and isotopic investigations of chilled margins of mafic intrusions	1,129	1,778
	Australian Research Grant Committee	Structure and petrology of Enderby Land, Australian Antarctic Territory	240	2,266
	Australian Research Grant Committee	Genesis of microcrystalline silica deposits in South Australia and adjacent Central Australia	1,598	101
Australian Research Grant Committee	Proterozoic age determinations in the Mount Painter block	—	5,578	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>SCIENCE</i> (Ctd) Geology (Ctd)	Australian Research Grants Committee	Geological investigations of the high grade precambrian gneisses of the vestfold hills, Australian Antarctic Territory	223	290
	Western Mining Corporation Ltd.	General support for research in Geology	—	943
	Esso Exploration (Aust.) Ltd.	Scholarship	—	30
	Various Grantors	Support for Pre-Cambrian research	483	1,390
	Department of the Environment	Sedimentary dynamics, development and stability of the mangrove shore, Port Adelaide to Middle Beach, South Australia	—	488
Mawson Institute	Australian Research Grants Committee	High latitude thermospheric winds, temperatures and electric fields	10,514	34,743
	Australian Research Grants Committee	Upper atmosphere gravity waves and winds	1,576	5,186
	Minister of Home Affairs	Cataloguing of the collection at the Mawson Institute	—	4,184
Microbiology	N.H. & M.R.C.	Induction of immunity to a metazoan parasite	26,633	30,949
	N.H. & M.R.C.	Tumour associated antigens and immunogenicity of human leukaemic cells	—	2,500
	N.H. & M.R.C.	Induction of immunity to tumours	20,488	3,099
	N.H. & M.R.C.	Immune control mechanisms at mucous surfaces	27,230	19,048
	N.H. & M.R.C.	Postgraduate research scholarships	12,356	12,151
	Australian Research Grants Committee	The biochemical steps in the immune response of invertebrates	10,574	12,314
	Australian Research Grants Committee	Outer membrane protein function with emphasis on their role in recipient functions during conjugation	33,642	35,401
	Anti-Cancer Foundation	Grant for research	9,652	—
	Anti-Cancer Foundation	Research in leukaemia	6,107	24,949
	Channel 10 Children's Medical Foundation of S.A. Inc.	Immune competence and antileukaemia immunity in children with acute leukaemia	—	3,000
Clive & Vera Ramaciotti Foundation	Grant for research	854	1,955	
Glaxo Laboratories	Grant for research	203	448	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
SCIENCE (Ctd) Organic Chemistry	Australian Research Grants Committee	Reactions of organic compounds in close-packed monolayers	14,821	16,235
	Australian Research Grants Committee	Intramolecular radical reactions	17,982	31,154
	Australian Research Grants Committee	Gas chromatography/mass spectrometric studies	5,770	—
	Australian Research Grants Committee	Ion cyclotron resonance studies	17,662	17,135
	Australian Research Grants Committee	Electron impact studies	5,177	4,302
	Australian Research Grants Committee	Some aspects of cyclo-octatetraene chemistry	15,979	911
	Australian Research Grants Committee	The synthesis of terpenoids from eremophila species	1,653	803
	Australian Research Grants Committee	Synthesis of analogues of the alkaloid, bicuculline	962	655
	Australian Research Grants Committee	Synthesis of CNS active caprolactam derivatives	16,328	3,925
	Australian Research Grants Committee	NMR studies of reactions, interactions and structures in solution	23,142	40,056
	Australian Research Grants Committee	Synthetic routes to germacranes and germacranolides. Studies on model systems	12,709	1,093
	N.H. & M.R.C.	Chemistry of photoradiation therapy of malignant tumours	—	19,758
	C.S.I.R.O. & I.C.I.	Oxidation of polyallylamines—Sirotherm project	5,552	—
	C.S.I.R.O.	Studies on the oxidation of amines	—	13,063
Australian Wool Corporation	Postgraduate scholarship	—	4,598	
Australian Wool Corporation	The synthesis and biosynthesis of perloine and related sheep toxins from <i>lolium perenne</i>	—	1,200	
Physical & Inorganic Chemistry	Australian Research Grants Committee	The role of complexing in polymerization and related reactions	2,969	2,191
	Australian Research Grants Committee	New Group IB metal chemistry	13,672	1,833
	Australian Research Grants Committee	Organometallic mass spectrometry	2,575	509
	Australian Research Grants Committee	Alkylation of dinitrogen complexes of molybdenum and tungsten	—	616
	Australian Research Grants Committee	Transport properties of gases and liquids	29,096	30,466

CALENDAR
OF
THE UNIVERSITY OF ADELAIDE
FOR THE YEAR

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About financial matters, and matters relating to the buildings and grounds: *to*

The Bursar.

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The University's telephone number is 223 4333 (228 5333 from 1 November, 1981) (Area Code: 08); and the Telex number is UNIVAD AA89141.

