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MEDICAL RESEARCH AT THE UNIVERSITY OF MELBOURNE

John B Furness, Associate Dean (Research), Faculty of Medicine, Dentistry and Health Sciences and
Richard G Larkins, Dean, Faculty of Medicine, Dentistry and Health Sciences

RESearch IS AN ESSENTIAL COMPONENT of any vibrant medical school: it informs and influences our teaching and underpins advances in diagnosis and treatment. It is no accident that many, perhaps most, medical advances have arisen out of research in medical schools and associated medical research institutes. This Medical School has a leading role in biomedical research in Australia: in 1999 the University obtained \$17.2 million in project grant support from the premier granting body, NHMRC. This is 16.8 per cent of all project funding in Australia: the next best was the University of Sydney, with \$10.6 million. The Medical School also obtains considerable support from other sources, including industry. The funding obtained is an index of the quality of research at Melbourne, and of past success.

Although medical research at Melbourne spans a very broad range, the following are a few examples of research in the Medical School that lead the world.

In the Department of Medicine at the Austin Hospital, Professor Sam Berkovic and his colleagues have discovered genes that predispose to epilepsy. This work promises to identify the molecular basis for some epilepsies, and will provide pointers to treatment. Dr Margaret Morris, in the Department of Pharmacology is investigating the neurotransmitters and hormones that are involved in determining satiety to food. This work holds great promise for the development of drugs to treat obesity. In the Department of Pathology, Professor Colin Masters and his colleagues are investigating the molecular basis of Alzheimer's disease. Excellent work is also being conducted into other areas, including investigations into cardiovascular, renal, gastrointestinal, bone and neurosciences and diabetes. New research initiatives have been developed with the establishment of the Koori Health Research Unit in the Centre for the Study of Health and Society; an agenda for rural health research is being developed by Professor David Simmons, the Foundation Chair of Rural Health; and an integrated program of research in Women's Health is being undertaken by the Key Centre for Women's Health in Society under its new Director, Professor Lenore Manderson.

Some of the support within the Faculty, especially important to underpin new initiatives, comes from bequests. These can be used to support young people entering research, through the provision of Scholarships and Fellowships. The Faculty administers two major endowed scholarship schemes, the Roper and Griffith Fellowships, which have been successful in recruiting intelligent and dedicated young researchers to the School.

The external environment relating to biomedical and public health research is undergoing major change, and our School has to develop the expertise to adapt to this new environment. The

Health and Medical Research Strategic Review, chaired by Mr Peter Wills AM, has advocated considerably more investment by both government and industry in health and medical research. It proposes a variety of structural changes to the research sector to increase the capacity for fundamental discovery and the development and commercialisation of discovery. The dramatic progress with the sequencing of the human genome (estimated to be complete between 2001 and 2003) and the enormous biological advances and new questions which will flow from the knowledge of the structure of all 80 000 or so human genes will lead to a major acceleration of the acquisition of biological knowledge. The associated research is expensive and highly competitive, and for our scientists to be successful strong collaborative links must be fostered.

There are also big challenges around public health services research. Every country, including our own, is facing the dilemma of increasing effectiveness but also increasing costs as new technologies become available for health care. We must develop our capacity to undertake high quality public health and health services research so that we can contribute to evidence-based health care and health policy.

The training of our next generation of health researchers remains a continuing challenge. The increased complexity of basic biomedical research and the increased demands of clinical medicine in a health system striving to contain costs make it harder and harder to combine clinical medicine and research; yet it is essential that we continue to produce 'clinician-scientists' if we are to undertake research appropriately directed to clinical problems and have effective translation of basic advances for the benefit of patients. We must develop imaginative ways of promoting research, facilitating research training for clinicians, and encouraging the interaction between full-time fundamental scientists and clinicians.

The future of medical research in our Medical School is bright, provided we are able to seize the opportunities that will become apparent in the near future. We must create an environment where we maximise the interaction between our affiliated research institutes and the medical school and develop national and international collaborations that allow us to continue to make a major international contribution. Most of all, we must continue to attract the brightest young minds from all over Australia and overseas, inspire them with the excitement of discovery and provide them with an environment that allows them to develop their full potential to contribute to knowledge and help overcome the major health problems confronting the developed and developing world in the twenty-first century.

COVER STORY

FIRST YEAR STUDENTS EXPERIENCE THE NEW MEDICAL CURRICULUM

THE RESPONSE OF FIRST YEAR STUDENTS to the new medical curriculum has been very positive, with the clinical field visits and small group work proving particularly popular. As a consequence of working in small groups, students are enjoying getting to know other students across their year much better and are developing closer relationships with staff.

Of the ten medical schools in Australia the University of Melbourne is the fourth to undergo this type of curriculum transition since Newcastle University pioneered the problem based learning style of curriculum. The other three medical schools, Flinders University, the University of Sydney and the University of Adelaide have moved to graduate entry only. Melbourne alone is maintaining school leaver entry and combining it with graduate entry. Graduate entry will be introduced next year adding to the diversity of the student base.

Facilities developed for the new curriculum include problem based learning rooms and clinical skills laboratories. In addition, all students have access to the new student computer resource centre. All these rooms have computers with internet access. There are fifteen problem based learning rooms, ten of which double up as clinical skills laboratories, and another eighteen are planned to meet the needs of the year 2000 and beyond.

Cover Photos

Top: First year medical students engaged in a problem based learning tutorial.

Middle: Medical students in the new student computer resource centre.

Bottom: Associate Professor Sue Elliott introduces first year medical students to clinical skills.

HYPOTHETICAL

31 JULY 1998

TOO YOUNG TO KNOW? TOO YOUNG TO DECIDE? CONSENT AND CONFIDENTIALITY IN ADOLESCENT HEALTH

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Panel

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'Dr Feelgood', Radio Fox FM *Pillow Talk*
and General Practitioner

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TOO YOUNG TO KNOW? TOO YOUNG TO DECIDE? CONSENT AND CONFIDENTIALITY IN ADOLESCENT HEALTH

The Hypothetical

Michael Carr-Gregg

THE MODEL OF the hypothetical has its origins in the Socratic method of classroom teaching, frequently used to train lawyers. The Ford Foundation was the first to use the technique at private conferences to examine the motivations and reactions of leading politicians and power brokers.

In the late 1980s Geoffrey Robertson adapted the technique for the media in Great Britain, but it was not until the ABC's 'Hypothetical' series started in prime time that the hypothetical made the final transition to popular television.

Hypotheticals are not designed to necessarily reach a particular conclusion, to solve an intractable problem or to convey a subliminal message, but merely to explore the various options. They are designed to raise awareness of particular issues and to encourage the audience to sit up and distinguish in their own minds between arguments that are good and arguments which are better.

The ultimate secret of the hypothetical's success lies in its spontaneity and in the willingness of panellists to get involved and argue their positions in a vigorous manner. The actual scenarios are never revealed prior to the hypothetical, introducing the additional element of surprise.

For some years now the Centre for Adolescent Health's Education and Training Unit has been using the hypothetical teaching technique to help students negotiate the ethical, legal and moral dilemmas that can arise in caring for young people. Questions such as when a young person should have the right to consent to their own medical treatment, what the rights of parents are when they clash with those of a young person, and whether a physician's duty of confidentiality is absolute when it comes to young people.

The area is complicated by a lack of Australian case law and the proliferation of popular myths and misinterpretations of the law that exist within different disciplines. The following discussion addresses the two issues of consent and confidentiality and illustrates how these might be explored in a hypothetical.

WHEN IS A YOUNG PERSON ABLE TO CONSENT?

The 'age of majority' is eighteen – this means that in the eyes of the law the young person is an adult and no longer requires their parents' or legal guardian's permission to consent to treatment. However, 'the mature minor' rule recognises that some young people under eighteen do have the right to consent to medical treatment.

A minor is regarded as mature, if in the opinion of the treating physician they have sufficient maturity, understanding and intelligence to fully comprehend the nature and effect of what is proposed. The younger a person is, the more satisfied the doctor must be of the young person's maturity, and if uncertain, some may obtain the opinion of a colleague which is then often documented in the patient's notes.

One of the difficulties facing workers with young people within a health setting is that this 'mature minor' rule has rarely been tested at law with the exception of a case in the United Kingdom, known as the Gillick case, which related to a young woman seeking contraceptive advice.

One of the scenarios often used to illustrate this point, involves a decision facing the parents of a young person with an osteosarcoma of the distal end of the femur who want their daughter to undergo a surgical procedure in order to determine whether her tumour has metastasised to her lung. This is the third such procedure their daughter has had to endure and each time recovery has been more and more painful. At the age of sixteen, she refuses to have the procedure, saying she has had enough. The surgeons assure the parents that they are optimistic of a good outcome if they can perform the procedure.

Despite the excruciating moral dilemma that this situation poses for the young woman's parents, the legal situation is actually quite clear. If the sixteen-year-old is deemed 'Gillick' competent and no agreement can be reached, the parents may ask the Court to decide whose wishes prevail, and the Court would do so according to what it believes to be in the best interests of the young person.

A similar situation prevails when this same young woman, now terminally ill, seeks to try an alternative therapy, of no proven worth, against the wishes of her parents. The Court may once again be called upon to decide whose wishes prevail. The situation can become further complicated when one parent or guardian disagrees regarding the treatment of a minor, and the Court will once more have to decide.

CONFIDENTIALITY

Despite commonly held beliefs, it is only medical practitioners and the clergy who are legally bound to confidentiality, although other professions such as the Australian Psychological Society have codes of practice that include confidentiality as a requirement for all consultations.

The law does, however, allow a breach of confidentiality in several situations – such as when compelled by a court, or a protective services investigation. Nor is one obliged to abide by a patient-client confidentiality if there is an over-riding duty to the public as part of public health legislation, or if expressed or implied consent of the patient has been obtained, or if it is deemed in the best interests of the patient, i.e. to preserve their life.

A scenario commonly used to illustrate this point is the case of a general practitioner who is approached by a young



Michael Carr-Gregg poses a hypothetical question to Sally Cockburn

women aged fourteen for the contraceptive pill and who discloses that her partner is a young man whom the general practitioner subsequently discovers is HIV positive. The young man refuses to inform his partner despite a request from the general practitioner. What are the general practitioner's options?

In Victoria, the Health Department has contact tracers who may lawfully inform contacts without disclosing the identity of a patient. This is legal as it is deemed to be in the interests of public health that others be informed. If the young person is a minor, then there is also an expectation that the patient inform or give consent to tracers themselves.

