



# MONASH REPORTER

An unofficial bulletin for the information of members of Monash University

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## MONASH MEDICAL CENTRE

*On February 16, 1970 the Minister of Health (Hon. V. Dickie, M.L.C.) announced that the Government had given its approval to a \$20 million medical centre on the campus. This had been accepted in principle by the Government when it accepted the Lindell Report (August, 1960).*

*This welcome news now establishes the broad lines of development and clears up much uncertainty which was inevitable while only the principle of a campus hospital was accepted. The decision now completes all the major decisions of the Interim Council (1958-1960).*

The concept of a university hospital on the campus and integrated with the medical school was first agreed to by the Interim Council August 11, 1958. To this end, 14 acres were set aside in the original master plan in the S-W corner of the campus at Clayton. This plan was re-affirmed by the Interim Council February 9, 1959.

The Committee on Medical Undergraduate Education in Victoria, of which Sir Robert Blackwood was a member, reported to the Government of Victoria (August 1960) which had appointed this Committee, that "Monash University has made provision for a hospital site ... and that a teaching hospital be built on the Monash University site ...". The size envisaged then was "a teaching hospital of 600 beds (the minimum ultimate desirable size) ...". The Committee also reported that the ideal conditions included "a complete medical school and teaching hospital should be physically assoc-

iated on the University campus". This report was accepted in principle by the Government.

Funds were requested from the Government for planning, by the University and the Hospitals and Charities Commission, in a letter from the Vice-Chancellor and the Chairman of the Commission (Dr. John Lindell) to the Minister of Health



An aerial view of site of proposed hospital

(October 30, 1964), and since then planning funds have been granted annually.

A Professional Planning Committee which first met on August 16, 1965 proceeded with the planning ("Functional Brief") and this was completed at the end of 1967 and submitted on December 15 1967 to the Joint Planning Committee (representatives of University and Hospitals and Charities Commission ).

From this preliminary work has evolved the plan of a hospital to be built in stages. The project is based in part on the concept of what is now generally referred to as a "balanced teaching hospital". This includes Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics, Psychological Medicine, and Social and Preventive Medicine, with their various specialties. The opinion of the university members of the Planning Committee is that the viable range is between 600 and 800 beds, and probably nearer the latter.

The demography of the Monash area, as calculated by the Hospitals and Charities Commission, shows the present requirements to be 1,575 beds for acute medicine on the present basis of 3.5 beds per 1,000. The Commission believes that the ratio is changing and has forecast that by 1985, 3 beds per 1,000 could be realistic in view of the ageing population, increase of geriatric requirements and domiciliary services, and the inevitable desirable enlargement of the para-medical contributions to total health services through psychologists and social workers.

To meet this need we understand that the Commission believes that an ultimate total of 1200 beds should be planned for at the Monash Medical Centre site. However, the Hospitals and Charities Commission has also foreseen both Dandenong and Southern Memorial Hospitals growing to at least 300, probably to 400, possibly to 600.

If the Monash Medical Centre were of 800 beds and to this in 10-15 years were added 6-800 other beds in Dandenong Hospital and Southern Memorial Hospital, we have then the total bed requirement for this area at its highest present calculated level (1,575) (Monash 800, Dandenong 400, Southern Memorial 400, total 1,600).

Looking at this problem from the viewpoint of clinical training there are now available 1,219 beds for teaching in the three Monash affiliated hospitals (Alfred, Prince Henry's, Queen Victoria Hospitals). The most generally accepted bench mark for teaching needs are the Goodenough Report (1944) and the Todd Report (1968), which recommend 10 beds for each student in each clinical year.

The Monash figure (156 average students in each clinical year) is therefore 1,560 beds. It follows that the present shortfall is 341 beds which the Monash Medical Centre would overcome.

The calculation of the teaching bed requirement is complicated by a trend in hospital staffing which has increased the requirement for beds. Thus in 1948 the resident staff at the three Monash affiliated hospitals numbered 49; it is now 173 (1968). The complex and growing graduate training program reduces the effectiveness of each bed because of the very large number dependent for their clinical training on a limited pool for teaching both undergraduates and graduates.

The calculations are further complicated by the need for a hospital of somewhere between 600 and 800 to achieve a viable level for a balanced teaching hospital.

It would seem, therefore, that for such a teaching hospital to cover the shortfall in beds needed for undergraduate, graduate and post-graduate education, and also to satisfy the community needs, would be of about 800 beds. This would also provide a small safety margin in terms of expanding graduate teaching.

In their study of the physical requirements

of the Monash Medical Centre, which resulted in the production of the so-called "functional brief", the Professional Planning Committee came to the conclusion that as many as 1200 beds could be accommodated on this site. The thought was that the main part of the hospital would consist of a large 3-storey area with several tower blocks rising to 7 and 8 stories from this base.

The advantage of a balanced teaching hospital on the campus closely integrated physically and academically with the Faculty of Medicine and the University, has been spelled out by many authorities. Summarised these are:

1. The same academic inter-relations for clinical departments as for other university departments are enjoined.
2. Maximum opportunities for educational integration over 6 years of the course.
3. Fulfilment of the need for a strong and continuing influence of basic medical sciences.
4. Opportunities for interdisciplinary research and service contributions from the behavioural, social, engineering and information sciences.
5. Enhanced teaching from close relations with Faculty of Education.
6. Opportunity for team work in health services.

On the other hand, the assessment of the reaction of the Medical Centre on the University as a whole is complex. The implications of the numbers of people necessarily involved, in a wide

variety of ways, with the operation of the Centre must be considered. In addition, the existence on the campus of a large hospital with a high degree of autonomy and owing its prime allegiance to satisfying the medical needs of a wide-spread community will raise special problems.