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>SCIENCE</i> (Ctd) Physical & Inorganic Chemistry (Ctd)	Australian Research Grants Committee	The anti-tumour activity of platinum metal complexes	14,090	—
	Australian Research Grants Committee	The interaction of DNA and polynucleotides with organic and inorganic ions	1,879	307
	Australian Research Grants Committee	Mechanism in crystal structure transformations	511	112
	Australian Research Grants Committee	Metal cluster chemistry	—	725
	Australian Research Grants Committee	Electron transfer reactions of CT excited states of transition metal complexes	19,945	13,162
	Australian Research Grants Committee	A comparative study of some metal complexes containing a single labile site with the enzyme carbonic anhydrase	622	—
	Australian Research Grants Committee	Isomeric hexamine-type cobalt (III) complexes with polyethyleneamine ligands: specific synthesis of isomers, and isomerisation reactions	840	1,000
	Australian Research Grants Committee	The interaction of biological macromolecules, particularly proteins, with small molecules	—	838
	Australian Research Grants Committee	Fluoride complexes of organometallics	22,256	36,579
	Australian Research Grants Committee	Dependence of the bulk properties of polymers on their molecular properties	7,298	5,697
	Australian Research Grants Committee	Reactions of unsaturated molecules with electron-rich transition metal complexes	10,880	16,986
	Australian Research Grants Committee	Six co-ordinate complexes of vanadium (IV)	1,953	1,384
	Australian Research Grants Committee	Polyelectrolyte systems and the production of contractile work	7,937	5,975
	Australian Research Grants Committee	The photochemistry of organometallic compounds	—	812
	State Energy Research Advisory Comm. C.S.I.R.O.	Alternative sources of energy	5,935	631
Australian Institute of Nuclear Science and Engineering	Research grant	493	461	
Flinders University	Intra-molecular electron transfer processes in metal complexes	638	334	
	Share cost X Ray Diffractometer	—	43,000	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
SCIENCE (Ctd) Physics	Australian Research Grants Committee	Medium frequency ionospheric and meteor investigations using a large antenna array	16,468	17,855
	Australian Research Grants Committee	Photodisintegration of atmospheric gases	2,347	653
	Australian Research Grants Committee	Trace constituents of the lower atmosphere	2,880	80
	Australian Research Grants Committee	Remote sensing of winds and density fluctuations in the lower atmosphere using optical methods	4,919	4,135
	Australian Research Grants Committee	Upper atmosphere winds from radio observations of meteors	3,621	4,428
	Australian Research Grants Committee	Cosmic ray anisotropy at 10^{16} eV	3,202	2,220
	Australian Research Grants Committee	Cosmic ray intensity variations since the pleistocene	21,564	3,213
	Australian Research Grants Committee	Photoabsorption in atmospheric gases	—	932
	Australian Research Grants Committee	Photoionisation of diatomic molecules	—	1,749
	Australian Research Grants Committee	Middle atmosphere VHF radar—design study	—	4,268
	Australian Research Grants Committee	Thermoluminescent dating for archaeology	4,003	2,349
	Australian Research Grants Committee	Studies of cosmic ray air showers	14,754	20,276
	Australian Research Grants Committee	Seismicity and crustal structure in South Australia	5,335	5,096
	Australian Research Grants Committee	Microearthquake activity associated with geological faults	1,300	—
	Australian Research Grants Committee	Determination of the optical constants of thin films and bulk specimens of semi-conductors and metals	1,928	696
	Australian Research Grant Committee	Atomic lifetimes by delayed correlation of photomultiplier noise signals	—	467
	Australian Research Grants Committee	Observations of upper atmosphere winds at low latitudes and during a total eclipse of the sun	5,101	3,810
Australian Research Grants Committee	The day to day variability of ionospheric currents	1,600	2,134	
Radio Research Board	Remote sensing of winds and density fluctuations in the lower atmosphere using optical methods	1,922	1,850	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>SCIENCE</i> (Ctd) Physics (Ctd)	Radio Research Board	Lower ionosphere dynamics and ionisation irregularities with special reference to the night E region	—	4,817
	World Meteorological Organisation	Data reduction for the international ozone intercomparison	—	2,446
	S.A. Museum	Thermoluminescent dating	—	819
	Australian Institute of Nuclear Science and Engineering	Low level uranium and thorium determination for archaeometry	145	—
	Bureau of National Resources	Operation of world wide seismograph system	2,081	9,880
	S.A. Department of Mines and Energy	Seismic recording programme in the south east of South Australia	19,605	4,103
	S.A. Department of Mines and Energy	Seismic recording in the Red Cliff area	2,310	15,278
	Anti-Cancer Foundation	Incandescent light source for photoradiation treatment	—	651
	U.S Air Force	Photo-absorption in molecular oxygen	9,247	15,266
Physiology	N.H. & M.R.C.	Extraneuronal uptake and inactivation of biogenetic amines	339	—
	N.H. & M.R.C.	Unloading reflex in human jaw muscles	—	5,720
	N.H. & M.R.C.	The role of the renin-angiotensin aldosterone system in foetal and neonatal life	18,271	19,457
	Australian Kidney Foundation	The role of the renin-angiotensin aldosterone system in foetal and neonatal life	3,177	—
	Life Insurance Medical Research Fund	Angiotensin and brainstem vasomotor mechanisms	—	132
	Australian Tobacco Foundation	The interaction of nicotine and renin-angiotensin system	6,113	—
	National Heart Foundation	Evolution of the renin-angiotensin aldosterone system	—	818
	Australian Research Grants Committee	Anatomical investigations of limbic connections with posterior olfactory cortex	2,197	—
	Neurosurgical Research Foundation	Strength duration curves for human peripheral nerve	480	6,989