CONCLUSION

Modern adult education techniques suggest that one lecturer talking at students using overhead projectors should be a thing of the past. In the Centre for Adolescent Health's endeavours to provide its students (both graduate and undergraduate) with meaningful educational experiences the hypothetical has been an unqualified success. We owe a great debt in the first instance to Socrates and perhaps also to Geoffrey Robertson for reviving a great tradition.

Ethical Themes in the Hypothetical

Lynn Gillam

SHOULD FOURTEEN YEAR old Wendy be prescribed the contraceptive pill without her parents' consent? To what extent should her general practitioner enquire into the nature of the relationship between Wendy and her boyfriend – and what should she do about the things she finds out? Wendy's father wants to know what these pills are that Wendy is taking – should the general practitioner tell him? When Wendy becomes pregnant and contracts HIV from her boyfriend, should she be advised to have an abortion if she is hesitating about it? Can she consent to this on her own, or do her parents now need to be involved? Finally, when she is diagnosed with metastatic bone cancer, what should be done when she refuses treatment?

These are just some of the questions that arose in the course of the hypothetical presentation of the case of Wendy. Such questions can be approached from many different perspectives. Here I will tease out some of the ethical principles (and ethical problems!) lurking in the background.

Perhaps the most obvious issue is that of the ability of an adolescent to give a valid informed consent to a medical intervention. In ethical terms (the legal situation, of course, may be somewhat different), this comes down to a question of whether the individual adolescent involved is able to make an autonomous decision in the situation. Precisely what counts as an autonomous decision is a controversial matter in ethics. Minimally, Wendy would need to understand the information that was being given to her about her medical condition, the options for medical treatment or management, the risks and benefits, and the implications for her future. In fact, almost all participants in the hypothetical (panellists and audience) seemed to accept without much question that at fourteen Wendy would be quite able to do this, and could therefore consent to medical treatment (both contraception and abortion) on her own, without the need for a guardian to consent on her behalf.

But perhaps this purely cognitive ability is not enough. Most ethicists would regard an individual's values as an important factor in an autonomous decision; indeed, no decision can be made unless the individual has some values on which to base preferences for one option over another. An autonomous decision must be based on a set of values that a person has thought about and decided to endorse, and that are at least reasonably stable over time. These values reflect the individual's view of her life and what is important to her. Disruption to values, as much as cognitive problems in understanding and processing information, can reduce an individual's capacity to make autonomous decisions. This is precisely the reason that people with psychiatric illnesses such as schizophrenia or depression are thought to lack decision-

making capacity. The key question here is whether, at fourteen, Wendy has had the opportunity to develop such values for herself: it is at least arguable that with her limited experience of life so far, and with most decisions being made for her by adults, she has not fully reached this stage of personal development. And if she hasn't, then she is not capable of making a fully autonomous decision.

Beware! This does not mean that Wendy should not be seen or treated by a doctor without her parents being present. There may be good reasons not to involve the parents, especially if the relationship is strained or likely to be abusive, and if in addition Wendy is likely to come to harm otherwise – for example, if she intends to pursue a sexual relationship with her new boyfriend with or without contraception. Wendy also has a right to confidentiality, which would be breached if her parents were present at a medical consultation against her wishes. (But the picture becomes murky here – the right to confidentiality is in part founded upon the value of autonomy, and insofar as Wendy lacks the ability to be autonomous, her right to confidentiality, especially in relation to her parents, might be that much the less. I'll say more about this later on.)

So for all these reasons, it might well be the right thing to see Wendy on her own, and to make treatment decisions in conjunction only with her. But it might be wise to avoid relying too much on Wendy's autonomy, leaving all the decision-making up to her. Perhaps in her case, attempts to influence and direct her decisions would be ethically appropriate in a way that they would not be for adults. Just as it would be wrong to completely ignore the capacities for understanding and choice that adolescents do have, it would also be wrong to go to the other extreme and treat them as no different from adults – especially when the potential for harm is great. There was virtually no discussion of this issue during the hypothetical, but I offer it here as food for thought.



Tony Coady, Loane Skene and Jon Faine

A related issue, which received some attention especially at the stage where Wendy wanted to refuse chemotherapy for her cancer, is that of a possible difference between refusing treatment and consenting to it. Some people who were comfortable with fourteen year old Wendy making her own decision about the pill were less at ease with fifteen year old Wendy deciding not to have treatment for her cancer: a decision that might significantly shorten her life. Should we apply different standards of decision-making capacity (competence) to different sorts of decisions. If we deem Wendy to have the capacity to consent to a prescription for the contraceptive pill, does that mean that she is also competent to consent to termination of pregnancy and to refuse chemotherapy?

This depends on how, exactly, competence is understood: another vexed question in ethics. Some ethicists take the view that the standard of competence should be set higher in situations where the implications are serious and life-altering, perhaps life-threatening, but lower where the decision has less far-reaching implications. This can be interpreted in two ways. It may simply mean that in situations where the stakes are high, we need to be more sure – we need to take more time and effort to assess carefully and thoroughly each individual's capacity for autonomous decision-making, rather than simply making assumptions. Or, more significantly, it may mean that some

decisions or situations actually require a higher level of decision-making capacity than others. This may include not only better cognitive abilities, but a greater capacity to think about and form one's own values. Either way, on this view, the fact that Wendy is competent to consent to taking the pill does not necessarily make her competent to consent to termination of pregnancy – a decision that will have much greater and long-lasting effects – let alone to refuse chemotherapy. Of course, Wendy may well have the capacity to make her own choices about cancer treatment – by this stage she has vastly more life experience than when she first came along seeking contraceptive advice. The point is, that we may reasonably judge her capacity differently in different situations.

A quite different issue came up early in the hypothetical, causing quite a lot of discussion and some consternation for some of the panel members. It turned out that Wendy's boyfriend, Shane, is eighteen years old – so technically it is a criminal offence for him to have sexual intercourse with her, since she is below the age of consent and he is more than two years older than her. This fact raises a host of questions, some directly related to Wendy's situation, others with much broader application. Firstly, is this any of the doctor's business? It seems that it could be, in at least two ways. If Shane is committing a criminal offence, and the doctor, by prescribing a contraceptive for Wendy, is making it easier for him to do this, then she seems to be aiding and abetting a crime – at the very least, she knows that a crime is being committed. Should she report the matter to the police? Should she refuse to prescribe the pill because of it? This is not just a legal question – quite apart from what the law says that the doctor should do, there is the moral question of whether acting strictly according to the law would be the right thing to do in this instance. There seem to be wider issues to take into account before a doctor could make a decision on this.

Morally speaking, what seems to matter more is the nature of the relationship between Wendy and Shane, rather than simply their ages. If it is an abusive relationship, or one that Wendy is involved in against her will or her better judgement, this would be grounds for concern about her well-being – a concern clearly more relevant to the practice of medicine than concern about whether or not a criminal offence is being committed. If it is a consensual, non-abusive relationship, then there seems to be not much to gain and a lot to lose from intervening, whether in terms of ensuring Wendy's well-being or of respecting her autonomy. That is, there seem to be good ethical reasons not to act strictly according to the law here.

But suppose there is concern about the nature of the relationship? It is still not entirely clear what the doctor should do. Should she try to warn Wendy, or counsel her about her options and how to get what she wants? Probably yes. But Wendy may well tell the doctor to mind her own business. So, are any further steps warranted? Once the doctor approaches any third party, whether it be Wendy's parents, a schoolteacher, or the police, confidentiality is breached and Wendy's trust is completely lost. Attempts at harm minimisation (whether by encouraging the use of contraceptives, or encouraging Wendy to think again about her relationship with Shane) will be significantly undermined. Now if the risk to Wendy of continuing in the relationship were bad enough, then it would be ethically justified, perhaps even ethically obligatory, to intervene: but we would need to be fairly sure, given the likely effects of doing so.



Similar sorts of concerns arise in other aspects of adolescent health care – particularly where it is suspected that a child is being abused, but also where the child is engaging in risky behaviours of various sorts, or in criminal activities. In these sorts of situations, concern to protect the child or adolescent from harm (physical, emotional and social) is constrained by the need to preserve confidentiality, maintain the therapeutic relationship, and respect the right of the adolescent to make her own decisions – and by the recognition that attempts to prevent harm can also cause harm.

Weighing up all these considerations, and finding an ethically satisfactory way of proceeding is no easy matter. There is certainly no simple rule which will sort it all out. That is why there will always be a need for hypotheticals and other forums in which interested parties can reflect on the ethical dimensions of their practice.



John McNamara and Susan Sawyer

Legal Issues in the Hypothetical

Jane Winter

IT IS CLEAR from Lyn Gillam's commentary, above, that a number of the ethical issues raised in the hypothetical 'Too young to know? Too young to decide?' also have legal implications. Those issues regarding consent and confidentiality are addressed below.

CONSENT

First, when is a minor able to consent to medical treatment? Secondly, does a fourteen year old have a right to consent to a termination of pregnancy? And thirdly, can a mature minor refuse consent to medical treatment?

When is a minor able to consent to medical treatment?

In Victoria, this issue is governed by the common law¹. As a general rule, minors are only capable of providing limited consent to any form of medical treatment until they reach the age of majority². However, an exception to this general rule exists where the minor is mature.

Although the issue of the competence of minors to consent to medical treatment has not yet been fully explored in an Australian case before, the majority of the High Court in *Marion's Case*³ have made it clear that '[a] minor is ... capable of giving informed consent when he or she "achieves a sufficient understanding and intelligence to enable him or her to understand fully what is proposed"⁴.

To determine maturity and subsequent competence a medical practitioner needs to ensure that the minor understands the proposed treatment, any options, the attached consequences and any risks. The level of understanding required will vary with each individual and with the seriousness of the matter⁵. Clearly, the more serious the procedure, the greater the onus on the medical practitioner to be certain that the minor is competent before proceeding.

Interestingly, in Australia a medical practitioner may bulk-bill a minor over the age of fourteen years without the consent of that minor's parents. At fifteen years, a separate Medicare card can be issued if required⁶. This no doubt adds to the difficulties medical practitioners find themselves in when treating minors. It seems to indicate a recognition by the state that minors have a right to self-determination but fails to

provide the treating medical practitioner with appropriate protection. Accordingly, it is still necessary to ensure that a thorough assessment of competence is carried out and documented whenever a minor is consenting to their own medical treatment.

Does a fourteen-year-old have a right to consent to a termination of pregnancy?

Essentially, whether or not a fourteen-year-old has a right to an abortion without her parents' consent would depend on two factors. First, she must be legally entitled to the abortion in the first place. An abortion will be lawful in Victoria if continuing with the pregnancy would put the mother's mental or physical health at risk. The second factor turns on an assessment of capacity. That is, the person seeking the abortion must be competent to consent to it.