In the consideration of the numbers of patients, it is expected that about one-half of the admissions to the Centre will take place as emergencies. This imposes requirements of easy and, in some cases priority access by road; the provision of a helicopter landing pad is also envisaged. The outpatient activity of the Centre is considered to be important and demanding.

For an 800 bed hospital eight or nine general purpose clinics are required to deal with outpatients in the medical area and other areas such as occupational therapy, social service and speech therapy. Private consulting suites are also to be established.

Daily visitors to the Centre will include the staff necessary for the professional, nursing and technical operations of the Centre and others such as outpatients, relatives of inpatients and tradesmen who provide housekeeping requirements. Vehicular access to the campus by all these will impose large loads on vehicle movement and parking facilities. It would be universally agreed that those in need of medical care be given preferential treatment. It could follow, for example, that the demands for car parking space by hospital visitors may become an important factor in the consideration of large-scale evening teaching and other programmes by the University generally.

Staff numbers involved in the Medical Centre are estimated as follows:



|               | <u>800 Beds</u> | <u>1200 Beds</u> |
|---------------|-----------------|------------------|
| Medical Staff | 186             | 280              |
| Nursing "     | 1360            | 2040             |
| Other "       | <u>680</u>      | <u>780</u>       |
|               | 1926            | 3000             |

As a guide, it is reasonable to assume that for every inpatient there will be an involvement of at least one "visitor". With an arbitrarily assumed ratio of 2:1 inpatient to daily outpatient numbers the total of those involved with the Medical Centre on a daily access basis are approximately:

|         |      |
|---------|------|
| 800 bed | 3500 |
| 1200 "  | 4800 |

The Medical Centre and its support groups will be the largest single operating unit on the campus. Many of its activities will be entirely different in practice and principle from those of the rest of the University. Some of its large-scale functions may also be overlapping, for example, in the matter of nursing staff training if this is developed to the undergraduate level.

Because of the size of the Medical Centre and its special relationship to the community it will pose difficult problems of adjustment to the University as it exists at present at Clayton. Changes must inevitably flow from the presence of an influential, non-academic, professional group in the University and the involvement of large numbers of outpatients, visitors, suppliers and others who are in no way concerned with the academic activities of the University. There will also be physical problems arising from e.g. the traffic and parking requirements of such a large enterprise.

It is apparent that only a limited area is available for the development of the Medical Centre on the campus and that the numerical demands for community and teaching medical services will have a far-reaching influence on the life of the University. It may be asked if the re-location of the Centre to a suitable alternative site could provide a teaching facility which does not fall too far short of the ideal direct association of the Centre and the medical science departments of the University. However, the members of the Faculty of Medicine who have been concerned with preliminary planning believe that the site of the Centre and its physical integration with the Medical School provide an opportunity for medical education and research unique in Australia. This integration is vital for the realisation of the concept behind all this planning.

\* \* \* \* \*

#### **PAPUA AND NEW GUINEA BOARD OF INQUIRY**

Professor D. Cochrane, Dean of the Faculty of Economics and Politics has been appointed to a Board of Inquiry on rural wages in Papua and New Guinea. The Board's terms of reference are broadly to inquire into and report on the Territory's rural minimum wage and the machinery for its determination and reviewal.

In addition to the Board's inquiry, Professor J. E. Isaac, department of Economics, will advise specifically on the proper balance of the wage structure between rural and urban employment.

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## GROOTE EYLANDT EXPEDITION

The Audio Visual Aids Section undertook its first major motion picture film production on Groote Eylandt in the Gulf of Carpentaria for a project on aboriginal dance and music notation. At the direction of Mrs. Alice Moyle, Department of Music, the Section was entirely responsible for the hire of suitable camera and sound equipment which would enable the aboriginal groups to be filmed with synchronized sound, from two distinct angles while a third camera would be used to obtain close-up shots of shoulder, hand and foot movements.

In addition to the hire of equipment it was necessary to seek an additional member for the team as only three staff members could be made available from the Section. We were fortunate in obtaining the services of Mr. Rod Power from the State Film Centre and are grateful to the Premier's Department for making him available.

Despite the problems associated with the recording of the musicians and dancers in an outside environment in 30 mph winds, the exposure of cameras to suit aboriginal skins in the shade of trees and a background of strong sunlight, the project was most successful. In all 10,200 ft. of colour film and 800 ft. of black and white film were used in two and a half days. All the film, when processed was found to be of use.

Such a method of recording aboriginal dances had not previously been attempted, but the problems encountered during planning and the difficulties of co-ordinating a team of three cameras, with due identification of shots and synchronization of sound were duly overcome. The final



One of the camera-men filming a dance.



Mrs. Alice Moyle signals to the three camera operators and two audio tape recorders to start shot 49.

results indicated that the method used suited the particular aims of the project which was solely concerned with the recording of information which could subsequently be used for dance and music notation. Subsequent criticisms and assessments by independent authorities endorsed this view.

As is the case in all motion picture film work, the shooting of the film is only the beginning - previewing and editing of picture and sound take a significantly greater amount of time. Because the university has no editing bench, it was necessary to seek out a sympathetic owner of such a bench and arrange for access to it when it was not in use. Fortunately the C.S.I.R.O. Film Unit made their bench available to us, but much of the work had to be done outside normal working hours and of course always on their premises.

\* \* \* \* \*

### LOST - CARTONS OF BOOKS

Twenty-one cartons of books labelled "Sureties, Education" were sent for storage in January 1969 and cannot now be located.

It is possible they have been placed in some storage location which was not recorded at the time. Any member of the University staff who knows of the existence of a number of unexplained cardboard cartons, is asked to contact Mr. Cunningham of Central Services (Ext. 2082) or Dr. Sureties (Ext. 2846).