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
SCIENCE (Ctd) Zoology	Australian Research Grants Committee	Biochemistry of elasmobranch erythrocytes	444	—
	Australian Research Grants Committee	Revision of the sub-genus <i>stigmopera</i> (castiarina) (coleoptera) (buprestidae)	—	3,688
	Australian Research Grants Committee	The evolution and phylogenetic relationships of Australian frogs	2,550	3,128
	Australian Research Grants Committee	Ecology and life history of mussels in the River Murray	287	—
	Australian Research Grants Committee	Taxonomic and ecological studies of Australian freshwater <i>amphipoda</i> and <i>atyidae</i>	6,086	8,125
	Australian Research Grants Committee	Ecology of the fan-shell <i>pinna bicolor</i> in South Australia	7,354	8,290
	Australian Research Grants Committee	Physiology of avian embryos	10,954	15,080
	Australian Research Grants Committee	Physiology of growth and moulting in nematodes, particularly parasitic species	6,068	6,193
	Utah Foundation	Survey of frogs of the north of Western Australia	2,536	3,216
	Anti-Vivisection Union	Research into substitutes for live animals	—	1,366
	Australia Water Resources Council	Ecology of fresh water mussels in the River Murray S.A.	6,951	634
	The Australian Museum	A taxonomic study of the northern Australian catfish of the family <i>ariidae</i> (pisces: cypriniformes)	—	654
	M. A. Ingram Trust	Ecology of the Kangaroo Island wallaby	32	—
	Department of Environment	Study of amphibians and macro-invertebrates in the Alligator River region	39,875	32,602
Department of National Development and Energy	Salinity as a water quality criterion and determinant in Australia	—	11,140	
Department of Science and the Environment	Report on taxonomy of the crustacea of Australian inland waters	—	3,029	
J. S. Davies Bequest	The physiology of nematodes parasitic in cattle	—	7,043	
MISCELLANEOUS Electron Microscope Unit	Australian Research Grants Committee	The permeabilities of vessels and interstitial tissues	12,555	12,795

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>MISCELLANEOUS</i> (Ctd) Road Accident Research Unit	Australian Department of Transport & Australian Road Research Board	In depth study of accidents in Adelaide urban area	8,470	2,725
	National Energy Research, Development and Demonstration Council	Energy conservation and road safety	—	32,510
	State Government Insurance Commission	Research and training in accident prevention and injury control	—	37,479
	S.A. Department of Transport	The cost of road accidents	—	16,067
	Australian Department of Transport	Study of passenger car side impact protection	111,944	1,062
	Australian Department of Transport	Survey of drink driving in Adelaide to establish levels of accident risk related to blood alcohol content		
	Australian Department of Transport	Comparison of data on police accident reports with in-depth study data		
	State Road Safety Council	Evaluation of the automotive apprentices road safety programme	15,030	4,535
	State Road Safety Council	Truck defensive driving course	646	—
	Continuing Education	Australian Department of Aboriginal Affairs	Publication of 'Alice in Wonderland' in Pitjantjatjara	242
Arts Advisory Council		Summer Music School	750	—
Australian Film Commission		Screen writers seminar	—	5,472
Commonwealth Department of Education		Audience survey of Radio 5UV	2,389	2,629
Environmental Studies	Australian Research Grants Committee	Submarine geology, sediment transport, hydrodynamics and quaternary history of the upper Spencer Gulf, South Australia	36,226	40,484
	Coast Protection board	Nearshore sediment dynamics and sedimentation in the Gulf of St. Vincent	—	12,561
Radio Station 5UV	Australian Department of Education	Radio innovation programme	1,091	840
	Australia Council—Theatre Board	"So you want to put on a play"	1,097	85
	Arts Advisory Council	Band movement in South Australia	1,101	—

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>MISCELLANEOUS</i> (Ctd) Radio Station 5UV (Ctd)	Australia Council	Community arts programme — "Writer's Radio"	145	—
	Australia Council	The history of jazz	—	6,000
	Australia Council	Australian chamber music	—	31
	Australia Council	Jazz workshop	6,338	21
	Australia Council	Writers radio	—	3,991
	Australia Council	Literature Board—In Print	400	—
	Australia Council	Authors' proof/writers' radio	1,977	2,862
	Australia Council	Music therapy in action	30	3,032
	Australian Schools Commission	"A Class of Your Own"—project	80	—
	Australian Schools Commission	Social work for teachers	202	5,323
	Australian Schools Commission	Matriculation music	6,528	—
	Australian Schools Commission	Primary school radio	2,500	3,450
	South Australian Government	Grant in aid	—	8,000
	Arts Grants Advisory Committee	South Australian writers on radio	2,844	159
	Arts Grants Advisory Committee	South Australian folk music	1,000	—
	Arts Grants Advisory Committee	Come Out 79 radio	966	—
	Arts Grants Advisory Committee	South Australian local fine music	125	879
	Arts Grants Advisory Committee	Young South Australian writers	2,000	—
	Arts Grants Advisory Committee	Over 60's radio	7,264	941
	Arts Grants Advisory Committee	National folk festival	—	3,590
Arts Grants Advisory Committee	Mannum folk festival	—	44	
			\$2,696,783	\$3,219,219
<i>WAITE INSTITUTE</i> Agricultural Biochemistry	Australian Research Grants Committee	Interactions between nitrogen and phosphorus assimilation in the symbiotic association between legumes, rhizobium and mycorrhizal fungi	—	10,036
	Australian Research Grants Committee	Engogenous acetate production and ketogenesis in sheep liver	1,520	1,500
	Australian Research Grants Committee	Isolation structure and biological activity of Agrocin 108	—	9,640

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
WAITE INSTITUTE (Ctd) Agricultural Biochemistry (Ctd)	Australian Research Grants Committee	Regulation of nitrate reduction by light, ATP and mitochondrial respiration in green plants	6,835	7,035
	Australian Research Grants Committee	Biochemistry of nitrification in nitrosomonas	16,893	20,840
	Reserve Bank—Rural Credits Development Fund	Interactions between nitrogen and phosphorus assimilation in the symbiotic association between legumes, <i>rhizobium</i> and mycorrhizal fungi	12,751	3,071
	Reserve Bank—Rural Credits Development Fund	Nitrogen fixation in legume crops	200	1,182
	College of Agriculture, Malaya	Support of postgraduate student	162	—
	International Atomic Energy Agency	Research on bacterial leaching of uranium ores	1,253	—
	Australian Wool Corporation	Interactions between nitrogen and phosphorus assimilation in the symbiotic association between legumes, <i>rhizobium</i> and mycorrhizal fungi	12,010	14,758
	Department of Science and the Environment	Grant in aid	—	1,500
	Utah Foundation	Use of photosynthetic bacteria for the production of protein and hydrogen gas from cheese whey	—	4,616
	Agronomy	Australian Research Grants Committee	The application of the ideotype concept to a barley breeding programme	8,156
Australian Research Grants Committee		Metabolism of seleno methionine in sheep	2,489	10
Australian Research Grants Committee		Growth and maintenance respiration of subterranean clover	2,415	2,147
Australian Research Grants Committee		Metabolism of threonine and isoleucine in sheep	2,510	6,268
Australian Research Grants Committee		Genetic control of nutritional characters in wheat, rye and triticale	5,243	5,168
Australian Research Grants Committee		Quantitative analysis of the genetic and environmental variation in populations of crop plants	5,935	4,868