It would seem logical that once a fourteen year old minor has been assessed as mature, she should have a right to consent to a termination of pregnancy. However, as this is such a controversial issue and there is little legal authority in Australia to guide medical practitioners it would be prudent to proceed with caution. If uncertain that the procedure is in the best interests of the child concerned, the safest option, after encouraging the minor to discuss the issue with her parents if possible, would be to seek a court order authorising consent for the abortion.

Can a mature minor refuse consent?

It is generally undisputed that competent adult patients may refuse all medical treatment even when it is intended to prevent harm or save their life.⁷ However, the issue of refusal to consent by a mature minor is much more problematic. In part, this issue is contentious and remains uncertain because there is confusion over what constitutes incompetence. Although it has not been tested in the Australian courts, the English law indicates that minors suffering from either anorexia nervosa or some form of mental illness – even in a lucid phase – will be seen as incompetent for the purposes of refusing medical treatment.⁸ In these situations a court order is usually sought to compel treatment. Even so a mature minor's refusal can often be overridden by the consent of a parent.⁹

In summary then, a child is only able to authorise treatment without the consent of a parent or guardian if the child is a mature minor. If the minor is not mature, and it is not in the best interests of the minor to obtain parental consent, a court order authorising the treatment should be obtained.¹⁰

The Family Court of Australia has published guidelines to assist medical practitioners to decide when a court order is necessary for a particular procedure.¹¹ If in doubt, these guidelines should be consulted.

CONFIDENTIALITY

There were three main issues addressed regarding confidentiality: first, when is a duty of confidentiality owed? secondly, is a mature minor entitled to confidentiality? and finally, what are the limits of the duty of confidentiality?

When is a duty of confidentiality owed?

In addition to an ethical duty of confidentiality¹² medical practitioners and other health professionals have a legal obligation to maintain patient confidentiality. This obligation stems from various sources of law including various statutory provisions and case law.

Is a mature minor entitled to confidentiality?

If it is established that a minor is competent to consent to their medical treatment they are entitled to the same confidentiality in relation to medical information as an adult.

Limits of the duty of confidentiality

Clearly, the duty to maintain confidentiality is not absolute. There are limits to this duty and in some situations the disclosure of confidential information may be authorised or even required.¹³ For example, competent minors are unable to seek treatment for sexually transmitted diseases and eating disorders in Australia without their parents' knowledge.¹⁴

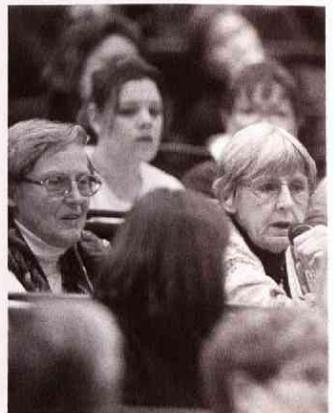
Mature minors are able to consent to medical treatment in the circumstances above. In addition, these minors are entitled to the same confidentiality regarding their treatment as adults. However, the rights of mature minors to refuse medical treatment remain unclear. Accordingly, the implications must be carefully considered when confronted in practice.

A more detailed analysis of the issues is beyond the scope of this paper. For further information I recommend the references (cited) by Loane Skene and Belinda Bennett. John Devereux's book¹⁵ is also an excellent text to consult.



Moira Rayner

- 1 Both South Australia and New South Wales have legislation which deals specifically with the ability of competent minors and their ability to consent to medical treatment: *Consent to Medical Treatment and Palliative Care Act 1995 (SA)*; *Minors (Property and Contracts Act 1970 (NSW)*.
- 2 In Victoria, and in all other states of Australia, the age of majority is 18 years: *Age of Majority Act 1977 (Vic)* s 3.
- 3 *Secretary, Department of Health and Community Services v JWB and SMB (1992)* 175 CLR 218
- 4 At 237 per Mason, CJ, Dawson, Toohey and Gaudron JJ.
- 5 This is clear from Marion's Case where Justice Deane stated that '[p]ending the attainment of full adulthood, legal capacity varies according to the gravity of the particular matter and the maturity and understanding of the particular young person'. (per Deane J at 293).
- 6 See Loane Skene, 'Law and Medical Practice: Rights, Duties, Claims and Defences' (1998), Sydney, Butterworths.
- 7 Although this is limited in cases where such refusal will put the safety or welfare of a third party at risk.
- 8 See the cases of *Re R (A Minor) (Wardship: Consent to Treatment)* [1991] 4 All ER 177; *Re W (A Minor) (Medical Treatment: Court's Jurisdiction)* [1992] 4 All ER 627; and more recently *Re C* (Wall, J unreported *The Times*, 13 March 1997). **Note** also that the statutory age at which a minor may consent to medical treatment in England is 16 years.
- 9 That is, even in the absence of a court order. It is important to note, however, that any lawful authority to consent by the parents must be in the child's best interests.
- 10 For example, from the Family Court under its welfare jurisdiction.
- 11 *A Question of Treatment, The Family Court and Special Procedures for Children, An Introductory Guide*, 1996.
- 12 See, for example the Australian Medical Association, *Code of Ethics* (1996), para 1.3(d).
- 13 See Belinda Bennett, *Law and Medicine* (1997) Sydney, LBC at [2.7] - [2.14] for a more detailed discussion on this issue. Here, she also discusses the USA decision of *Tarasoff v Regents of the University of California* where a patient told his psychotherapist that he intended to kill a particular female and subsequently did so. This case was about the duty to warn in certain circumstances. However, it has not been applied in Australia.
- 14 Skene, above n 6 at 109.
- 15 John Devereux, *Medical Law: Text, Cases and Materials* (1997) Sydney, LBC.



28 APRIL 1998

ANGIOSOMES

EXPLORED, EXPLAINED, EXPANDED AND EXPLANTED

PROFESSOR G IAN TAYLOR

HEAD, PLASTIC AND RECONSTRUCTIVE SURGERY UNIT, ROYAL MELBOURNE HOSPITAL



PROF G IAN TAYLOR

THE BASIS of my talk today is anatomy. Although most of us seem to regard anatomy as a dead subject, it is noteworthy that nearly every advance that has been made in medicine in recent years, particularly in surgery and in radiology, has been associated with a detailed reappraisal of this field. Anatomy is not dead – it is a living, functional, vibrant subject. Because most people have different concepts of plastic surgery, and since this is my area of expertise, I thought I would show at the beginning how the 'anatomical renaissance' has

impacted on this specialty.

Many people think that plastic surgery is cosmetic surgery and that it's all to do with ironing out wrinkles: a bit of a tuck here and a suck of fat there. However the word 'plastic' is derived from the Greek and the Latin meaning to *shape* or to *mould*. We are focused on restoring something that is missing, replacing something that is misplaced or, occasionally, reducing something that is in excess. The whole art is to restore to normal, wherever one can, the deformity.

Plastic surgery evolved during the two great wars. Because of close combat, warfare facial injuries were common and these mutilated patients somehow had to be restored back into society. To repair the defects patients underwent multiple operations during which a tube of abdominal skin and fat was sewn up like a sausage roll. One end was joined onto the arm until the blood supply grew in and then it was cut from the abdomen and taken up to the face. Using the forearm as 'a carrier' one waited until the blood vessels grew in to the end attached to the face and then it was detached from the arm and gradually unfolded and respread. This took perhaps five to six months and perhaps fifteen to twenty operations to obtain a result (Fig 1). Sometimes legs were joined together to try and get skin from one leg to cover a fracture in the other where the skin had been lost in a car accident or in a gunshot wound, replacing the area on the back of the donor leg with a skin graft. The skin and fat flap was left to heal and eventually the legs were separated by dividing the base of the flap. The alternative was a tube pedicle transfer or amputation. A very uncomfortable and difficult procedure, usually confined to the young. One can only imagine the discomfort of a young lad whose hand was joined to his leg by a tube pedicle for six weeks while the flap healed before it was detached. Again: four or five months of surgery.

Unexplained anomalies occurred if one designed a flap in one spot and then raised exactly the same flap on the other side. Sometimes one side would survive, while the other would not. If a flap of the same dimensions was raised in one direction,

another flap exactly the same shape and size but placed in a different direction would die. We just didn't know why this was happening. We were bogged down with rigid length to breadth ratios assigned to different areas of the body. The reason was ignorance of the basic anatomy of the blood supply of the tissue that we were transplanting.

The art of plastic surgery and flap design was developed by Sir Harold Gillies and the discipline was handed on to Sir Benjamin Rank, who in turn encouraged me to further research and design. Then, in 1973 a car accident case presented with extensive skin loss over an exposed ankle joint and leg amputation seemed the only option. I was called in to assess the problem. At the time some work had been done overseas with animals using the microscope to transplant skin flaps. There had also been some work done in Scotland on a human flap based in the groin on specific blood vessels – the superficial circumflex and superficial inferior epigastric radiating from the femoral artery. Over five days we did fifteen dissections in the post-mortem room at the Royal Melbourne Hospital while the patient was being resuscitated. We worked out the variations of the anatomy and whether these vessels were of a size that could be joined up with a microscope. Based on this anatomical research we transplanted a groin flap to the damaged leg. Using the operating microscope we joined up its artery and vein to vessels lying in the debrided wound, just begging to be anastomosed, and managed to revitalise the skin and fat flap in one operation. It took twelve or thirteen hours, but that patient is still walking and running today.

This started an 'anatomical renaissance': if a groin flap was successful where else in the body could we locate similar donor sites? Doctors all over the world went back to the dissection room to find the answers.

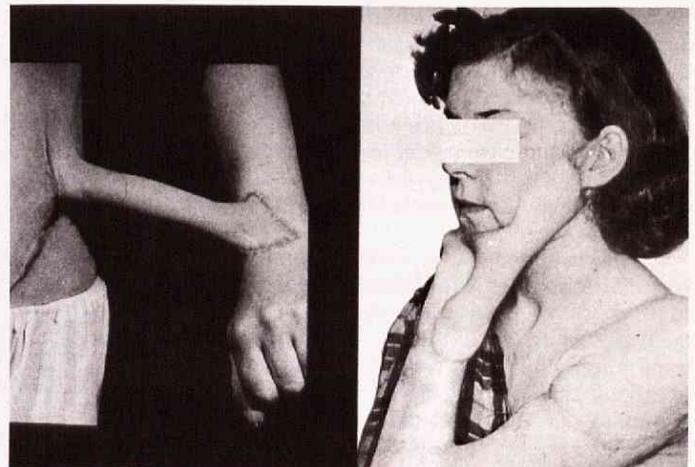


Fig 1 Tube pedicle transfer to face

Just one week after our first successful free skin flap another case presented. A gunshot wound – five inches of tibia had been shot away and again the patient was facing amputation. Back to dissections in the post-mortem room. If we could transplant skin with its blood vessels, then why not bone with its vessels. After many anatomical dissections we transplanted the fibula from the patient's other normal leg, joined up its arteries and veins and dowelled it into the medullary cavity of the damaged tibia to bridge the gap. We were unsure how disabled the donor leg would be and therefore took the vascularised segment from the middle of the fibula. This was a most successful operation and this patient has full use of both legs today.