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## THE READER WRITES

The following interview with Dr. L. Austin, Reader in Biochemistry, is the eighth in the series of articles on Readers at the University.

Question: You are a neurochemist - Why?

Answer: Partly because we know so little about the biochemistry of the human brain and virtually nothing about so many diseases of the nervous system, including mental illness.

Neurochemistry covers many fields. It is a branch of biochemistry which deals with the chemical structure of the nervous system and chemical changes which take place during the functions of nervous tissue and so attempts to describe changes in the brain and elsewhere in biochemical terms.

Virtually all animals of any complexity have a nervous system, however primitive, and their awareness of the outside world as well as their responses to events outside themselves rely on events in the nervous system. To a large extent they control their own bodily processes through their central and peripheral nervous systems, one reason why any damage or disease in these tissues has such far-reaching consequences for the animal.

When we come to a higher plane, that of man, we reach the most complex nervous system in existence. Although the treatment of various types of illness has improved considerably in recent years due to the use of modern drugs which have been developed empirically, much better treatment would

be available if the biochemical causes of these diseases were known.

Q: Can processes such as memory, learning and behaviour patterns be described in biochemical terms?

A: Not now, but eventually a biochemical basis of these processes will probably be worked out.

It is only in the last few years that biochemistry in general has developed sufficiently to allow any meaningful basis for an attack on these problems.



Dr. L. Austin

Nevertheless a number of laboratories are actively engaged in research into these areas and the number of these is increasing. Most of the present theories concerning the biochemistry of memory involve a change in some macromolecule in the neuron. These ideas have developed from recent findings in molecular biology but unfortunately there is little evidence available as yet to decide whether any of these current theories are correct. However, the increasing interest in this challenging area of biochemistry will probably produce results which could have an important

consequences for mankind.

Q: What aspect of neurochemistry are you investigating at present?

A: Protein metabolism, in relation to the function of the nervous system, interpreted in a very broad sense. In my laboratory we are concerned with the site of manufacture of many of the proteins which are used by the nerve cell to form its membranes and to provide enzymes for synthetic processes.

Most of these proteins and other components are made in the area of the cell surrounding the nucleus but from there they have to be transported over long distances into the axon. This transport process interests us particularly since it is an essential part of the life of the nerve cell; in fact without it, the axon dies. The nerve ending, at the crossroads of information transfer, also requires substances from the cell body, but it has many synthetic capacities of its own.

We also follow various synthetic mechanisms along the axons and at their terminals because these are intimately connected with the transport mechanism and its control over many aspects of nerve metabolism. We are also investigating the control of metabolism of catecholamines in the terminals of sympathetic nerves, a system which lends itself to our type of approach and one which is of great importance in the control of many important bodily functions such as blood pressure.

It is necessary to keep a broad view of the field at all times. We have even become involved, in a small way, in marine biology because of some unique aspects of the nervous systems of some marine creatures, such as squid and crayfish.

Q: Do you believe that a Reader should be a full-time researcher?

A: No but I believe that he should not be unduly



saddled with administrative responsibilities.

Q: How about teaching?

A: The most effective way to learn is to teach. Therefore I find it desirable to spend time teaching. At the undergraduate level one needs to cover a wide range of topics and this prevents the development of too narrow an approach at the research level.

Q: Post-graduate teaching must also take up a lot of your time?

A: Yes. Teaching at this level occupies a great deal of time because it is not conducted in any formal way. It is, however, rewarding as there is a continual exchange of ideas and not infrequently the teacher is taught. There are, of course, more formal teaching programmes at this level and these are also good for the staff as well as the students.

Q: Does Monash have any special advantages for you?

A: Universities in general do because of the dual role of teaching and research. Monash provides a particular stimulus because there is more collaboration between disciplines than in most other Universities in Australia. We have projects running in collaboration with the departments of Physiology and Physics at the present time. This is very important when dealing with a structure as complex as the nervous system since it allows for the application of many different types of skills to the problems under investigation.

Q: How about other aspects of University life?

A: On the teaching side I think we are rather too conservative. A swing towards more flexible courses has started at Monash but something more positive in approach to such things as unit courses (made easier by the introduction of a semester system) is needed. This would allow us to produce graduates who are conversant with a wider range of interests than is possible under our present system.

\* \* \* \* \*

**REPORT OF PROCEEDINGS  
OF COMMONWEALTH UNIVERSITIES CONGRESS 1968.**

The Report of the Tenth Congress of the Universities of the Commonwealth which was held in Sydney 1968 has now been published and a copy is available in the Library.

The Report is on sale for £2.10.0 (stg.) per copy, surface post free and may be obtained from the Secretary General, The Association of Commonwealth Universities, 36 Gordon Square London, WC1.

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**COMMONWEALTH SCHOLARSHIP AND FELLOWSHIP PLAN  
NINTH ANNUAL REPORT**

This Report has been prepared by the Association of Commonwealth Universities for publication by the Commonwealth Education Liaison Committee.

Copies may be purchased from the Commonwealth Secretariat, Marlborough House, Pall Mall, London S.W.1. (6 shillings (stg.) by post).

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## NEW DEPARTMENT OF MATERIALS ENGINEERING

Until this year, teaching and research within the Faculty of Engineering relating to materials has been carried out by a group located within the Department of Civil Engineering.

Because of the increasing importance of materials in engineering, activities in this area have expanded and a Chair of Materials Science was established in 1967. Now a separate Department of Materials Engineering has been created within the Faculty and a new undergraduate course is being introduced leading to a B.E. degree.

