Professors head teaching hospital departments

Four professors in the University's Faculty of Medicine have been appointed Heads of the new Greater Newcastle Teaching Hospital at Rankin Park.

The professors and the departments they will be directing are Professor Nick Saunders (Medicine), Professor Robert Burton (Surgical Science), Professor William Walters (Obstetrics and Gynaecology) and Professor John Boulton (Paediatrics).

The 500-bed major teaching hospital is being built by the State Government.

According to the Chief Executive Officer of the Hunter Area Health Service, Dr Owen James, the main hospital building is the size of a 61-storey building lying on its side.

Teaching and research activities will be integrated within the areas of the hospital to be used for in-patient and out-patient care.

The only modern equivalents, in the terms of the integration of University and Health Department functions care, are Westmead Hospital in the Western Suburbs of Sydney and the Flinders Medical Centre in Adelaide.

The hospital will be the centre for the Chairs of Medicine, Surgery, Obstetrics and Gynaecology and Paediatrics. It will also house a new cardiac surgery unit.

Facilities will be provided for teaching students of medicine from the University, students of nursing and para-medical subjects from the Hunter Institute of Higher Education, and staff of the Department of Health.

In January the Minister for Health, Mr Collins, opened the hospital's western wing, the educational complex, which is the first part of the hospital to be completed.

Features two auditoriums of 120 and 70 seats, six tutorial rooms, conference rooms and a library, the centre is planned to be the focus of the hospital side of medical education in the Hunter.

A team, which includes the new Heads of Departments, has been appointed to manage the lengthy and huge task of commissioning the hospital, including completing the relocation of hospital and teaching services, developing management procedures, and providing furnishings.

Continued Page 2

INSIDE THIS ISSUE
• Forecasting world meat markets, Page 3.
• New Chair of Orthopaedics filled, Page 4.
• Record enrolments for 1989, Page 7.
• Home-based maths program developed, Page 7.
Three-way amalgamation plan

On February 27 the Minister for Education and Youth Affairs, Dr Terry Metherell, wrote to confirm that the State Government would introduce legislation to provide for:

'the amalgamation of the University of Newcastle, the Hunter Institute of Higher Education and the Newcastle Branch of the New South Wales State Conservatorium of Music to form a new University of Newcastle.'

Perhaps the only major surprise in this announcement was the welcome commitment to the incorporation of the Conservatorium in the consolidated University.

Informal discussions with representatives of the Conservatorium have been proceeding for some time. These discussions had been welcomed in the University by the Senate and the Council. But only now with the decision of the Minister will it be possible to extend these informal discussions into the areas of detail needed to give effect to the amalgamation.

The New South Wales Conservatorium established a branch in Newcastle in 1952. This was the result of a concerted campaign in Newcastle supported by the then Director of the Conservatorium, Eugene Goosens. It is clear that the support for the Conservatorium was part of the same concern for cultural and educational opportunity in the city and the region that led to the establishment of the Newcastle Teachers’ College in 1949 and the University College also in 1952.

In common with the College and the University, the Conservatorium has grown in stature and scale over the past 30 years. A high degree of autonomy was accorded the Newcastle Branch in 1986 under its new Principal, Michael Dudman; and the new concert hall, practice facilities and offices completed in 1988 represent one of the finest of the bicentennial achievements.

Its academic program at the tertiary level has shown similar expansion with growth in the professional Diploma of the State Conservatorium of Music and in the Bachelor of Music Education taught jointly with the Hunter Institute. A proper academic objective now is the establishment of a full Bachelor of Music degree.

An equally important role for the Conservatorium is its contribution to music education and training for other than tertiary students. This aspect of its work has been of great importance to the community and it will be important that this continues after amalgamation. We shall need to ensure that a satisfactory base for funding these activities by the State Government is maintained.

The benefits of amalgamation will be looked for in areas additional to those prescribed under the headings of administrative structures and academic developments of the existing courses. As well as the possibility of introducing a BMus degree, there will be an opportunity of enriching the studies of those students in other areas of the University by making available courses in music; and similarly providing access for music students to courses provided elsewhere in the University.

The possibility of bringing the University, the College and the Conservatorium together was first discussed some 20 years ago. This is clearly one idea which has matured with time and its achievement will be widely and properly welcomed.

Professors head hospital departments — Cont’d

and equipment. The team’s activities will be centred in the educational complex.