As different cases presented, we searched the body anatomy to solve each problem. Based on our knowledge of the blood supply of the fibula we transplanted the growth plate of this bone with its supplying vessels into the arm of a young lad who had lost five inches of his radius at the age of six in a motor-mower accident. This was successful and our studies have shown that the transplanted fibular bone growth is about the same as it would have been if still in the leg. We've seen this with skin flaps and other tissues when we transplant them; they behave as if they are still at the donor site.

Since the transplantation of bone and skin was successful then why not the transplantation of living nerves? A patient presented who had lost all the skin, most of the muscles and the main nerve (the median nerve) in the front of the forearm from the elbow to the wrist. By looking at donor sites around the body that could be spared we eventually focused on the superficial radial nerve from the other forearm and transplanted it with its blood supply. However, before proceeding we had to be sure that the vascularised nerve graft was going to provide a better result than a conventional nerve graft without a blood supply and hence did preliminary studies in animals. Mr Russell Corlett, who had been involved with the previous transplants and most of the previous research, was of enormous help with this case as was Sir Sydney Sunderland in the planning of these types of vascularised nerve transfers. The operation succeeded and the patient had an excellent result with the return of hand function and sensation.

Tendon transfer was the next problem with which we were confronted. Another patient presented who had a compound hand injury with skin loss and open joints on the back of the hand as well as extensor tendons missing to three fingers. Once again we went looking for anatomical solutions and we looked at the blood supply of the extensor tendons of the foot. Armed with this new knowledge we took a composite flap of skin and extensor tendons (each toe has two tendons, one to extend and the other to transplant) and corrected the hand injury. Free vascularised tendon transfer was now successful.

So far we had been looking at individual tissues in different areas of the body. But why not look at the whole body? We looked back in history and focused on the work of John Hunter, Carl Manchot, and Michel Salmon. Inspired by their results we commenced our study on not only the blood supply of the skin, but of the deep tissues as well. If an artery supplied a particular area of skin what else did it supply? What muscles? What bones? We looked at the anatomy of the blood supply to the entire skin and deep tissues of the human body and created montages of the arterial supply. We mapped out every one of the cutaneous arteries and related them to underlying arteries from whence they arose so that we knew the origin of each perforating artery. We were building up a 'Big Mac hamburger', layer by layer, of each tissue supplied by a particular artery. We then colour-coded each area and each layer to match particular arteries (Figs 2 & 3).

Thus, we developed this concept of three dimensional vascular territories. We also performed cross sectional studies of the body to again relate the course of the vessels from the deep tissues to the overlying skin, working out which muscles were supplied, which branches continued on to supply the overlying skin, where vessels ran for short distances or long distances, so that we could accurately plot out their three dimensional blood supply. And so this 'angiosome' concept was

formulated in which we mapped out, in a similar way to Carl Manchot's skin territories of last century, the vascular territories of the entire body. These zones represent not only the cutaneous supply from a specific artery but also its supply to bone, muscle, and whatever else happened to lie within the particular angiosome territory. We use these anatomical territories when planning surgery; sometimes combining skin, muscle and bone together in one reconstructive effort to be transferred by microsurgery on a single artery and its accompanying vein.

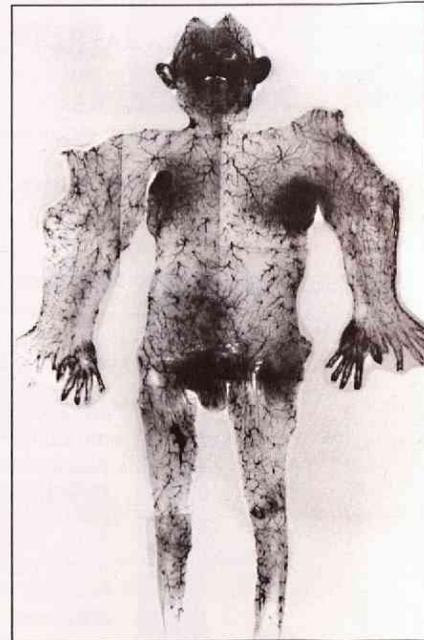


Fig 2 Total body skin supply

Fig 3 Angiosomes front view of body

Next we mapped every vein in the body. They were harder to inject but nevertheless we found in many cases that there are veins with no valves. For example the entire scalp has almost no valves so that one can replant the entire scalp with the anastomosis of one vein and one artery. The valves were plotted and marked out with their direction labelled. The venous territories, not surprisingly, match the arterial territories.

Now I would like to discuss another clinical case to show the application of this work: a lady with a huge tumour of the mandible. Thirty years ago, we would have reconstructed this with forehead skin based on the superficial temporal artery, to re-line the inside of the mouth. A flap from the chest would have provided skin cover on the outside. A bone graft or metal plate would have been used to try to give some form of reconstruction of the lower jaw and in fifty per cent of cases this would be lost. It would extrude, giving a terrible 'Andy Gump' deformity with an incompetent mouth.

With our case, we went back to the anatomical dissecting room. We looked again at our work with the hip; the blood supply of the skin, the blood supply of the iliac crest of the pelvis and the blood supply to the muscles and ligaments attached to it. We worked out that one could take the iliac crest with its blood supply and that it had just the right shape to make a mandible (Fig 4). We knew the blood supply came from its inner surface and hence we could do an osteotomy from the outside where needed to change its shape. We could split the bone also, just taking the inside bone as the transplant and leaving the outer cortex behind, to give virtually no deformity at the donor site. From this composite bone flap we were able to reconstruct the jaw. Fascia was used to reattach the muscles of mastication, tendon to reconstruct the temporomandibular joint, muscle to reconstruct the floor of the mouth and skin for lining. Hence, instead of a scarred forehead and a scarred shoulder, she has only a scar in the groin to show and this has been achieved with just *one* operation (Fig 5).

Although I have presented some of our 'vertical studies', there have been 'lateral ideas' that one chases and this is the fun of experimentation. What's happening here? How can we improve that? Not simply satisfied with the anatomical knowledge of the blood supply to a particular tissue we focused on improving its viability and safety as a transplant. This led to another area of research - 'the delay phenomenon'.

So far I have concentrated on the arteries and veins, but the nerves are also of enormous importance. Mark Gianoutsos, from Sydney, spent a couple of years with us carefully dissecting the cutaneous nerves and marking them and their branches with fine computer wire. This was done in tandem with arterial and venous injections and portrayed the exact correlation between the nerves, the arteries and the veins. In this way we have set about creating a 'Melways roadmap' of the neurovasculature of the body. An interesting observation was noted during our study of the neurovasculature of the pig and the rabbit. The pig has lots of tiny little vessels supplying the flank whereas the rabbit has just four supplying the entire side of the torso. If, however, we look at the nerves, you will see that the nerve 'blue print' is almost identical. So what does this suggest? I think that this adds further evidence to favour Darwin's theory of Evolution and may support the so-called

'Neurogenic Theory' of the developing embryo where the nerves have some effect on the changes that occur in the developing tissues and their vasculature.

Wayne Morrison at St Vincent's Hospital is doing a lot of work with flap fabrication which may well be the way in the future. Already overseas a replica of a hemiface has been reconstructed on a patient's forearm within one angiosome territory using many tissues. Subsequently it was transferred to the patient's face using microsurgery to replace horrific burn injuries and thereby making her acceptable in public.

Finally, I wish to acknowledge that this research would have been impossible without the support of the Jack Brockhoff Foundation, the NHMRC, The Royal Australasian College of Surgeons and many other philanthropic organisations. Nor could we have covered so much ground without the constant stream of enthusiastic research workers from all over the world - seventy-five researchers from thirteen countries over the past twenty-five years.

Every one of these operations was evolved to match a particular patient's requirement. They were patients in search of an operation and the anatomical dissecting room provided the answers.

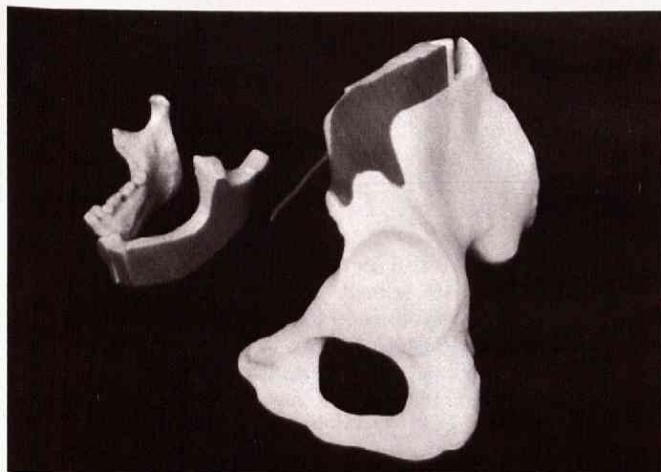


Fig 4 Designing the jaw from the iliac crest of the pelvis

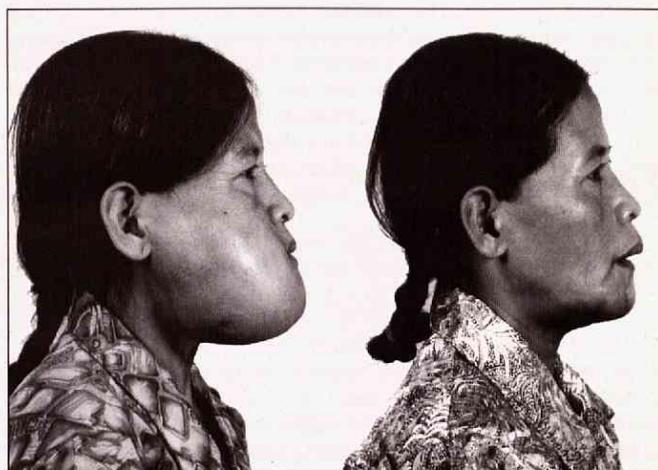


Fig 5 Before and after jaw repair after removing tumour

1999 DEAN'S LECTURE SERIES - SEMINAR

DEBATES IN HUMAN GENETICS THE BRAVE NEW WORLD OF GENETIC TESTING

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Sunderland Lecture Theatre, ground floor Medical Building, The University of Melbourne

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HEREDITARY DEMENTIAS

Should testing be encouraged? Should testing of children be allowed?