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
WAITE INSTITUTE (Ctd) Agronomy (Ctd)	Barley Improvement Advisory Committee	Research into barley	76,277	82,734
	Reserve Bank—Rural Credits Development Fund	Breeding of a barley ideotype	481	546
	Reserve Bank—Rural Credits Development Fund	Illustrations to revision of genus <i>solanum</i>	40	10
	Reserve Bank—Rural Credits Development Fund	Animal nutritional aspects of triticale grain	16,375	21,595
	Wheat Industry Research Council	Wheat improvement research	114,347	—
	Wheat Industry Research Council	Grant for interstate travel	298	235
	Wheat Industry Research Council	Chromosome manipulations and wheat improvement	—	14,416
	Wheat Industry Research Council	The methodology of breeding wheat	—	76,753
	Wheat Industry Research Council	Genetic control of glutenins in the wheat grain	—	17,845
	Wheat Industry Research Council	Wheat breeding machinery workshop	—	24,881
	Wheat Industry Research Council	Genetic control of endosperm protein	—	7,502
	Wheat Industry Research Council	Scholarships for cereal breeding course	—	1,000
	Wheat Industry Research Council	Nitrogen accumulation by field grown legumes	—	12,673
	Wheat Industry Research Council	Field harvester with tapered thresher	—	4,590
	Wheat Industry Research Council	Glasshouse for wheat genetics and breeding research	—	450
	Wheat Industry Research Council	Grant for overseas travel	—	762
	Wheat Industry Research Council	Utilization of alien genes in wheat improvement	—	4,448
	Wheat Industry Research Council	Grant for overseas travel	—	1,120
	Australian Meat Research Committee	Studies into the summer nutrition of grazing cattle in the Mediterranean environment of South Australia	25,173	19,808
	Australian Meat Research Committee	Studies of post-partum oesterus in sheep	29,558	33,360
	Department of Science	Australian biological survey	14,062	4,702
	Food and Agricultural Organization of U.N.	Grant in aid	148	2,000
	C.S.I.R.O.	Extra mural grant for research chromosome transfer and wheat improvement	14,943	20,396
International Atomic Energy Agency	Grant in aid	89	—	

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>WAITE INSTITUTE</i> (Ctd) Agronomy (Ctd)	Australian—Asian Universities Co-operation scheme	Visiting assignment UNHAS crop physiology	—	1,243
	Australian—Asian Universities Co-operation scheme	Visit to Indonesia	—	3,163
	Wheat Industry Research Committee of South Australia	Wheat improvement research	—	798
	Wheat Industry Research Committee of South Australia	Testing and selecting potential wheat varieties on Eyre Peninsula	—	5,235
	Department of Economic Development	Ridgway resilient cone thresher	12,351	8,800
	Chamber of Commerce and Industry S.A. Inc., Stock Feed Manufacturers' Assoc. of S.A.	Triticale breeding research	382	—
	Department of Primary Industry Australian Wool Corporation	Cereal rye breeding	11,215	15,069
		Ecology and productivity of annual medic pastures	971	10,843
		Plant improvement	485	—
		Australian Asian Universities Co-operation Scheme		
Animal Physiology	Australian Research Grants Committee	Carbohydrate metabolism in the epididymis	9,937	—
	Australian Research Grants Committee	Thyroid function in ruminants: relation to food intake and growth	10,736	11,890
	Australian Research Grants Committee	Avian ecophysiology and protein synthesis rates	12,821	—
	Australian Research Grants Committee	Defective control of cholesterol metabolism in cancerous and pre-cancerous liver	10,060	—
	Australian Research Grants Committee	Physiological relationship between plasma cholesterol and the composition and func- tion of cellular and sub-cellular membranes	7,226	6,944
	Australian Research Grants Committee	Lipid turnover and carnitine uptake by the epididymis	—	6,835
	Australian Research Grants Committee	Protein synthesis rates in the ecophysiology of birds, reptiles and insects	—	7,402
	N.H. & M.R.C.	Does an elevated level of blood cholesterol have a role in the management of leukemia?	12,982	12,088