Chairman of the department is Professor I.J. Polmear and the present staff comprises three senior lecturers, a senior teaching fellow, and two research fellows supported by outside funds. The materials engineering laboratories are located on the first floor of building 5 of the engineering school and these will be expanded with the erection nearby of a new three-storey building later this year. Present facilities installed or on order include a 120 KV electron microscope, X-ray diffractometer and fluorescence units, instrumented rolling mill, Zeiss Ultraphot metallograph, Instron testing machine, plasma generator, and equipment for processing metals, ceramics and plastics.

Examples of current research projects are: stress relaxation mechanisms in steels, deformation of crystalline polymers, strength and fracture toughness in fibre-reinforced composites, lubrication during metal working, fine oxide powders produced by plasma methods, trace element effects in age hardening systems, mech-

anisms of adhesion and stress-corrosion cracking in welded light alloys.

The syllabus for the new course, which will be the first of its kind in Australia, has been devised bearing in mind developments at overseas universities as well as comments sought in a survey of potential local employers of graduates. Subjects common to the existing four engineering courses will be included. So far as materials are concerned, a central theme will be a study of the relationships between basic structures of metals, ceramics and polymers and their properties, with the aim of their economic utilization in a wide range of technology.

It is believed that the course should appeal particularly to students interested in applied science. It should also be equally attractive to members of both sexes.

Dr. B.W. Cherry, Senior Lecturer in the department left in January for Leningrad University. He is this year's visitor to that university and is spending two months in the Department of Theory of Elasticity. He will give a lecture course on the surface physics of polymers.

Mr. R. McPherson, also a Senior Lecturer in the department, has returned from a year's study leave which he spent in the Division of Inorganic and Metallic Structure at the National Physical Laboratory in England.

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## HAPPY ANNIVERSARY!



A cocktail party to celebrate the tenth anniversary of the Vice-Chancellor taking up office, was held at the Vice-Chancellor's home on Friday, January 30. All members of staff who were working at Monash in 1960 and who still retained some connection with Monash, were invited. A good time was had by all.

## FLUID POWER

The Fluid Power Society's recent February Symposium - "Fluid Power, 1970", had a significant contribution from the Department of Mechanical Engineering. Senior Lecturer, Dr. Peter Dransfield, was Chairman of the Organizing Committee and Editor of Proceedings; as well, he presented a paper "Fluid Power Research".

Newly appointed Lecturer, Bruce Kuhnell presented the paper "Iron-ore Train Loading Station: Dynamic Analysis of the Hydraulic Actuating System". Mr. Kuhnell's paper formed part of a 3-way case-study describing the control of the 8,000 ton/hour plant for loading iron ore fines into moving railway trains at Mt. Tom Price, W.A. for Hammersley Iron Pty. Ltd. Dr. Dransfield's paper described some of the results of a survey of current projects being undertaken by fluid power control system researchers in Great Britain, North America, and Australia.

The Symposium, the first in fluid power control in Australia, attracted over 300 applicants for registration. The maximum seating capacity of the hall limited registrants to 270, and the Organizing Committee had regretfully to refuse registrations from about 10 days before the Symposium date. The Keynote Speaker, Dr. Ernest C. Fitch, Professor of Mechanical and Aerospace Engineering and Director of the Fluid Power Control Systems Laboratories at Oklahoma State University, came to Melbourne specifically for the occasion.

Professor Fitch's visit was financed by a consortium of local companies concerned with fluid power. Professor Fitch discussed the present state of the art of hydraulic systems and predict-

ed the problems and development to be faced by technology in the early 1970s.

Mr. James M. Eley, Chief Engineer of Tyrone Hydraulics Inc., U.S.A. was a second U.S. contributor on the programme. Mr. Eley spoke on high-pressure gear-pump design, performance, and application to heavy construction equipment, a topic of special relevance to Australia's booming civil construction and mining industries. Mr. Eley's visit was timed to coincide with the Symposium through the courtesy of a local associate, Moore Hydraulics Limited.

Symposium sessions, apart from the Keynote Address were concerned with Hydraulic Systems, Fluidics, and Education, Research, and Development.

Professor Fitch spent the full day following the Symposium visiting the Department. His Colloquium to the Engineering Faculty described in general terms the organization, support and operation of his current \$250,000 per year fluid power systems research programme at Oklahoma State University. Built up by personal endeavour over the past 15 years, the programme owes its present strength to wide support from industry. Although he undertakes government sponsored projects (NASA, military), Dr. Fitch has consciously acted to be largely independent of such agencies. His belief, proven by recent cutbacks in government supported research contracts awarded to universities, is that industry offers better prospects for long-term support. Dr. Fitch emphasized that his support from industry had required long and careful cultivation, and was dependent on the orientation of projects towards industry's current and possible future needs. Project staff are drawn from graduate students (M.S. and Ph.D) and from undergraduates, who work on a paid full-time or part-time basis while proceeding with their academic course work.

## OFFICIAL OPENING OF EDUCATION BUILDING



The Chairman of the Australian Universities Commission, Sir Henry Basten, officially opened the new Education Faculty Building on Friday, February 20.

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### ROBERTS HALL

Work has begun on our fourth Hall of Residence, Roberts Hall, in the N.E. corner of the campus.

It will be completed early next year and will house approximately 200 people. Work on the fifth Hall of Residence, Richardson Hall, is due to start late this year.

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## THE THINGS AN AMPHOMETER FINDS

An amphotometer was operated by our Parking Attendants on the University roadways during 1969 to obtain some idea of the incidence of speeding on campus.

The instrument was also used to find out what categories of University and non-University motorists were involved in infringements of the campus speed limit.

The results of this test indicate clearly that speeding by motorists is a great hazard to pedestrians in the University, and that some action will have to be taken.