Professor Saunders, spokesperson for the professors transferring to Rankin Park, said that while Westmead Hospital and the Flinders Medical Centre were purpose-built to integrate teaching, research and patient care activities he believed Rankin Park Hospital was the first in Australia to give senior clinical academics the additional responsibility of commissioning and management.

Professor Saunders said the task undertaken by the professors during the commissioning stage would be made more complex by the need to maintain existing health services whilst units were being established at the new hospital. Paediatrics is moving from the Mater Misericordiae Hospital and Obstetric services from the Mater and Western Suburbs hospitals to the new Teaching Hospital. Also many adult medical and surgical services now located at the Royal Newcastle Hospital will be established at the new site.

In recognition of this task, the Department of Health had provided the University with funds to employ junior faculty to help the professors with their academic loads and employ administrative assistants and secretaries, he said.
International Recognition

Forecasting developments in world meat markets

What began as research at the University of Newcastle into the Australian meat industry 15 years ago has resulted in an internationally supported system of forecasting developments in world meat markets.

Mr Robert McShane, Senior Lecturer in Economics, developed the system based on econometric models. It has been adopted by the Geneva-based International Research Group (GIRA), which has been operating in the animal/meat business since 1973 and which has a research staff in excess of 70 professionals.

For Mr McShane the success of his method of forecasting trends in the international meat industry should be tremendously satisfying, because many companies and government agencies have asked him to prepare reports, and, since 1983, he has expanded his activities to include forecasts for Japan, the United States and New Zealand.

Second major report

Mr McShane usually spends a period before Christmas every year travelling to Geneva and cities in other countries to obtain information necessary for the application of his forecasting system.

In 1968 he began research into the livestock and meat industry in Australia. About five years later, GIRA contracted him to prepare the Australian section of a meat program world study. Compiled over three years, the world study ran to more than 60 volumes and cost $3 million Swiss Francs.

In 1976 Mr McShane prepared a second major report on expected long-term developments in the world meat market and the effect on Australian meat exports.

A year later he was asked by GIRA to set up several models for forecasting developments and how they would affect certain countries. This required him to spend an extended period in Geneva.

For the last 12 years leading companies and government agencies in the livestock and meat industry, such as BP Nutrition (UK), Unigrains (France) and government instrumentalities in The Netherlands, Ireland, United Kingdom, France and Denmark, have operated as the GIRA Meat Research Group.

As Mr McShane explains, the members of the group contribute to a research fund to help GIRA's annual analysis of world wide developments in the meat industry and to attend a conference in Geneva at which forecasts are evaluated.

Mr McShane, whose strong interest in the international meat industry is reported on this page, has been appointed Chief Economist for the Hunter Valley Research Foundation.

While continuing to teach in the Department of Economics at the University, Mr McShane will provide the Foundation with assistance in evaluating and interpreting Hunter Region Economic Indicators; present the Foundation's Economic Indicators Report to sponsors, the Press and the community; raise research contracts for the Foundation.

Apart from his association with GIRA, Mr McShane has undertaken research directly for a number of government agencies and companies. He has also presented many seminars and been published in journals.

He explains that his major interest is in setting up the forecasting systems. Basically, his technique involves constructing economic models and then modifying parameter values according to the information gathered from his research. Modestly he describes the results as 'reasonably successful' but he also recognises that he would not have been able to stay in the game very long if he had made large errors.

Because of the technique he uses, it is necessary for him to travel to the countries for which he prepares reports. Having to help to put together world studies, while also attending the annual conference in Geneva, adds to the periods he spends overseas.

Asked to give details of current trends in the world meat markets, he forecast the following possible developments:

- Poultry would continue to expand its importance in meat markets, although at a slower rate than before.

- Meat trade flows would change, with the Asian region increasing its importance.

Expand its investments

- The world mutton trade would remain weak. The world lamb trade would shift from being directed at Europe to being directed to Asia and North America.

- As for Australia, the good returns for beef production should continue until the early 1990s before dipping in the mid-1990s and then recovering in the period leading into the 21st century.

Mr McShane also predicts that Australia's main beef export market will move from the United States to Japan, which will expand its investments in Australia.

The work being done on forecasting developments in the meat market is relevant to the Hunter as the general movement in cattle and sheep prices is a major determinant of this region's beef and sheepmeat production. The research being done by GIRA is being supported by a major Hunter Valley meat processor.