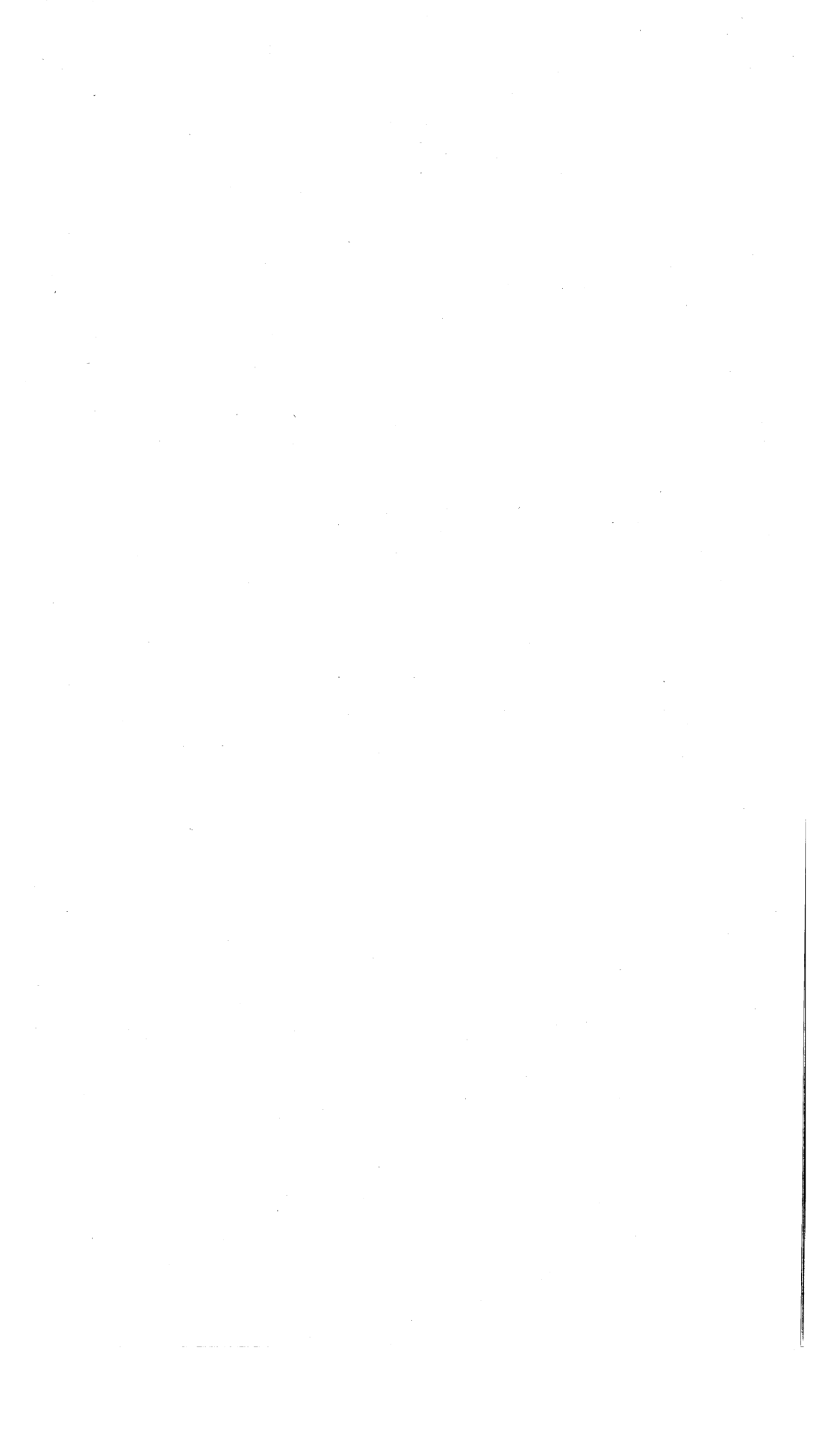
Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$	
WAITE INSTITUTE (Ctd) Animal Physiology (Ctd)	Swine Compensation Fund Advisory Committee	Earthworm culture for the profitable disposal of pig effluent	—	500	
	Australian Pig Industry Research Committee	Recovery of protein from animal waste by earthworms	2,615	—	
	National Parks and Wildlife	Wombat research	15	—	
	Rural Credits Development Fund	Surface proteins of ram sperm in maturation, and their use in promoting survival during dilution and cold storage	—	274	
	Entomology	Australian Research Grants Committee	Diapause and development in <i>heliiothis</i>	12,029	16,737
		Australian Research Grants Committee	Integrated control of insect pests of citrus and peaches	9,069	—
		Australian Research Grants Committee	Ecology of infectious diseases of <i>apis mellifera</i>	—	6,470
		Australian Research Grants Committee	The effect of physiological changes in stressed plants on populations of phytophagous insects	8,469	9,853
		Australian Research Grants Committee	Basic features on parasitism in nematodes; moulting and hatching in infective stages	12,331	378
		Australian Research Grants Committee	Identification and epizootiology of non-occluded viruses of insects	2,000	—
Australian Wool Corporation		Wool scholarship	157	—	
Australian Wool Corporation		Feasibility study of the potential of microbial agents for the suppression of the sheep blowfly	4,078	23,011	
UTAH Grant for Bridging Finance		Readership in insect pathology	19,336	66	
C.A.P.E.S.		Grant in aid	125	169	
S.A. Department of Environment—Coast Protection Board	Yorke Coast survey	5,225	792		
Australian Meat Research Committee	Control of the pastures cockchafer <i>aphodius tasmaniae</i>	9,321	40,015		
South Australian Health Commission	Mosquito monitoring with regard to Australian encephalitis programme	6,276	11,698		
S.A. Department of Agriculture & Fisheries	Grant in aid	300	700		
Australian Asian Universities Co-operation Scheme	Support for study leave	3,500	6,109		