In the case of constant offenders, consideration will have to be given to implementing punitive action if results are not better this year.

Naturally, the University is reluctant to take this action, and hopes that it will not be necessary.

University members can help in this regard by driving their vehicles at a safe speed at all times, remembering that the campus speed limit is 25 miles per hour.

Your co-operation would be greatly appreciated by the Parking Attendants who look forward to helping you in any way they can.

A synopsis of the 1969 amphotometer findings is given below. The areas of the operation were varied, and the period over which the tests were made ranged from 30 minutes to four hours. The synopsis includes only those motorists who exceeded 34 m.p.h.

| Date          | Number of Offenders | Staff     | Student    | Visitor   | Contractor | Speed Range         |
|---------------|---------------------|-----------|------------|-----------|------------|---------------------|
| 21.8.69 a.m.  | 31                  | 9         | 19         | 2         | 1          | 35-52 m.p.h.        |
| 21.8.69 p.m.  | 7                   | 2         | 3          | 2         |            | 35-39 m.p.h.        |
| 22.8.69 a.m.  | 32                  | 6         | 24         | 2         |            | 35-50 m.p.h.        |
| 22.8.69 p.m.  | 25                  | 4         | 18         | 3         |            | 36-46 m.p.h.        |
| 25.8.69       | 33                  | 5         | 21         | 7         |            | 36-49 m.p.h.        |
| 26.8.69 a.m.  | 18                  | 7         | 11         |           |            | 36-39 m.p.h.        |
| 26.8.69 p.m.  | 11                  | 2         | 6          | 3         |            | 37-40 m.p.h.        |
| 5.9.69        | 19                  | 2         | 14         | 3         |            | 36-43 m.p.h.        |
| 8.9.69        | 11                  | 1         | 10         |           |            | 35-38 m.p.h.        |
| 29.9.69       | 11                  | 3         | 5          | 2         | 1          | 35-41 m.p.h.        |
| 6.10.69       | 20                  | 1         | 17         | 2         |            | 35-40 m.p.h.        |
| 9.10.69 a.m.  | 13                  |           | 11         | 2         |            | 35-45 m.p.h.        |
| 9.10.69 p.m.  | 3                   | 1         | 2          |           |            | 36-37 m.p.h.        |
| <b>TOTALS</b> | <b>234</b>          | <b>43</b> | <b>161</b> | <b>28</b> | <b>2</b>   | <b>35-52 m.p.h.</b> |

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### MONASH UNIVERSITY SCOUT AND GUIDE CLUB

This Club particularly welcomes staff members as well as student ones. Membership is open to all those who were or are scouts and guides, or who are interested in and subscribe to the aims of the Scout and Guide movements. The Club promotes a number of activities (not too many!) of general interest, with at times a scout or guide flavour, but is always ready to try something new.

It is also affiliated with the Australian Fellowship of Former Scouts and Guides, through the Baden-Powell Scout Guild, and hopes to assist in some way with hosting the Ninth General Assembly of the International Fellowship in September/October 1971.

Enquiries about the Club may be directed either to the Hon. Secretary, Scout and Guide Club, C/o the Union, or by ringing Gordon Troup on Extension 3635.

## **"HOW TO SUCCEED IN EXAMS"**

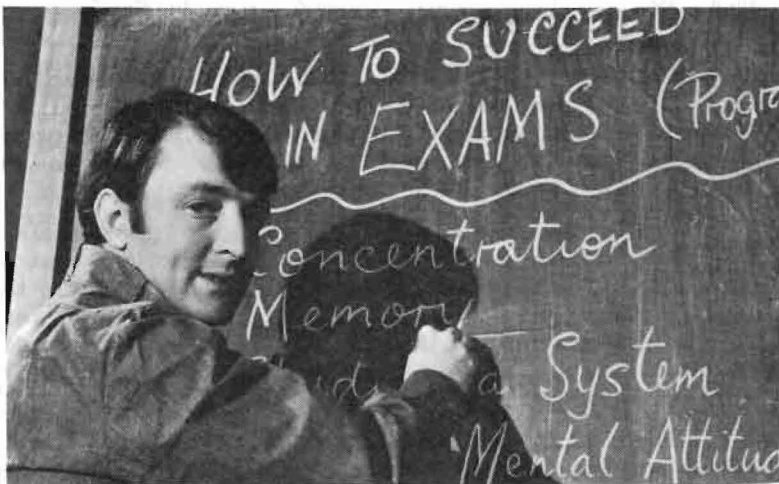
Towards the end of last year a commercial production company came to the Audio Visual Aids Section to videotape record two 45 minute programmes "How to Succeed in Exams". The on-camera talent was flown down from Sydney.

The programmes were directed by Don Hauser, the production supervisor of the Section and all technical facilities, including staff, were those of the Section. The television signal was sent to GTV-9 via microwave link and a back-up recording made on campus with a portable high quality broadcast videotape recorder from GTV-9.

The first programme was put to air from GTV-9 on Sunday, November 2, at 11.00 a.m. and the response from the public was so overwhelming that several hundred additional copies of the booklet referred to in the session had to be flown from Sydney. The second programme, which was aired the following week, had an even greater response, and it was decided that both programmes would be re-played in their entirety on November 16.

Reports from the television industry praised the technical and production quality of the programmes, much to the delight of the members of the Section.

Both programmes were recorded in the one day with only a rough outline of the material to be covered in the hands of the Director. No detailed script was provided nor had the talent rehearsed any of the material prior to that day. The overall success of the programmes would tend to indicate that for certain types of telecasts, it is not necessary to spend a great deal of time in the preparation of material for the telecast and that it may not be necessary to conduct extensive rehearsals prior to the recording.