Speakers: Professor Geoffrey Donnan, Director of Neurology, Austin and Repatriation Medical Centre;
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Royal Children's Hospital and Centre for the Study of Health and Society, The University of Melbourne;
Professor Loane Skene, Director of Studies, Health and Medical Law, Law School, The University of Melbourne

12 MAY 1998

GENERAL PRACTICE IN AUSTRALIA: INTEGRATION OR DISINTEGRATION?

PROFESSOR DORIS YOUNG

PROFESSOR OF GENERAL PRACTICE

DEPARTMENT OF GENERAL PRACTICE AND PUBLIC HEALTH

THE MOST COMMON question I have been asked since my appointment to the Chair is 'What challenges do you think you'll face as Professor of General Practice?'. I knew giving a Dean's Lecture was one of them but little did I realise that I was going to be slotted between Professor Arthur Kleinman, renowned psychiatrist/anthropologist from Harvard University, and the Nobel Laureate, Professor Peter Doherty. Well, I guess it is not unlike the sort of challenge general practice has to face to establish a role amongst our specialist colleagues and be at the interface between art and science. 'Besides' I told myself, 'this is my turf. I have given more than fifty lectures in this theatre over the last ten years. I have the home ground advantage'.

'General Practice in Australia: Integration or Disintegration?' I would like first of all to briefly address some of the factors that have contributed to the devaluing and gradual disintegration of general practice, then move on to some of the attempts at integrating general practice with the wider health care system and finally to what I think should constitute good general practice and practitioners and the ways the University of Melbourne and my new role as Professor in the Chair of General Practice can contribute to achieving some of these visions for general practice.

When Norman Rockwell painted this picture (*Fig 1*) for the cover of the *Saturday Evening Post* in 1929, the image of the general practitioner and his role as a family doctor was very clear. However, this role has been progressively eroded by a number of factors. By the 1950s, general practice in the United Kingdom had major problems which subsequently occurred in Australia. As JS Collings said

There are no real standards for general practice. What the doctor does, and how he does it, depend almost entirely upon his conscience . . . The present conditions of general practice, and the gloomy outlook for the future, have produced demoralisation in many thoughtful members of the profession.¹

Factors that contributed to the disintegration of general practice include:

- the rapid development of medical technological advances resulting in medical specialisation and with it the introduction of differential payment for services
- the loss of the traditional role causing some general practitioners to seek a niche for themselves in the areas of sports medicine or women's health
- nurse practitioners, herbalists, and chiropractors etc claiming a primary care provider role
- a medical benefits schedule that awards the same rebate for consultations that range from six minutes to twenty minutes and encourages rapid throughput of patients
- the competitive market force causing eighty per cent of general practitioners to bulk bill Medicare for their services
- the rise of consumerism driving general practitioners to provide services that are sometimes not medically warranted
- a triage and referral type of medicine resulting in some general practitioners referring anything of greater complexity

- the low profile of general practice academics in medical schools which perpetuates the misconception amongst medical students, and indeed specialist colleagues in hospitals, that general practice is not an academic discipline and does not require further training.

These changes to general practice have generated twenty-four hour bulk-billing clinics and the shop-front convenience store delivery of primary health care. Changes have also occurred in the primary medical care work force with women now forming thirty per cent of the general practitioner work force, a large proportion of them working part-time. It has been predicted that, with fifty per cent of the current medical students being female, in 2020 more than half of the general practitioner work-force will be women. The diversity in cultural backgrounds of medical students and general practitioners also contributes to the apparent segregation of the nature of general practice. The rural and metropolitan maldistribution of general practitioners has received much publicity and resulted in the split of rural versus urban training needs. Symbolic of the fragmentation of general practice is the resulting number of organisations (about thirteen) representing general practice. These range from the RACGP to the AMACGP, from the AAGP, to the RDAA, each with its own agenda and battle to fight. Conflict between the profession and the government has been accompanied by disagreement within the profession itself.

Of course, these problems have long been recognised and attempts have been made over the last forty years to develop some cohesion in general practice. The Royal Australian College of General Practitioners was the first on the scene in 1958 when it attempted to ensure that general practice became a medical specialty in its own right with its own training program and standards. It brought in the College Fellowship examination in 1969, the Family Medicine Training Program in 1973 (I was one of its first trainees) and Vocational Registration in 1989 which mandates continuing education and quality assurance. There was uproar and dissension amongst the various special interest groups who challenged what constitutes a general practitioner and dare we mention 'a good GP'. The AMA established the AMA Council of General Practice to fight for general practitioner independence and interests. Many think-tanks and summits were organised to solve the general practice crisis. In 1992, the efforts culminated in a report known as the '*GP Strategy: 1992 and Beyond*'. It was created as a blueprint for the way forward. Some integration attempts are in sight. More recently, further attempts have been introduced to integrate general practice.



Fig 1 Doctor and Doll (*Saturday Evening Post* 9 March 1929. Copyright: Curtis Publishing)

One of the major structural changes to come out of this strategy was the birth of Divisions of General Practice. One hundred and nineteen of them were formed across Australia, each with memberships ranging from fifty to a few hundred general practitioners located within a geographical area. It brought general practitioners out of isolation and united them into local groups with a voice in the health care delivery of their region. As a result of the strategy fifteen organisations have been formed since 1992 to support general practice. During the last seven years, I have interacted with every one of them and directed three.

Even though the memberships of the Divisions are high, only a small percentage of general practitioners are actively involved. The Divisions and Projects Program has also undergone major changes and after five years in existence, it is moving to an outcomes based focus. Facilitation, project supports and evaluation expertise were provided to the Divisions. A form of blended payment resulted in encouraging general practitioners to participate in other forms of health care delivery outside of the one-to-one consultation. General practice 're-skilling' and 'up-skilling' were the buzz words. However the uptake of these divisional activities is slow and much paranoia about government control crept in. Disagreement between the various medico-political groups and personalities involved became more open and with the reduction and freezing of the medical benefit schedule for general practitioners, general practice was seen, once again, on the road to disintegration, once again in crisis. This time it culminated in the recent review of the GP Strategies at the end of December 1997 which saw 174 recommendations passed on to the Minister of Health for comment. The training of general practitioners was also reviewed at the same time. It called for more cooperation and collaboration between the Universities and the RACGP.

So, what credentials should a good general practitioner have? In 1993 the World Health Organization identified the qualities which make a five star doctor as one who:

- assesses and improves the quality of care by responding to the patient's total health needs
- makes optimal use of new technologies
- promotes healthy lifestyles
- reconciles individual and community health requirements
- works efficiently in teams.²

One could argue that these qualities should apply to all doctors working in the health care system.

Opinions about good general practice did not differ in the UK. In 1994 Peter Toon identified excellence in:

- diagnosing and treating established illness
- preventing the onset of illness
- enabling patients to understand and make sense of their illness
- meeting patients' wants
- business efficiency.³

Before embarking on setting standards and accreditation for general practice, we must allow for the fact that different general practitioners have different philosophies about what constitutes good general practice, their special interests, the full or part-time nature of their clinical commitment and the organisation of their practices. We would still hope to have traditional practices like this one (Fig 2) in Ballarat with five doctors in a group practice providing fee for service all hours care for their patients.

But there is also a place for salaried and non-salaried doctors working in community health centres. Others with special interests can develop their expertise in a variety of areas to suit their community's needs such as in women's health.

Today's federal government budget will announce spending initiatives to support general practice based on the GP Strategy Review completed earlier this year. Of the 174 recommendations, I would like to highlight some which illustrate the integration aspects:

General practitioners will:

- be unified in their purpose to provide quality medical care to individuals, families and the community

- be assisted in the care of patients through utilising advanced technology, electronic communication links with providers of health services and information systems to guide the practice
- be actively involved in research, evaluation and teaching and will be appropriately remunerated for these activities
- embrace the team approach that ensures their central role in the coordination and integration of health care
- work within a variety of practice models to meet differing community needs and settings which supports professional independence in the interests of quality care
- be proud to work in general practice.

What about the role of the University of Melbourne? Where do I see integration of general practice going? What has been my contribution during the last twelve years at the University? With the establishment of the first Chair of General Practice at the University of Melbourne and my appointment to it, I think first of all, that the importance of the discipline of general practice has to be reflected in the name of the Department and hence the name change to the Department of General Practice and Public Health. It has to continue to ensure that general practice is adequately represented in the new medical curriculum and that it has academic contributions to make. It has to work with the RACGP to integrate undergraduate and postgraduate education in general practice and be actively involved in the continuing education of general practitioners in the community. The General Practice Section will build on its strong existing links with the Public Health Section of the Department in education and research. The relationship and involvement built up with the Divisions of General Practice over the last five years need to be further strengthened. We need to be visible in the community to establish and evaluate excellent models of primary health care delivery by linking with other general practitioners and primary, secondary and tertiary health services providers. Our new GP Units at the Northern Hospital and the Broadmeadows Health Services are such examples (Fig 3). Integrating undergraduate and postgraduate training in rural general practice are under consideration at present with Ballarat Health Services and with the new Department of Rural Health at Shepparton. Our five year General Practice Education Program funded research program aims to explore the concept of integration of general practitioners into the wider health care system. Measurement of changes in general practice patient care and community involvement are difficult but necessary in health care planning.

Finally, with the enthusiasm and innovative thinking of the members of the team in the General Practice Section involve in divisions, research and teaching, we plan for the University of Melbourne to make a major contribution to the future of general practice in Australia.

- 1 Collings, JS. 1950. 'General Practice in England today'. *The Lancet*. 1:555-85
- 2 Boelen, C. 1993. *The five star doctor*. WHO Publications, Geneva.
- 3 Toon, P. 1994. *What is Good General Practice? A Philosophical Study of the Concepts of High Quality Medical Care*, Royal College of General Practitioners, London

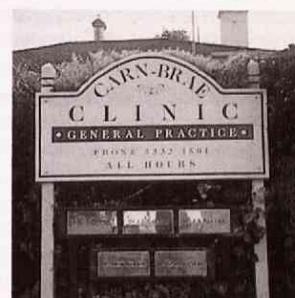


Fig 2



Fig 3

FROM THE DEAN



PROF RICHARD LARKINS

THE LAST TWELVE months have been extremely exciting for all the Schools within the Faculty of Medicine, Dentistry and Health Sciences. This has been particularly true for the School of Medicine as intense activity has been directed towards the final stages of preparation of the new curriculum which was introduced from the first semester this year. Although this has been reported quite extensively in *Chiron* previously, I would like to spend a little time going over the major features of the new curriculum to highlight the significance of the changes.