In the Department of Economics, Mr McShane teaches Economic Statistics and Econometrics. In 1980 he was attached to Oxford University's Institute of Agricultural Economics as a Visiting Researcher and he has lectured in his field in a number of overseas countries, including Canada.
New Appointments

Chair of Orthopaedics filled

Professor William Gillespie has been appointed to the University's new Chair of Orthopaedics.

Professor Gillespie will be Director of a new Institute of Orthopaedics in Newcastle, which the New South Wales Department of Health will fund as part of its Orthopaedic Enhancement Programme, designed to expand the academic base in orthopaedics in this State.

The Department of Health said Newcastle was already recognised as a major orthopaedic centre, with a reputation for high-quality services and a tradition of excellence in education and research.

Orthopaedic services would be considerably enhanced by the completion of the Rankin Park Teaching Hospital, which included provision for a Regional Trauma Service. The development also allowed for a major expansion of orthopaedic beds at the Royal Newcastle Hospital.

The Department of Health said the establishment of an Institute of Orthopaedics at Newcastle would not only enhance Newcastle as a major centre for orthopaedic teaching and research, but would also enable an increase in clinical services, particularly elective surgery, in the Hunter Region.

Apart from financing the Chair in Orthopaedics, the Department of Health will provide Professor Gillespie with support staff comprising a Senior Lecturer, a Clinical Lecturer, two Professional Officers and a Secretary.

While he will be responsible for teaching and research across the whole field of orthopaedics, Professor Gillespie's major research interests lie in bone infections, the quality of care assessment using a computer base, the economics of joint replacement and clinical performance testing. He also has research interests in orthopaedic problems of the aged. As a teacher he is particularly interested in launching programmes at undergraduate and postgraduate levels.

Professor Gillespie is presently attached to the University of Otago in New Zealand. He graduated from the University of Edinburgh with the degrees of BSc(Hons) in 1961 and MB, ChB in 1964. He was elected to the Fellowship of the Royal College of Surgeons of Edinburgh in 1961 and of the Royal Australasian College of Surgeons in 1977.

After graduation he served periods as House Surgeon and Senior House Officer in hospitals in Carlisle and Edinburgh before becoming Registrar in Orthopaedic Surgery (1970-72) and Consultant Orthopaedic Surgeon (1974-77) at the Princess Margaret Rose Orthopaedic Hospital, Edinburgh. During this period he had been appointed Lecturer (1972-73) and part-time Senior Lecturer (1974-77) in Orthopaedic Surgery at the University of Edinburgh.

Dr Gillespie had spent one year as an Exchange Tutor Specialist in Orthopaedic Surgery at the Middlemore Hospital, Auckland (1973-74). He was appointed Senior Lecturer in the Wellington Clinical School of Medicine, University of Otago (1977-81) and moved to his present post as Professor of Orthopaedic Surgery, Christchurch School of Medicine, University of Otago, in 1981. In this position he is also Head of Orthopaedic Services, Canterbury Hospital Board.

In Christchurch he established the Foundation Chair in Orthopaedics and developed orthopaedic services in a major development in the district hospital. Despite the heavy commitment to developing new facilities at Christchurch, Professor Gillespie had achieved great success in Christchurch. It was fortunate that the coincidence of such high quality and self-supporting and financially sound services. particularly elective levels.

Professor Morgan said it was apparent that Professor Gillespie had achieved great success in Christchurch. It was fortunate that the coincidence of funding by the State Government and the development in Orthopaedics in Newcastle enabled the University to attract a candidate of such high quality and attainment as Professor Gillespie.

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Study of valley boarding school

One hundred and six years ago the Sisters of St. Joseph opened a Convent, the foundation of a new religious institute, at Lochinvar.

A thesis on the work of the Sisters of St. Joseph at Lochinvar Convent has rewarded Sister Janice M. Tranter with a Master of Arts from the University of Newcastle and the 1988 Newcastle City Council Local History Award.

Sister Tranter's thesis, entitled Foundations: the Forces at Work in the Foundation of the Sisters of St. Joseph at Lochinvar, 1883-1913, was recommended for the award by the University's Department of History.

Sister Tranter was born in Newcastle Highway in the Catholic and educated at the Rosary School, Waratah, and St. Joseph's College, Lochinvar.