Michael Riddell at the blackboard during the production of "How to Succeed in Exams".



Production team and on-camera talent for "How to Succeed in Exams".  
(Left to right) Standing : Don Hauser, Audio Visual Aids Section, Bob Huber, NLT Productions.  
Seated : Barbara Rees, Diana Ward, Michael Riddell, Inga Roche.

## SEMINARS, 1970

As in previous years, General Seminars and Work-in-Progress Seminars of the Centre of South-east Asian Studies will normally be held on Thursday afternoon at 2.15 p.m. (until approximately 3.45 p.m.) in Room 515, History Department, Menzies Building.

On March 19, Mrs. Bob Muskens, Accessions Librarian in the General Library, who is mainly responsible for Southeast Asian material in the Library, will introduce the Seminar series for the year with a talk on "A Guide to Bibliographical Resources, especially on Southeast Asia".

This seminar should be of particular value to all graduate students and it is hoped that it will also provide an opportunity for wider discussion of our problems of source materials and acquisition of books.

Mr. J. Mackie, Research Director of the Centre, would also welcome suggestions or offers from any members of staff (or graduate students) associated with the Centre who would like to give General Seminars during the year - or suggest visitors who might be invited to do so. Normal practice is to try, as far as possible, to hold Work-in-Progress Seminars fortnightly and to have three or four General Seminars per term in the intervening weeks.

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### DR. MATHESON RE-APPOINTED TO N.G. POST

The Vice-Chancellor, Dr. J.A.L. Matheson, has been re-appointed Chairman of the Council of the Papua and New Guinea Institute of Technology at Lae. The re-appointment - for three years - was announced in the Papua and New Guinea Gazette by the Acting Administrator of the Territory, Mr. L. W. Johnson.

## STAFF-STUDENT CONFERENCE ON PROBLEMS OF TRANSITION 1970

The Student Counsellors are planning a three day residential conference for first year students to be held towards the end of the first term vacation. This will be the fifth Transition Conference the counsellors have held, and will resemble in format the previous conferences.

The core of the project is three days of informal group discussion, giving staff and students an opportunity to talk openly about issues of mutual concern.

As in previous years, the counsellors will arrange staff discussion groups throughout first term for those members of staff taking part for the first time.



A discussion group at the Mount Evelyn camp 1969.

Anyone who is interested or would like further information, should contact George Cally, Peter Lawrence, or Carolyn Poon ext. 3156 or 3157.

The following members of staff participated in the 1969 conference and could give information: Engineering: Messrs. R. Gani, K. Atkins, J. Phillips; English: Miss A. Clarke; Classics: Miss A. Romano; Education: Mrs. P. Strong; Law: Miss S. Walters, Mr. W. Strugnell; Mathematics: Mr. M. Legg, Dr. T. Speed; Botany: Mr. P. Lumley; Chemistry: Dr. I. Wilson; Anatomy: Dr. G. Smith; Social and Preventive Medicine: Dr. A. McMichael; Health Service: Dr. J. Green; Chaplain: Rev. J. Whitehead.

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### **PADDY'S MARKET**

A Paddy's Market is to be held at 10.30 a.m. on Friday, April 24, 1970, in the Union Building.

The Market is being held by the Parents Group to raise money for student amenities. Any donations of second hand books, crockery, kitchen utensils or discarded sporting gear would be appreciated for the White Elephant Stall. Cakes, jams and biscuits will also be sold.

Donations can be picked up. Please contact Mrs. Nancy Kempton - 'phone 20.7742 - or Mrs. Griffith - 'phone 96 1143.

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## LUNCH-HOUR CONCERT SERIES

The Music department's Monday Lunch-hour concert series take place in the Alexander Theatre, 1.10 - 2.00 p.m. each Monday during terms. Admission is free. The programme for first term is as follows : -

- March 30      Easter Monday
- April 6      Leslie Howard (Piano): Liszt: late piano works; Berg: Sonata Op. 1; Stravinsky: Sonata 1924; Webern: Variations Op. 27; Howard: Sonata Op. 13
- Apr. 13-27    Series of three solo violin recitals of the Partitas and Sonatas of J.S. Bach, presented by Ronald Woodcock:
- April 13 - Partita No. 3 in E;  
                                Sonata No. 1 in G.
- April 20 - Partita No. 1 in B;  
                                Sonata No. 3 in C.
- April 27 - Sonata No. 2 in A;  
                                Partita No. 2 in D.
- May 4        Janáček: "Diary of One who Vanished"  
                Performance prepared and directed by  
                Keith Humble.
- May 11      Monash Choral Society, Conductor John  
                McCaughey. Programme includes works  
                by Jean-Charles Francois, Ian Bonigh-  
                ton and Keith Humble.

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## ANZAAS INTERNATIONAL SCIENTIFIC FILM EXHIBITION

Sixty three films reached the ANZAAS office in time for inclusion in the 1970 Exhibition and Competition for the Orbit Award. The films comprised entries in the following classes:

Biology & Medicine (BM)  
 Engineering (E)  
 Teaching & Sociology (TS)  
 Physics & Chemistry (PC)  
 Geology & Geography (GG)  
 General Scientific Interest (GSI)