The University of Melbourne has always had good reason to be proud of its medical graduates. They have succeeded in every sphere of medical life, and in several instances in other spheres of activity such as sport, politics and entertainment. But around the world, major changes have been occurring in medical education. This led us to examine critically what we were doing and we detected a number of signs that we could improve our approach. Over the last two or three decades, the amount of knowledge relating to the basic sciences underpinning medicine has expanded considerably and, like other medical schools, we were expecting our students to know more and more detailed factual information. The major factor which convinced us that we needed to change our approach came from our own students who indicated in questionnaires that they often resorted to superficial approaches in order to pass examinations rather than gaining a deep understanding of the concepts and principles. Moreover, they were often finding the course a boring slog instead of the exciting and stimulating experience that it should be for the outstanding students we select into the course. We also realised the potential for new approaches to computer-aided instruction to provide a stimulating and interactive supplement to traditional teaching techniques.

I will not go over the new curriculum in detail here, but I will emphasise its major features. The course will become vertically integrated. That is, we will introduce clinical medicine right from the beginning of the course and will continue the basic science teaching right through to the end. We want the students to learn the science in an appropriate context so they understand its relevance. We also want them to be actively engaged in their learning and we will achieve this in part through introducing problem-based learning as a significant component of the curriculum. In this approach, the students work through clinical problems in small groups, trying to understand the problem by coming to grips with the relevant anatomy, physiology, biochemistry, pharmacology, molecular biology or any other relevant discipline. Horizontal integration will also be achieved by learning around organ systems rather than around individual traditional subjects. In a parallel health practice subject, greater emphasis will be placed on areas such as medical ethics, the social context of medical practice, law and medicine, public health and the human mind and behaviour.

One of the four major streams throughout the course is Professional Attitudes and Development which will emphasise social responsibility and a range of other factors around professional practice in the community.

An especial feature of the new course will be the fact that there will be two entry streams. Two thirds of the students will be undergraduates, mostly school-leavers and one third will be graduates of other university courses. The undergraduates will do a six year course whereas the graduates will do a four-and-a-half year course, although those without a biological science background may also choose to do the introductory first semester making five years in all. The undergraduates will choose from a range of options for an 'Advanced Medical Studies' year for which, when successfully completed, they will receive an additional diploma, the Bachelor of Medical Science (BMedSc). As well as traditional bench-based research, students will be able to select course and research project work around options such as rural health, medical ethics, medical history, law and medicine, Aboriginal health and many others. We want the students to have the opportunity to explore areas that interest them in depth and also to learn the fundamentals of information gathering, critical analysis of data, review of medical literature and preparation of reports. We feel that these skills are essential to prepare the students for a life-time of self-directed learning and continuing medical education.

The whole Faculty has been involved in the process of developing the new course materials and the educational programs. A range of highly innovative interactive computer-based programs have been developed throughout the Faculty with outstanding leadership from the Information Technology Unit headed by Peter Harris and the Biomedical Multimedia Unit. The Schools of Dental Science and Physiotherapy are also involved in curriculum reform and, where appropriate, materials and programs will be shared between the Schools. The Faculty Education Unit, headed by Susan Elliott, has been leading the process of developing the new curriculum with a major role also for the Associate Dean (Academic Programs), Neville Yeomans. However, I re-emphasise that it has been a true team effort with literally hundreds of staff and students directly involved.

There have been a number of additional developments that have flowed from the development of the new curriculum. All tutors involved in the delivery of the problem-based learning tutorials undergo a two day intensive tutor-training program delivered by the Faculty Education Unit. A new selection method has been developed, with a psychometric test designed to test problem-solving skills and personal qualities added to the traditional VCE result-based method for undergraduates as it is felt that these characteristics will be important to success in the problem-based learning environment. The graduates will be selected on the basis of a combination of their 'grade-point average' in their undergraduate course, their performance in the Graduate Australian Medical Schools Admission Test and a structured interview. We hope that the two admission streams, combined with the broad range of selection criteria will ensure that students from a diverse range of backgrounds and with varied interests and aptitudes will have an opportunity to enter the course.

There has also been a need for new physical facilities to accommodate the new purpose-built problem-based learning rooms and clinical skills laboratories as well as housing the

Faculty Education Unit and the Information Technology (IT) Unit. I would like to thank all those alumni who responded to my call for donations to help to fit out the north wing of the seventh floor of the medical school building to allow these developments which will provide outstanding facilities.

The new course commenced in March this year. I am confident we have developed an outstanding program to ensure that we continue to enjoy the reputation as a world-class medical school, excelling in the educational program as well as in research.

The Australian Medical Council was invited to assess the first three-and-a-half years of the new course in June 1998 and granted it full accreditation without the requirement for a review visit, a very pleasing outcome.

It has been an excellent year for the School in other ways as well. The performance of the Faculty in obtaining research funding through NHMRC was simply outstanding. Not only did we maintain our position as the leading medical school in this respect, but the gap to the next best was considerably extended. Several members of Faculty won research awards. Outstanding appointments have been made to the Foundation Chairs of Women's Health (Lenore Manderson) and Rural Health (David Simmons) and to established Chairs including Biochemistry and Molecular Biology (Mary-Jane Gething), the James Stewart Chair of Medicine at the Royal Melbourne Hospital (Graham Brown) and Microbiology and Immunology (Roy Robins-Brown). Sam Berkovic was appointed to a Personal Chair, a rare distinction. In addition, in partnership with the affiliated hospital networks, a number of Professorial Fellow appointments were made, linked to directorships of hospital services.

We are delighted that two Nobel Laureates have accepted our invitations to join the Faculty under the University's Eminent Scholars Program. Professor Peter Doherty AC, the Nobel Prize winner in Physiology or Medicine in 1996 will be spending two months for each of the next three years working in the Department of Microbiology and Immunology and renowned physiologist Professor Bert Sakmann, Nobel Prize winner in Physiology or Medicine in 1991 will also spend two months a year for three years at the University commencing in August 1999. Professors Doherty and Sakmann will be a source of wisdom and inspiration particularly for young research workers and for all the students in the Faculty.

The Department of Rural Health at Shepparton has now been promised sufficient funding from both the Commonwealth and State Governments to allow the commencement of the construction of teaching, office and research facilities associated with the Goulburn Valley Base Hospital. Student accommodation will follow. This facility will allow our University's teaching and research programs in rural health and in Aboriginal health to be expanded greatly. The new Professor of Rural Health, David Simmons, will head a consortium of five universities in Victoria (the Victorian Universities Rural Health Consortium) to improve teaching and research programs which will help to counter difficulties in attracting doctors and other health care professionals to rural areas.

The Women's and Children's Healthcare Network has kindly provided facilities to allow the relocation of the Key Centre for Women's Health now headed by Professor Lenore Manderson. This has allowed the Centre for the Study of Health and Society headed by Associate Professor Warwick Anderson to be relocated to the Grattan St quarters previously occupied by the Key Centre. We are delighted that the Centre for the Study of Health and Society has been awarded a large grant by VicHealth to establish the Koori Health Research Unit to be headed by Associate Professor Ian Anderson, a recognised leader in the area of Koori health and a graduate of this University.

The Australian International Health Institute (The University of Melbourne) has now been successfully established with Rhonda Galbally as Managing Director and Professor Kwong Lee Dow as the Chair of its Board of Management. We are very

grateful to the North Western Health Care Network for providing accommodation for the Institute. Already the Institute has been highly active in gaining contracts for aid programs in a number of Asian countries and it has conducted a very successful seminar on managed care in developing countries. It is negotiating a number of very exciting projects relating to aspects of health service and education programs in countries in our region.

Space has allowed me to mention only some of the many exciting developments and achievements in the School of Medicine over the past year. A huge amount of work has been required to bring these developments to fruition and I would like to acknowledge the work and commitment of the administrative staff of the Faculty and the School of Medicine led by Darrell Mead, the General Manager of the Faculty, and Kaye Lincoln the Manager of the School of Medicine. I would also like to acknowledge the hard work and leadership in many areas by the Deputy Dean and the Deputy Head of the School of Medicine, Dick Wettenhall and the outstanding role also played by the Associate Deans – Neville Yeomans (Academic Programs), John Furness (Research) and Bruce Singh (International). You will also be aware that the School of Medicine no longer functions in isolation but is part of the Faculty of Medicine, Dentistry and Health Sciences, which, in addition to Medicine, comprises Schools of Dental Science, Physiotherapy, Behavioural Science and Postgraduate Nursing. To an increasing extent, the five Schools are working closely together in education, research and administration and we now have several Faculty-wide Centres and Units including the pivotal Education and IT Units. The close and mutually beneficial relationships between the Schools is a tribute to the Heads of the four other Schools and I gratefully acknowledge my debt to them Harold Messer – (Dental Science until the end of 1998), Joan McMeeken (Physiotherapy), John Trinder (Behavioural Science) and Judith Parker (Postgraduate Nursing).

Richard G Larkins

*Dean, Faculty of Medicine, Dentistry and Health Sciences
Head, School of Medicine*

THANK YOU FOR YOUR SUPPORT

Medical alumni continue to provide valuable support to projects which assist our students and our young researchers. Most recently alumni contributed generously to facilities needed for the new medical curriculum. \$33 000 has been donated towards a problem-based learning room on level seven of the medical building. This important facility along with fourteen similar rooms is available for use this year by our first intake of medical students into the new medical curriculum. The room will be named to acknowledge medical alumni support and we look forward to taking alumni on a tour of these facilities.

Other important projects which continue with the assistance of medical alumni are our scholarships and fellowships programs for young researchers, the UMMS Bachelor of Medical Science Prize (see p 37) and the Peter G Jones Elective Essay Prizes (see p 26). Contributions to these projects provide practical support and encouragement to our students and young researchers.

The School of Medicine and the Committee of the University of Melbourne Medical Society thank all who have supported these initiatives. Your generosity is very much appreciated.

For advice about donations and bequests please contact Robin Orams at the School of Medicine on (+ 61 3) 9344 5889.