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
WAITE INSTITUTE (Ctd) Entomology (Ctd)	Australian Asian Universities Co-operation Scheme	Travel Grant	—	2,300
	Commonwealth Development Bank	European foul brood disease	3,266	5,463
	Commonwealth Extension Services	The application of a computer model for red scale on citrus	258	8,915
	Department of Primary Industry—Commonwealth Special Research Grant	Citrus red scale research	1,466	3,661
	Reserve Bank of Australia—Rural Credits Development Fund	Epizootiology of European foul brood disease of honey bees	1,589	39,297
	Reserve Bank of Australia—Rural Credits Development Fund	Improvement of pollination of almonds and lucerne	—	341
	George Aitken Pastoral Research Trust	Aphid migration research	—	1,642
	Co-operative Almond Producers Ltd.	Grant for research	—	5,095
	United Farmers and Stockowners of S.A. Inc.	Integrated management of pests and pollinators of seed lucerne	—	4,945
	George Aitken Pastoral Research Trust	Biological control of the sheep blowfly	4,358	—
	Citrus Organization Committee	Red scale parasites	600	—
	Citrus Organization Committee	Citrus crop estimation project	—	673
	International Congress of Apiculture	Bee research	300	—
	Department of Labour and Industry, State Unemployment Relief Scheme	Potato pest research	225	—
	Criminology Research Council	Forensic implications of the development of maggots in cadavers	2,135	916
	Australian Honey Board	Epizootiology and management of European foul brood disease of honeybees in Australia	7,496	9,681
Plant Pathology	Australian Research Grants Committee	Resistance of barley to leaf scald disease and pathogenicity of <i>rhynchosporium secalis</i>	1,200	9,503
	Australian Research Grants Committee	Molecular biology of plant viruses with multipartite RNA genomes	7,547	1,750
	Australian Research Grants Committee	Structure and composition of complex plant viruses	14,581	11,993
	Australian Research Grants Committee	The basis of pathogenicity in agrobacterium	21,035	9,512

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>WAITE INSTITUTE</i> (Ctd) Plant Pathology (Ctd)	Australian Research Grants Committee	The structure, and location, in vivo, of plant virus RNA	1,200	4,845
	Reserve Bank—Rural Credits Development Fund	Biological control of soil borne plant pathogens	12,988	177
	Reserve Bank—Rural Credits Development Fund	Development and testing prototype applicator for delivery protective aerosol mixtures to pruned apricot trees and grape vines	159	—
	Reserve Bank—Rural Credits Development Fund	Relationship of the Fiji disease virus with its leaf-hopper vector	7,314	372
	Wheat Industry Research Council	The recovery of wheat plants from damage caused by <i>heterodera avenae</i>	126	8,978
	Commonwealth Department of Health	Quarantine investigations	4,336	3,727
	S.A. Department of Agriculture	Research	10,033	7,630
	Food and Agricultural Organization of U.N.	Cadang Cadang disease in coconuts	638	1,482
	Food and Agricultural Organization of U.N.	Grant in aid	14	—
	Bureau of Sugar Experiment Stations	Grant in aid	—	1,796
	I.C.I.	Postgraduate studentship	—	1,999
	C.S.I.R.O.	Studentship	—	472
	Oilseeds Research Committee	Pathogens of rape seed crops in S.A.	—	3,307
	S.A. Fruitgrowers' and Market Gardeners' Association Inc.	Travel Grant	—	41
	International Agricultural Development Service	Postgraduate fellowship	—	190
	C.S.I.R.O.	Plant virus identification and assay	19,516	15,173
	Department of Primary Industry—Commonwealth Special Research Grant	Characterization of Australian plant viruses	3,857	17,967
Plant Physiology	Australian Research Grants Committee	Accumulation of solutes by grape pericarp cells	8,002	8,736
	Australian Research Grants Committee	Effects of water stress on lipid metabolism	—	1,000
	Australian Research Grants Committee	Physiology of water deficit and grain growth in wheat	5,068	5,068

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>WAITE INSTITUTE</i> (Ctd) Plant Physiology (Ctd)	Australian Research Grants Committee	Aqueous interactions between plant hormones and phospholipid membrane components	2,500	24,427
	Australian Research Grants Committee	Basic features of parasitism in nematodes: the role of juvenile hormone in moulting and hatching	—	13,263
	Barley Improvement Advisory Committee	Research into barley	70,820	67,908
	Wheat Industry Research Council	Physiology of growth of cereal grains	17,962	23,566
	Wheat Industry Research Council	Hormones and drought resistance	—	2,000
	Wheat Industry Research Council	Grant for interstate travel	—	289
	U.N.E.S.C.O.	Grant in aid	14	—
	Australian Asian Universities Co-operation Scheme	Grant in aid	—	7,366
	Australian Asian Universities Co-operation Scheme	Grant in aid	—	2,159
	Australian Development Assistance Bureau	Grant in aid	162	—
Soil Science	Australian Research Grants Committee	Surface properties of aluminous goethites	1,160	19,200
	Australian Research Grants Committee	Soil organic fractions with biological significance	2,000	1,500
	Australian Research Grants Committee	Manipulation of surface charges and soil structure	8,134	9,664
	Wheat Industry Research Council	Study of structure of seed beds for wheat	9,898	—
	Wheat Industry Research Council	Crack distributions in untilled soil	8,955	21,364
	Wheat Industry Research Committee in S.A.	Wheat improvement research	59,281	37,647
	International Soil Congress	9th International Soil Science Congress	24	—
	Victorian Department of Agriculture	Grant in aid	—	500
	Oilseeds Research Committee	Tillage requirements for oilseed crops	10,071	12,051
	Reserve Bank—Rural Credits Development Fund	Use of low grade phosphate rock and sulphuric acid to improve phosphate availability	16,320	15,079

Faculty and Department	Source of Grant	Research Project	1979 \$	1980 \$
<i>WAITE INSTITUTE</i> (Ctd) Soil Science (Ctd)	E. & W.S. Department	Effects of alum sludge on soil structure and fertility	5,599	—
	International Rice Research Institute Department of Primary Industry— Commonwealth Special Research Grant	Grant in aid	808	560
		Clay movement in soils	400	9,939
Director	Australian Research Grants Committee	Mechanism of soil swelling	43,399	25,938
Biometry	Wheat Industry Research Council	Grant for equipment	—	2,495
Total — Waite Institute			950,989	1,157,330
Total — North Terrace			2,696,783	3,219,219
			3,647,772	4,376,549