These films entered under 'University Exhibition' were:

| No. | Name   | Country   | Class | Running Time |
|-----|--|-----------|-------|--------------|
| 1   | Walbiri Ritual at Gunadjari                                      | Australia | TS    | 27 (Minutes) |
| 6   | Against the Sea  | U.K.      | GG    | 17 "         |
| 14  | Heart Motion by Computer Graphics                                | U.S.A.    | BM    | 17 "         |
| 16  | Flow Instabilities   | U.S.A.    | PC    | 27 "         |
| 19  | Hot Ground Investigations  | Australia | GG    | 17 "         |
| 23  | The Laser  | France    | PC    | 25 "         |
| 24  | Atomic Structure and Spectral Transitions                        | France    | PC    | 27 "         |
| 25  | Optical Pumping  | France    | PC    | 33 "         |
| 26  | Optical Properties of Nematic and<br>Cholesteric Liquid Crystals | France    | PC    | 24 "         |
| 27  | Biology of an Earwig   | France    | BM    | 19 "         |
| 28  | Predatory Behaviour of the Asp-Viper                             | France    | BM    | 18 "         |
| 30  | Development of the Egg of the Salamander                         | Germany   | BM    | 15 "         |
| 42  | Blood-Grouping   | Holland   | BM    | 32 "         |
| 43  | Pathology of Speech and Voice                                    | Holland   | BM    | 37 "         |
| 44  | Bacteriological Search for Diphtheria                            | Holland   | BM    | 12 "         |
| 45  | The Grafting of Pure Cultures                                    | Holland   | BM    | 17 "         |
| 46  | Removal of Dental Tartar   | Holland   | BM    | 27 "         |
| 47  | Orbital Fractures  | Holland   | BM    | 13 "         |
| 48  | Crossmatching  | Holland   | BM    | 24 "         |
|     | Neuro-Muscular Integration                                       | Holland   | BM    | 16 "         |
| 52  | Tardigrada   | Poland    | BM    | 11 "         |
| 56  | Rain Erosion Impact Studies                                      | U.K.      | GG    | 4 "          |
| 57  | The Normal Metabolism of Iron and<br>Haemoglobin                 | Denmark   | BM    | 24 "         |
| 62  | The Structure of Protein   | U.K.      | PC    | 17 "         |

The films listed under 'University Exhibition' with the exception of the films numbered 42-49, are available during the first and second academic terms upon request to Mr. Patrick Matthew, Film Office, Film Unit, The University of New South Wales, P.O. Box 1, Kensington, N.S.W. 2033. The eight films numbered 42-49 are available during the second academic term only. The Vice-Chancellors of the Australian Universities have been informed of this and have been invited to avail themselves of these films through the schools or departments in their Universities.

It is to be noted that film No. 1, "Walbiri Ritual at Gunadjari", must not be shown to others than academic audiences, as this is a condition for its exhibition made by the Australian Institute of Aboriginal Studies which entered the film in the competition.

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### COMMISSION ON UNIVERSITY AFFAIRS

The Commission on University Affairs has made the following report:

"Although the intention of the Commission was to produce a reasoned argument for the recommendations we published in October, 1969, we were unable to reach agreement on it."

An account of the work of the Commission from one of the student members will be found on page 6 of Lot's Wife for March 5, 1970 and some comments on this article by the Vice-Chancellor appeared in the following edition on March 19.

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### THE REPORTER

Copy for the April issue will close on April 8. Copy should be addressed to the Editor, Monash Reporter, Vice-Chancellor's Office.

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## SCHOLARSHIPS AND FELLOWSHIPS

### **P & O Lines Free Passage Scheme to North America for University Graduates - 1970.**

This scheme provides six Free First Class passages annually in each direction to enable persons who have taken their first degree entirely at Australian Universities to travel to North America (Canada or U.S.A.) for post-graduate study. The Awards will not be available for post-doctoral study or to permanent members of staff proceeding to further study overseas.

Selection of candidates shall be in the hands of the Universities, and the Australian Vice-Chancellors' Committee. All intending Monash applicants should obtain the prescribed form from the Graduate Scholarships Office in the University Offices building and when the form is completed it must be returned to the same office, together with an official statement of the applicant's record by not later than May 15, 1970.

### **Australian Federation of University Women The Freda Bage Bursary.**

The Council of the Australian Federation of University Women (A.F.U.W.) announced the offer of the Freda Bage Bursary, of the value of \$500, for tenure in the period July 1970 - June 1971.

This Bursary is open to women graduates who are members of the Australian Federation of University Women. The purpose of the Bursary is to provide assistance during a period of post-graduate study or research in any field, in Australia or its Territories. The period of tenure is not more than one year, but may be shorter, the period in each individual case to be approved by

the A.F.U.W. Council. The Bursary must be taken up during the period for which it is offered.

Applications shall be made to the A.F.U.W. through any of the member State Associations of the A.F.U.W. Application forms may be obtained from the Victorian State Secretary, Mrs. D.E. Price, 6 Berkeley Court, Kew, 3101.

Candidates must lodge their applications with State Associations by March 31, 1970. The award will be announced during June 1970.

### **Post University Courses – France**

These courses are being organised in France for the period October 1970 to July 1971.

The courses cover the following fields - Metallurgy, Higher Electronics (Logic circuits and data processing), Chemical Analysis and Radiobiology.

The courses will be presented in French and applications should be forwarded directly to L'Institute Nationale des Sciences et Techniques Nucléaires, Boîte Postale No 6A 91, GIF-sur-Yvette, France, by April 15, 1970.

### **Italian Government Scholarships**

The Italian Government is awarding two scholarships to Australian citizens who hold a B.A. or higher degree with a major in Italian and who desire to pursue their studies in Italy during the academic year 1970/1971.

Applications must reach the Italian Consulate General not later than April 1, 1970, (34 Anderson Street, South Yarra. Telephone 26.2879).

### **Trinity College Cambridge – Research Studentships**

Trinity College Cambridge offers each year Research Studentships to male graduates or prospective graduates of other Universities who have not begun residence in the University of Cambridge. In exceptional cases, non-graduates may be eligible.