RETIREMENTS

PROFESSOR IRWIN FARIS

PROFESSOR IRWIN FARIS graduated from the Medical School at the University of Melbourne in 1963 with a distinguished undergraduate academic record, including the Jamieson Prize in Clinical Medicine. After completing surgical training at the Alfred Hospital and at the Middlesex Hospital in London, he undertook research training at the Royal Postgraduate Medical School in London. He returned to Australia as Senior Lecturer in Surgery at the University of Western Australia based at the Sir Charles Gairdner Hospital. In 1977 he was appointed Associate Professor of Surgery at the University of Adelaide, based at the Royal Adelaide Hospital. He served as Chairman of the Department of Surgery at the University of Adelaide from 1990 to 1992. He was then appointed as the Foundation Professor of Surgery at the Geelong Hospital, part of the Department of Surgery of St Vincent's Hospital/Geelong Hospital. As well as these academic roles, he has held a number of senior clinical positions in the hospitals in which he has worked, including Head of the Vascular Surgery Unit at Royal Adelaide Hospital from 1986 to 1992 and Chief of Service, Division of Surgery at the Geelong Hospital from 1997 to the present time.

Professor Faris has held many leadership positions in his discipline of surgery, including among many others Chairman of the Board in Vascular Surgery of the Royal Australasian College of Surgeons, Editor-in-Chief of the Australian and New Zealand Journal of Surgery, President of the Surgical Research Society of Australia and member of Regional Grant Interviewing Committees of NHMRC.

Professor Faris has had an extremely productive research career, focused particularly around vascular reactivity and clinical aspects of vascular surgery. He has published extensively in the peer-reviewed literature, contributed many book chapters, and authored two major text books related to vascular surgery. He is a highly effective teacher with a great interest in educational theory and innovation.

Irwin Faris has performed an invaluable role in establishing the academic surgical department at Geelong Hospital complementing an outstanding career in academic surgery.

PROFESSOR T J MARTIN

PROFESSOR MARTIN has been Professor of Medicine at Melbourne University since 1977, first at the Austin Repatriation Clinical School and, since 1988, at St Vincent's Hospital where he is also Director of St Vincent's Institute of Medical Research. He has a long career in Bone Cell Biology research. His special interests include endocrinology of bone metabolism; cell biology of osteoblasts and osteoclasts; bone cancer; mechanisms by which certain cancers metastasise to and grow in bone and mechanisms of hypercalcaemia of malignancy.

Knowledge of the cell biology of bone has lagged behind that of other tissues, and Professor Martin has pioneered laboratory-based experimentation on bone cells and contributed significantly to the development of bone cell culture systems. With Dr Gideon Rodan he proposed the now proven and accepted hypothesis that osteoblasts played a critical role in the regulation of osteoclast activity.

In 1987 his group was the first to purify and clone PTHrP – a significant milestone in his long-standing interest in humoral hypercalcaemia of malignancy – the term he first coined and defined.

His contributions have been recognised worldwide by many prestigious appointment awards. He has served as President of The International Conference on Calcium Regulating Hormones

and was host to the 1995 meeting held in Melbourne, Australia. His awards include The Dale Medal of the British Society of Endocrinology in 1992 and The William F Neuman Award in 1994. This latter is the highest accolade awarded by the American Society of Bone and Mineral Research for outstanding contributions to the field.

Professor Martin was awarded the AO in the Queen's Birthday Honours List in 1996 and in 1998 he was elected a Fellow of the Australian Academy of Science.

PROFESSOR ROGER PEPPERELL

PROFESSOR ROGER PEPPERELL graduated from the Medical School at the University of Melbourne in 1965. Among several prizes during his course he was awarded the Exhibition in Obstetrics and Gynaecology and the Fulton Scholarship in Obstetrics and Gynaecology. These prizes signalled a particular propensity for this discipline, which was to be the major focus of his career. Unusually, however, as well as gaining full specialist qualifications in Obstetrics and Gynaecology, he also became fully trained and qualified as a physician, specialising in endocrinology. He had the unusual distinction of training under two of the more formidable medical men of the time, Lance Townsend and Bryan Hudson, and the fact that he managed to thrive under both says much for his resilience. He was awarded an MD from Monash University in 1976. In 1977 he was appointed to the prestigious Dunbar Hooper Chair of Obstetrics and Gynaecology at the University of Melbourne, at the unusually young age of thirty-five, succeeding Lance Townsend.

Professor Pepperell has held many leadership positions in Obstetrics and Gynaecology, including serving on many government advisory committees, a long period as member of the Council of the Royal Australian College of Obstetrics and Gynaecology, including a term as Chairman of the Board of Examiners of that College, membership of the Board of the Women's and Children's Healthcare Network and several journal editorial boards. He has published extensively, particularly in areas relating to reproductive endocrinology. He has been greatly appreciated by students as a clear and authoritative teacher.

Although Professor Pepperell will be leaving the Dunbar Hooper Chair of Obstetrics and Gynaecology and the Academic Board at the end of 1998, he will continue to serve the University as a Professorial Fellow, with an active teaching role. His contributions as Dunbar Hooper Professor of Obstetrics and Gynaecology have been outstanding and the University, the profession and the community are in his debt.

PROFESSOR JAMES ALFRED PITTARD

PROFESSOR JIM PITTARD has given thirty-five years of outstanding service to the Faculty of Medicine, Dentistry and Health Sciences and the Faculty of Science at the University of Melbourne. Educated in Ballarat, he first studied pharmacy at the Victorian College of Pharmacy before pursuing science at the University of Melbourne where he was awarded a Master of Science in 1960. As a Fullbright scholar he obtained a PhD at Yale University in 1963. In 1964 he joined the University of Melbourne as a Lecturer and was appointed Professor of Microbiology in 1970. He has served as head of that department for over fourteen years and has played a vital role in maintaining its excellent reputation throughout this period.

Widely recognised as an inspiring teacher and gifted researcher, he has supervised over fifty BSc Honours students and over thirty PhD students. His research achievements have

been outstanding and have earned him an international reputation for his work on genetic systems controlling transport and synthesis of aromatic amino acids and plasmid replication in bacteria. Professor Pittard's commitment to research of the highest calibre has been reflected in his many contributions to graduate training and research at the University of Melbourne. In his committee work for the University Professor Pittard acquired a particular reputation for his congenial humour and uncompromising academic standards.

Professor Pittard's achievements have been recognised outside the University in the form of numerous prizes and awards including the David Syme Prize for Research and the Lemberg Medal of the Australian Academy of Science in 1974. He

has served on many government and professional committees: his expertise at the forefront of molecular biology recognised through membership of the Gene Manipulation Advisory Committee, the Gene Therapy Committee, and ARC and NHMRC granting committees. He has also acted as Secretary of the Biological Sciences of the Australian Academy of Science and been active in Academy programs intended to raise the profile of science through teacher education.

Professor Pittard's most enduring legacy will be the deep impression he has left on so many undergraduate and research students. The Faculty of Medicine, Dentistry and Health Sciences, the Faculty of Science, the wider University and the profession are all indebted to him for his contributions.

CLINICAL SCHOOL REPORTS

AUSTIN AND REPATRIATION MEDICAL CENTRE AND NORTHERN HOSPITAL

ANNA LEE and Dominic Wilkinson were the top students from the Austin and Repatriation Medical Centre (ARMC)/Northern Hospital Clinical School in 1998. They finished equal second in the year and were awarded first class honours degrees. Kate Robbins-Browne finished second in the year in Surgery and was one of the four ARMC/Northern Hospital students to receive a first class honour in that subject. We congratulate all fifty-four graduates and wish them every success for the future.

Two significant developments affected the Clinical School during 1998. First was the retirement of Associate Professor Bernie Sweet after twenty-two years as Clinical Dean. It would be difficult to overstate the role he has played in the development of the Clinical School, or the gratitude of many hundreds of Austin/Repatriation graduates whose careers he has moulded. Second was the incorporation of the Northern Hospital into the Clinical School. In 1998 our students had exclusive access to patients at this hospital for the first time. Faculty has approved a change of name for the Clinical School to recognise the important role that the Northern Hospital now plays in our teaching program.

One third of the third year students attended ARMC/Northern for an eight week 'Introduction to Clinical Medicine' program in the second half of the year. Each week the students attended a clinico-pathological conference followed by a bedside tutorial.

The basic structure of the fourth year program remained, beginning with an introductory two week period followed by four medical and surgical terms, including one term based at Albury, Bendigo or Wangaratta Hospital. Students spent two terms attached to general medical units and two attached to general surgical units. There were three review weeks during the year, designed to help students consolidate their knowledge. All students sat a trial long case at the end of each term, and two trial OSCE exams, and trial MCQ and short answer written exams were conducted during the year.

Fourth year medical and surgical clinical teaching was based mainly in the wards of the ARMC, increasingly on the Austin campus as clinical activity was transferred away from the Repatriation campus during the year. An extensive lecture program complemented the clinical tutorials and pathology teaching was integrated into the medical and surgical teaching program as in previous years. Radiology teaching was considerably improved this year with the development of comprehensive fourth and final year programs. All students completed an Advanced Study Unit.

Each fourth year student was attached to the Accident and Emergency Department for two weeks and also received two weeks of geriatrics teaching, either at Bundoora Extended Care Centre or at the Repatriation campus of the ARMC. The Clinical

School was fortunate to acquire the services of Mr Alan Roberts, a communication skills counsellor from the Centre for Cultural Studies in Health who provided a series of small group tutorials for students experiencing communication difficulties.