She was among students seeking autonomy for the Newcastle University College in the sixties.

In 1964, the year of her graduation, she joined the Novitiate of the Sisters of St. Joseph at Lochinvar. Subsequently she completed part-time studies through the University of New England, gaining an additional major in German and a Diploma in Education, while teaching in various Catholic secondary schools.

Sister Tranter's thesis presents aspects of the growth of the Lochinvar Institute in the Hunter Valley and the expansion of the Catholic schools, especially during the incumbency of Bishop Murray.

In doing so, the pioneering research of Professor W.G. McMinn (retired), into the work of Murray, and the research of her Co-supervisor, Assoc. Professor A.R. Barcan (retired), into Australian education has been amplified.

In a broader context, Sister Tranter has placed the foundation of the Sisters in an Australia-wide movement and drawn on extensive resources from Adelaide, Bathurst, Perthville, Maitland, Brisbane, Sydney and elsewhere to identify clearly the colonial origin of the new religious institute.

Sister Tranter was born in the Newcastle suburb of Waratah and her family integrates diverse elements of the nineteenth century Hunter Valley experience.

More recently, she moved into pastoral work and in 1985 gained her Bachelor of Educational Studies degree.

In 1984, she moved to the Convent in the Anglican cemetery, as well as across the New England Highway in the Catholic cemetery.
Modern treatment of schizophrenia

Professor of Psychiatry, Vaughan Carr, will establish a laboratory to continue his study of schizophrenia.

Professor Carr became interested in the modern treatment of schizophrenia as a Research Fellow at the Yale Psychiatric Institute.

After taking up his appointment at the University of Adelaide in 1980 he initiated a research program with Dr Jo Wale, notably in developing biological models of schizophrenia which were tied very closely to the common manifestations of that illness.

He has been successful in identifying several strategies which people who suffer from schizophrenia can adopt to help them to cope with the illness.

He says the nature of the basic brain disorder which occurs in schizophrenia is not known. However, it is known from recent research that the illness involves some sort of disturbance in attention and the processing of information. The laboratory could also be useful in the understanding and treatment of a range of other mental disorders like depression and dementia.

Unfortunately, he is the only Professor of Psychiatry in Australia who does not have a clinical unit attached to a general hospital in his region. A proposal for a unit to be provided at the Mater was raised about 10 years ago, but so far, it has never been realised.

He sees the establishment of the unit, including an in-patient ward, community care and a day hospital, as a major priority at a time when the integration of general health and mental health services is recognised as providing considerable benefits in human and economic terms and when an estimated 30 per cent of the patients in general hospitals and primary care have diagnosable psychiatric conditions.

Lastly, he says he is very interested in having a Diploma in Community Mental Health established to cater for nurses, social workers, school counsellors, general practitioners and others who want to heighten their professional qualifications and better equip them to meet the challenges presented by their clients with mental health problems.

Southern African visitors

- Education Secretaries from Southern Africa visited the University to meet educators and discuss ideas about teacher education, curriculum development and distance education.
- They were invited to Australia by the Australian International Development Assistance Bureau (AIDAB) to assist with the planning of the second stage of an education project for the African region which will be funded by the Australian Government over the next three years.
- The delegation included, from left, Dr E.J. Chanakira (Zimbabwe), Mr K.M. Masogo (Botswana), Dr I.C. Lamba (Malawi), Mr M.J. Nalbande (Swaziland), Mrs G. Mulapesi (Zambia), Mr B.O. Hassan (Zanzíbar), Mr K. Tsekoa (Lesotho) and Mr J.D. Ngonyanl (Tanzania).
International Maths program developed

A curriculum research team led by Mr Trevor Cook and Mr Wing Au, of the University of Newcastle's Department of Education has received a major research and development grant from Promaths Pty. Ltd. for the development of a classroom version of Programmed Mathematics, its internationally successful home-based mathematics individual instruction program.

They have also been commissioned as authors and consultants for the latest primary and secondary versions of the materials, soon to be published and distributed internationally.

The role of Mr Cook and Mr Au in the project concern curriculum design, the development of resources and curriculum management and implementation.

The research team includes Mr Harold Fryer, a former lecturer in mathematics at the Hunter Institute of Higher Education and a mathematics teacher at Newcastle High School, Mr Bryce James, a lecturer in education at the HIHE and research assistants Greg Preston and Sharon Lewis, postgraduate students with the University's Faculty of Education.