THE UNIVERSITY
STATEMENT OF SEPARATE
THE ANTI-CANCER FOUNDATION OF

INCOME	\$	\$
Government of S.A.—Annual Grant		147,501
Government of S.A.—Hospital Service Reimbursement		118,620
Income from Investments		178,633
Public Appeal		57,601
Donations from the Public	161,578	—
<i>Less: Transferred to Capital Account</i>	<u>(161,578)</u>	—
Physics Section Income		160
DEFICIT for the year ended 31/12/80		38,691

\$541,206

OF ADELAIDE

ACCOUNTS FOR THE YEAR 1980

THE UNIVERSITIES OF SOUTH AUSTRALIA

EXPENDITURE

	\$
Salaries and Insurance.....	210,149
Equipment.....	3,239
Physics Section.....	2,481
Library.....	3,030
Sundries.....	5,543
Patients' Care and Transport.....	7,248
Administration Charge.....	5,500
Overseas Travel.....	2,450
Publicity and Promotion.....	3,012
Travelling Expenses.....	487
Hostel Maintenance.....	1,983
Public Appeal.....	6,342
Public Education.....	23,557
Subscription to Australian Cancer Society.....	11,347
Computing.....	156
Professional Education.....	2,642
Stationery.....	5,125
Provision for Long Service Leave.....	8,500
Mastectomy Rehabilitation Service.....	182
Mobile Education Unit.....	4,316
Alison McLachlan Readership in Clinical Oncology.....	53,226
Grant to Flinders University.....	53,020
Grant to University of Adelaide.....	44,917
Contingency Research Grants.....	2,170
Grant to Flinders Medical Centre.....	3,300
Grant to South Australian Institute of Technology.....	18,819
Grant to Institute of Medical and Veterinary Science.....	29,037
Research Associates.....	13,240
Cytology Services—Net Deficit.....	12,319
Da Costa Samaritan Fund.....	3,869
	<u>\$541,206</u>

THE UNIVERSITY
STATEMENT OF SEPARATE
THE ANTI-CANCER FOUNDATION OF

LIABILITIES AND TRUSTS		\$	\$
Endowments			1,448,559
Alison McLachlan Readership in Clinical Oncology			50,000
Long Service Leave Provision			88,243
Equipment Fund			54,607
Cytology Service—Accumulated Balance	25,097		
<i>Less loss for year</i>	<u>(12,319)</u>		12,778
Peter Nelson Leukaemia Research Fund			299,551
Donations	556,708		
<i>Less deficit for year</i>	<u>(26,372)</u>		530,336
Donation for Hostel			550
1979 Lord Mayors Appeal			205,063
Current Account			62,527
			<u><u>\$2,752,214</u></u>

OF ADELAIDE

ACCOUNTS FOR THE YEAR 1980

THE UNIVERSITIES OF SOUTH AUSTRALIA

ASSETS

	\$
Northern Territory Loan No. 4	50,000
Northern Territory Loan No. 5	50,000
Northern Territory Inscribed Stock	50,000
Trustee Executor Agency—Melbourne	50,000
S.A. Gas Co. Bonds	3,674
Telecom Australia—Debentures	60,000
Finance Corporation of Australia—Debentures	51,031
Standard Chartered Aust. Ltd.—Deposit	223,000
Citicorp—Debentures	20,000
Executor Trustee—Deposit at Call	33,000
Mutual Acceptance Ltd.	10,000
Elders Trustee Common Fund No. 1	155,000
Standard Chartered Bank (Peter Nelson Leukaemia Fund)	100,000
E.T.S.A. Debentures	4,167
Inscribed Stock	101,149
Funds held by Trustees	10,172
General Investments	1,561,130
Linear Accelerator	12,000
Fire Protection System	3,000
Hostel (Building and Furniture)	29,108
Equipment	54,607
Lombard Australia Ltd.—Debentures	20,000
Additions to Hostel	101,176
	<u>\$2,752,214</u>

THE UNIVERSITY
STATEMENT OF SEPARATE

INCOME	\$	\$
UNION FEES—		
Fees received for the year 1980		860,733
		<u>860,733</u>
CONTINUING EDUCATION (EXCLUDING RADIO STATION 5UV)—		
Allocation by University:		
Special Grant	19,650	
Staff Salaries	289,992	309,642
Fees:		
Tutorial Classes		30,587
Schools and Special Programmes		29,992
Extension Courses		17,390
<i>NOTE:</i> The allocation by the University of \$309,642 in 1980 for staff salaries and running expenses is shown in the University Income and Expenditure Account under the headings "Departmental Salaries and Wages" \$289,992 and "Departmental Maintenance" \$19,650.		
DEFICIT as at 31/12/80.....		14,892
		<u>\$402,503</u>

OF ADELAIDE
ACCOUNTS FOR THE YEAR 1980

EXPENDITURE		\$	\$
UNION FEES—			
Paid to Union Council			845,882
Refunded to Students			14,851
			<u>\$860,733</u>
CONTINUING EDUCATION (EXCLUDING RADIO STATION 5UV)—			
Deficit as at 1/1/80 brought forward			9,558
Staff Salaries			289,992
Honoraria:			
Tutors and Lecturers	26,140		
Schools and Special Programmes.....	7,250		
Extension Courses	7,021	40,411	
			<u>40,411</u>
Motor Vehicle Expenses	562		
Motor Vehicle Depreciation.....	1,000	1,562	
			<u>1,562</u>
Travelling Expenses—Staff.....			400
Library.....			416
Administrative Expenses			20,046
Tutorial Classes	9,203		
Schools and Special Programmes.....	26,096		
Extension Courses	1,843	37,142	
			<u>37,142</u>
Furniture and Equipment			361
Publications			2,615
			<u>\$402,503</u>