Enquiries should be sent to the Tutor for Advanced Students, Trinity College, Cambridge to whom completed application forms must be sent so as to reach him by April 1, 1970.

### **Leverhulme Trust Fund Interchange Scheme Outgoing Fellowship Tenable Oct. 1970/Sept. 1971**

The Leverhulme Trust of Great Britain offers funds to six Australian Universities, of which Monash University is one, to enable an interchange of academic staff between the University and universities in a number of Asian countries. The scheme, insofar as it affects this university, provides for one visitor per year from Monash to an Asian university and for one Asian visitor per year to Monash, not necessarily from the same institution. The Asian countries included in the scheme are as follows:

|           |            |             |          |
|-----------|------------|-------------|----------|
| Hong Kong | Japan      | Pakistan    | Taiwan   |
| India     | Malaysia   | Philippines | Thailand |
| Indonesia | New Guinea | Singapore   |          |

The scheme, which began in 1966, has recently been renewed for a further period of five years, commencing October 1971.

Interested persons who wish to work for a period of from three to four months in an Asian university are invited to apply through the Academic Registrar for a fellowship tenable in

October 1970/September 1971. (In making the original offer to Monash, the Director of the Leverhulme Trust referred to an exchange of "senior academic staff" but this is not defined.)

The successful applicant will be expected to make his own arrangements with a host department in an Asian university and each application should indicate whether the individual feels able to make such arrangements. An applicant should give details of correspondence which has already passed between him and the university in which he wishes to work.

The fellow will receive his return fare (economy class), his present salary (including superannuation), and in addition an allowance of \$10.50 per day for sixty days and \$5.00 per day thereafter, up to a further sixty days. The allowance is intended to cover the additional costs of settling into a new environment. It should be noted that, since the fellow's salary will actually be met from funds provided by the Leverhulme Trust, the period spent abroad as a visiting fellow will not affect the staff member's entitlement to study leave.

**Applications should include:**

- (i) the applicant's curriculum vitae
- (ii) a statement of the period of his proposed absence and particulars of the work he wishes to undertake.

An applicant is also asked to obtain from the Chairman of his department his consent to the applicant's going on leave (should he be selected) and a statement of the work to be undertaken while overseas on the Fellowship.

Further enquiries should be made to the Chairman of the Committee - Professor Linnane (Biochemistry).

#### **Selection**

The Committee administering the scheme decided several years ago that, other things being equal, priority would be given to applications from those faculties which had not formerly benefitted under the Scheme; however, if no suitable applications were received, then other applications would be considered on their merits.

Applications for 1970/71 should be lodged with the Academic Registrar not later than May 31, 1970.

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#### **NUFFIELD FELLOW**

Mr. T.E. Hall, B.Sc., Senior Teaching Fellow in the department of Mathematics at Monash, has been awarded a Nuffield Travelling Fellowship for 1970.

Mr. Hall graduated B.Sc. (Hons.) in 1966 at the University of Queensland. Last year he submitted a thesis for the Ph.D. degree at Monash. Mr. Hall, whose interest in algebra is in the theory of semigroups, will work in the department of Mathematics at the University of Stirling, Scotland, under the guidance of Professor W.D. Munn.

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## BOOKS FOR SALE

The Monash representative on the Women of the University Fund has the following books for sale in aid of the Fund's charities. They are all in good condition, with hard covers, and anyone interested should telephone Netta McLaren at 25.3424.

|                 |  |        |
|-----------------|--|--------|
| Liddell & Scott | A Greek-English Lexicon. Pub. Oxford. 1847.<br>8th Edn. 1778 p.p.                              | \$2.00 |
| Mitchell, J.    | The Fall of Napoleon; An Historical Memoir; 3 vols.<br>Pub. London 1846. 2nd Edn.              | \$1.50 |
| Darling, C.J.   | Scintillae Juris. Pub. Stevens & Haynes London 1889  | \$1.50 |
| Ingoldsby, T.   | The Ingoldsby Legends. Pub. Bentley, London. 1869  | \$1.00 |
| Beasley, H.     | The Book of prescriptions, also comp. materia medica.<br>5th Edn. Pub. Churchill, London 1876. | \$1.00 |
| Smiles, S.      | Personal History of Josiah Wedgwood, F.R.S. Pub.<br>Murray, 1897                               | \$1.00 |
| Mill, J.S.      | On Liberty. Pub. Longmans 1882.  | \$0.70 |
| Joad, C.E.M.    | The Adventures of the Young Soldier in Search of<br>The Better World. Illus. Pub. Faber 1942.  | \$0.70 |
| Shaw, B.        | The Intelligent Woman's Guide to Socialism &<br>Capitalism. Pub. Constable 1929.               | \$0.70 |

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## MUSICA VIVA – MELBOURNE 1970 CONCERT SEASON

|           |                        |  |
|-----------|------------------------|--|
| Concert 2 | – Friday April 17      | – Adelaide Wind Quintet                              |
| Concert 3 | – Friday June 26       | – Amati Ensemble (Berlin)                            |
| Concert 4 | – Friday July 23       | ) – Tel - Aviv Quartet (Israel)                      |
| Concert 5 | – Saturday August 8    | )  |
| Concert 6 | – Tuesday September 15 | – Stradivarius Trio and Werner Giger<br>(Piano)      |
| Concert 7 | – Saturday October 17  | – Sydney String Quartet with Lois<br>Simpson (Cello) |
| Concert 8 | – Monday November 9    | – Stradivarius Trio Werner Giger<br>(Piano)          |

New Subscribers are welcome. Applications may be taken personally to the booking office, Fine Music Pty. Ltd., York House, 294 Little Collins Street, Melbourne (Tel. 63–2196).