The Managing Director of Promaths, Mr Passlow, said his company was impressed with the professionalism and preliminary curriculum design work already undertaken by the research team.

"We believe our product is an excellent one but will benefit from the research and development program to better meet contemporary needs, both internationally and in Australia," he said.

The research project will be progressively funded over a two-year period and is worth about $180,000.

Enrolments confirm strong growth

The enrolment of new undergraduate students this year has confirmed the strong growth of the University in recent years.

By the end of Orientation Week (March 6), 2011 new first year students had been admitted and late enrolments were still being taken. New undergraduates last year totalled 1792.

The estimate of the University's total student numbers in 1989 (at the end of Orientation Week) was 6755 — a record. Last year it was 6375, and six years ago it was 4435. Another feature of the enrolment is the participation of full fee-paying students from overseas for the first time. The enrolment of full fee-paying students was 55 by the end of Orientation Week.
Reducing traffic noise at intersections

Research in the University of Newcastle's Department of Mechanical Engineering has indicated how road traffic noise is generated at a signalised intersection.

The generation of vehicle noise at an intersection controlled by traffic signals is made up of a complex mixture of various components.

The research was a joint venture between the University and the Australian Road Research Board (ARRB) the national centre for road research and information dissemination.

Under the supervision of Assoc. Professor Eric Betz ARRB staff member Stephen Samuels was awarded a PhD for his research into the subject.

Funded largely by State and Federal Governments, ARRB undertakes research into the use, maintenance and enhancement of Australia's existing and proposed road systems.

\[\text{Stephen Samuels}\]

Conducted in ARRB's Melbourne laboratory the traffic noise research initially involved the development of a theoretically and empirically based descriptive model.

By considering the noise output of every vehicle during all stages of progress through a conventional signalised intersection a picture of the traffic noise history at an array of locations around the intersection was built up.

Noise emissions were recorded at a trackside location as individual vehicles drove under conditions of acceleration, deceleration and constant speed as specified by the model. Stationary, idle conditions were also included.

Comparing stop-start and free-flowing traffic emissions through the intersection will allow road, traffic and environment engineers to assess and allow for the effects of intersections on the community noise climate.

Differences between free and interrupted flow noise conditions have been identified and this data will go towards achieving reductions in the traffic noise at intersections.

How do you spell ...?

The field of semantic memory is concerned with the manner in which we organise and retrieve knowledge.

Under the supervision of Dr Richard Heath, Senior Lecturer in Psychology at the University of Newcastle, Dr Paul Casey made some interesting spelling observations in this field on his way to being awarded a PhD.

Dr Casey, a lecturer in Psychology at the Riverina-Murray Institute of Higher Education, said it is difficult to measure what is going on inside the head when working on a person's knowledge base.

'One of the few measures available is the time required to make a response to some simple question or statement,' he said.

Fused a common methodology employed in semantic memory experiments has been to request subjects to respond 'yes' or 'no', as quickly and as accurately as possible, to simple statements such as "All apples are fruit" and "All dogs are flowers" with the speed and accuracy of the answer being of central concern.

This exercise is termed the semantic sentence verification task.

Previous data on speeded categorisations showed that people often take longer to reach an incorrect decision than a correct decision while according to other processing models correct and erroneous decisions should take the same amount of time.

For his PhD Dr Casey chose to investigate various aspects of the decision processes executed by people when they carry out this speeded categorisation task.

Over 600 subjects were tested and 28 categories were listed.

Responses were entered on a computer exactly as spelled by the subjects — and this is where the interesting spelling results came to light.

Despite the massive editing task for Dr Casey the discrepancies in spelling of the same words were astounding.

'Marijuana' was spelled 68 different ways, 'Presbyterian' (44 different ways), 'Hari Krishna' (39) and 'chrysanthemum' (36).

Relatively common words with at least 10 different spellings included 'Adelaide', 'cockatoo', 'kookaburra', 'galah', 'giraffe', 'banana', 'nectarine' and 'petunia'.

A paper based on Dr Casey's PhD research has been published in the Australian Journal of Psychology and another paper has been accepted for publication in Memory and Cognition.

After a 15-year association with the University of Newcastle (Dr Casey enrolled as a student in 1968) and the acceptance of his PhD thesis, with its intriguing sideline, Dr Casey has probably earned a spell.