THE UNIVERSITY
STATEMENT OF SEPARATE

INCOME	\$	\$
UNIVERSITY RADIO STATION 5UV—		
Allocated by University:		
Special Grant		10,850
Fees:		
General Courses.....	1,753	
Extension Courses.....	1,757	
Tape Correspondence	2,672	
Subscriptions.....	16,168	22,350
Studio Hire and Technical Services.....		38,002
Other Broadcast Users.....		18,970
Administration Charges—Outside Grants		771
Radiothon		17,626
Public Radio Support		8,000
Book Bounty.....		706
DEFICIT as at 31/12/80.....		24,976
<i>NOTE:</i> The allocation by the University of \$10,850 in 1980 is shown in the University Income and Expenditure Account under the heading "Departmental Maintenance" \$10,850.		
		\$142,251
BOARD OF PUBLIC EXAMINATIONS IN MUSIC—		
Fees received for year 1980		57,417
Other Income.....		2,627
Joint Universities Operation—Surplus.....		1,362
S.A. Government Grant		10,000
DEFICIT as at 31/12/81.....		3,580
		\$74,986

OF ADELAIDE

ACCOUNT FOR THE YEAR 1980

EXPENDITURE

	\$	\$
UNIVERSITY RADIO STATION 5UV—		
Deficit at 1/1/80 brought forward.....		26,322
General Courses:		
Honoraria.....	350	
Notes and Distribution.....	546	896
Extension Courses:		
Honoraria.....	697	
Notes and Distribution.....	424	1,121
Radiothon		2,546
Publications.....		19
Subscription Costs.....		3,666
Studio Hire and Technical Services Purchase.....		11,590
Outside Programmes and Tape Purchases.....		1,823
Advertising.....		7,841
Staff (Office and Part-time Operations etc).....		66,449
Administration Expenses.....		8,848
Studio Technical Maintenance.....		4,627
Transmitter Technical Maintenance.....		2,695
Landline and Telephone Charges.....		2,324
Expanded Programme Guide.....		1,366
Cassette Duplicator Maintenance.....		118
		<u>\$142,251</u>

BOARD OF PUBLIC EXAMINATIONS IN MUSIC—

Deficit at 1/1/80 brought forward.....	1,805
Salaries, Payroll Tax and Insurance.....	34,721
Printing and Stationery.....	4,904
Travelling.....	3,285
Sundries.....	1,181
Postages.....	1,462
Examiners and Supervisors.....	18,018
Scholarships and Prizes.....	344
Administration Charges.....	5,742
Rent.....	2,500
Provision for Long Service Leave.....	1,024
	<u>\$74,986</u>

The University of Adelaide

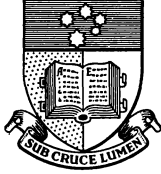
D. R. BEECHER,
Bursar.

We report that we have audited the above statements of the Separate Accounts of The University of Adelaide for the year which ended 31 December, 1980 and certify this statement to be a correct abstract of Income and Expenditure during this period.

TOUCHE ROSS & CO., Chartered Accountants.
DELOITTE HASKINS & SELLS, Chartered Accountants.

Adelaide, 20 July, 1981.

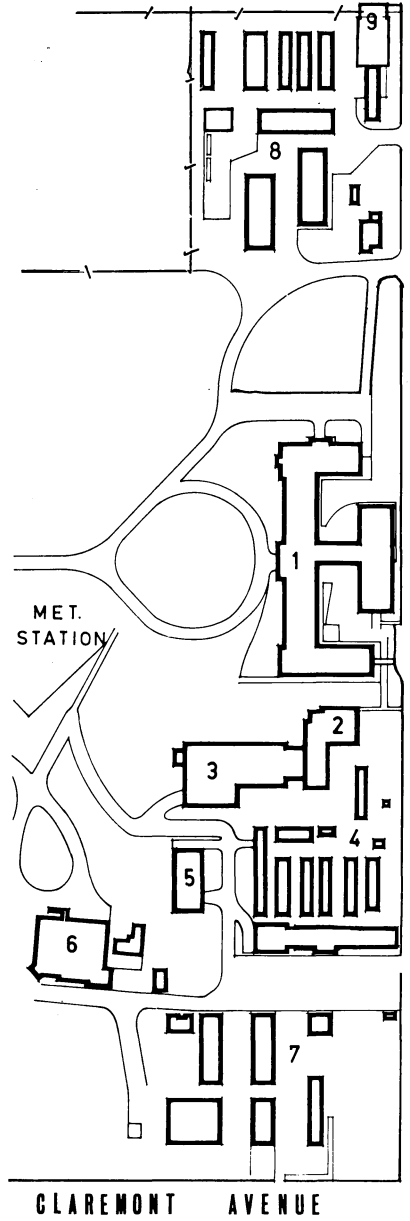
THE UNIVERSITY OF ADELAIDE

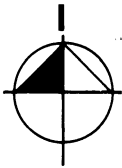


THE
WAITE AGRICULTURAL
RESEARCH INSTITUTE

KEY TO PLAN

1. Laboratories and Administration.
2. Library.
3. Teaching Laboratories.
4. Glasshouses.
5. Workshop.
6. Urrbrae House.
7. Farm Buildings.
8. Glasshouses and Implement Sheds.
9. Controlled Environment Building.
10. Insectary.
11. Horticulture Laboratory.
12. Central Animal House.
13. Bee Research Laboratory.
14. Workshops.
15. Animal Physiology Laboratories.





100 0 100 200 300 ft.

50 SCALE