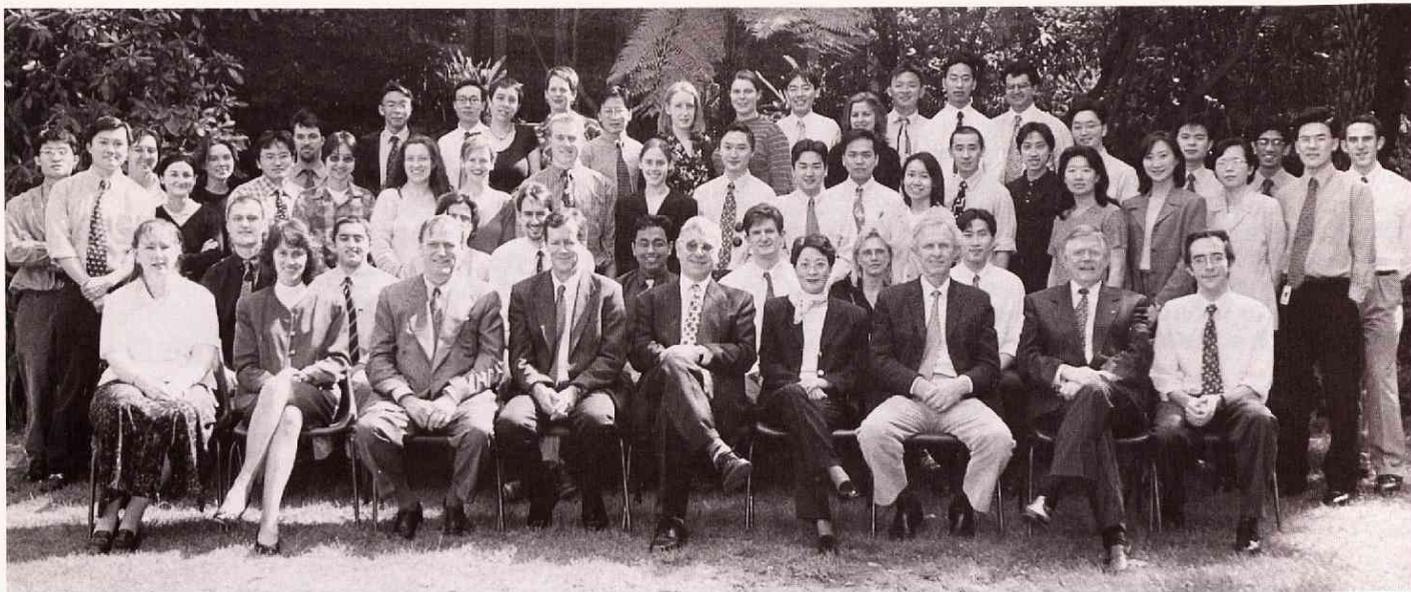
Fifth year students spend much of the academic year away from the Medical Centre on paediatrics at the Royal Children's Hospital, on obstetrics and gynaecology rotations at the Mercy Hospital for Women, and on a general practice rotation coordinated by the Department of General Practice and Public Health. The remaining fifth year rotation, psychiatry, is partly based at the ARMC, attached to the Department of Psychiatry.

Final year students commenced in March after completing their elective terms. As in past years, final year was divided into four equal terms; general medicine, general surgery, medical specialties and surgical specialties. Students on general medical and surgical rotations spent three days of each week at the Northern Hospital, with most of their lectures and seminars held at the Austin campus on the remaining two days. Surveys of student opinion revealed very positive comments about the standard of teaching and access to patients at the Northern Hospital. The medical and surgical specialty terms were based at ARMC. Emergency Department rotations were included in the surgical specialty term with some emergency medicine teaching based at the Northern Hospital. Exam preparation included weekly short answer question seminars, regular sessions on investigational material, and a trial written examination.

The physiotherapy program has expanded to include the Northern Hospital with six students undertaking their third year musculoskeletal placement there in 1998. It is planned that Northern Hospital will also provide fourth year musculoskeletal placements in 1999. The Bendigo Healthcare Group took fourth year neurological and musculoskeletal placements for the first time in 1998, in addition to their significant involvement with third year students. The growth in the post acute care program at the ARMC will provide an opportunity to expand the fourth year clinical experience to include domiciliary care for the first time, an exciting development given the changes that are occurring in the way health care services are being delivered.

As a result of the many changes imposed on Victorian public hospitals, clinical schools face increasing difficulties obtaining adequate clinical exposure for their students. This is particularly an issue for medical students during surgical terms because of shorter lengths of stay, falling bed numbers and an increasing proportion of elective patients being admitted on the day of surgery. It is gratifying that the staff of the hospitals associated with the ARMC/Northern Clinical School have retained their enthusiasm for teaching despite these problems.

Brendan Crotty
Clinical Dean



Austin and Repatriation Medical Centre Clinical School Final Year 1998

Back row L-R: Kah Kit Yoong, Natalie Barton, Kate Robins-Browne, Lucas Speed, Alex Lo, Simon He, Joo-Inn Chew, Emma Secombe, Grant Pang, Paula Leach, Gabryelle Nicholls, Cheng-Hon Yap, Negibe Mankir, Niko Surano, Peter Wong, Michael Fanartzis, Ken Lee, Yang Ming Chow, Gangadharan Ganesvaran, Christopher Baguley. **Third row L-R:** Lawrence Chan, Anna Kelly, Peter Cheung, Eu Nice Neo, Natalie Hewat, Anna Lee, Alistair Bishop, Barbara James, Andy Lim, Otis Wang, Kevin Tsao, May Mok, Andrew Kyoong, Harry Quach, Huei-Min, Chen, Belinda Chua, Penelope Wong, Marcus Choy. **Second row L-R:** Paul Bent, Ajay Chauhan, Lanny Bochsler, Travers Anderson, Durai Subramaniam, Mark Warren, Cecilia Pousette, Samuel Lau. **Front row L-R:** Carolyn O'Shea, Dr B Goss, Professor C Johnston, Associate Professor B Crotty, Associate Professor B Sweet, Mrs R Poon, Professor K Hardy, Professor G Burrows, Dominic Wilkinson. **Absent:** Aniza Babrain, Liam Broad, Paul Burgess, Kirrily Hartnell, Jia Lin Soon, Anthea Tan, Professor W Louis, Dr D MacGregor, Professor R Smallwood, Dr C Holmes.



The Royal Melbourne Hospital and Western Hospital Clinical School Final Year 1998

Pictured: Kelvin Adams, Susan Barnett, Andrew Chan, Casey Chan, Denise Chao, Simon Chatfield, Claudia Cheng, Angela Chien, Julian Choi, Elizabeth Chow, Damian Claydon-Platt, Melinda Dalman, Evan Dyer, Julia Fisher, Francesco Gaillard, Cindy Gim, Eileen Gourley, Arun Gupta, Haris Haqqani, Natalie Harrison, Martin Weng Chin Hing, Yoon Mei Ho, Kent Hoi, Samantha Hutchinson, Joseph Ischia, Tim Iseli, Richard Kjar, Brian Le, Sharon Lee, Gary Liew, Beng Ghee Liew, Thenmozhi Manoharan, Luigi Marino, Jillian Morgan, Professor Robert Moulds, Subanesan Nadesapillai, Irene Ng, Sophie Nottle, Ken Pang, Christos Pavlidis, Dr C Penfold, Wendy Perret, Penelope Preston, Samuel Robson, Shamon Roshan, Jon Ruddle, Rachel Shanks, Jang Wen Su, Rosemary Sutton, Concetto Tartaglia, Darren Teoh, Elizabeth Thomas, Steven Tong, Edward Upjohn, Irena Vigderovich, Crispin Wan, Claire Williams, Elaine Wong, Peter Wright, Bryan Yan. **Absent:** Annie Fung, Helen Gardner, Peter Hill, Mark Putland, Mohamed Saleem, Sharon Thai.

THE ROYAL MELBOURNE HOSPITAL AND WESTERN HOSPITAL

THE STRUCTURE of the course at the RMH/WH Clinical School in 1998 was similar to previous years. The fourth year students spent two of their four terms at the Royal Melbourne Hospital, one at Western Hospital and one in the country, at either Ballarat, Wimmera or Wangaratta Hospitals. Each term involved the attachment of a group of students to a general medical or surgical unit with most of the clinical instruction given by the membership of the unit, although supplementary specialty teaching also occurred. This use of our clinical resources has worked well over the last few years, and we plan to continue this broad structure of the fourth year program.

Our sixth year program has also been similar to previous years, with students spending roughly half their time in general medicine and surgery, and half their time in specialist medicine and surgery. Three weeks of anaesthetics and emergency medicine are included in surgery. The specialty terms are spent at the Royal Melbourne Hospital but the general medical and surgical terms are split between Royal Melbourne Hospital, Western Hospital and Ballarat Hospital. In the general terms the students function as student interns within the units. Again, this use of our clinical resources works well, and we plan to continue it in 1999.

The main highlight for us has been planning for the new curriculum. As I write, planning is now almost complete for the pre-clinical years, and the clinical schools are already looking carefully at the implications of continuing to mount the old curriculum at the same time as accommodating the clinical requirements of students entering the new curriculum in 1999. The new curriculum will also enable a major re-think of the whole structure of the clinical years which should enable exciting new developments.

Another development has been an alteration in the functioning of the Western Health Care Network, with a reversion of responsibilities back to the individual campuses. The network structure follows that of the Clinical School and has enabled resources, both human and material to pass back and forth between campuses in much the same way as students from the Clinical School have done for some years. It also enables the possible use of Williamstown Hospital to be considered in our teaching programs, together with the new development at Broadmeadows.

*Robert WF Moulds
Clinical Dean*

ST VINCENT'S HOSPITAL AND THE GEELONG HOSPITAL

IN COMMON with all tertiary teaching hospitals we have had to face the challenge of rapid changes in health care delivery in Australia, whereby factors such as reduction in length of hospital stay, increase in ambulatory care and technological advances have resulted in marked limitation of traditional access to patients for teaching purposes.

We envisage that the way forward will be to redirect the teaching focus from tertiary hospitals to include a broader spectrum of clinical settings such as private hospitals and private consulting rooms, and to increase experience in rural hospitals and community health centres.

In preparation for the new curriculum, when students will undertake training in a clinical setting from their first semester, we have developed a dedicated clinical skills area within the St Vincent's Hospital campus. This will provide the opportunity for 'junior' students to gain skills experience in an appropriate setting.

In 1998, the Clinical School had the largest number of final year students, which, coupled with the loss of a major final year surgical rotation following the closure of PANCH, stretched our resources to the limit. However, we were able to provide a comprehensive clinical education program and our students had a satisfying and successful year.

In response to student feedback, the cardiology teaching was reviewed and a comprehensive new program was implemented. This has been very well received by students, rating highly in student surveys. The innovative infectious diseases teaching program, introduced in 1997, was again well regarded by the students.

During 1998, all students went to Geelong Hospital for a medical or surgical rotation which they found valuable, especially in terms of patient access. Use of the video link between our two campuses enables us to provide a more effective and complementary teaching program.

Some specialty teaching in orthopaedics, urology and vascular surgery has been introduced into the Geelong surgical rosters. It is becoming increasingly challenging to ensure that students have adequate experience in general and specialised surgery following the dramatic changes in hospital practice. Short inpatient stay, the move to day procedures and super-specialisation have had a more profound effect upon surgical teaching than the medical program.

There has been an increase in final year student teaching at the Peter MacCallum Cancer Institute and students also attend the Royal Victorian Eye and Ear Hospital for tuition in ophthalmology and for emergency experience.

In fifth year there have been some changes in the psychiatry teaching personnel, and the program continues to be well received by the students. Arrangements have been made for individual students to stay in the hospital for after hours, on-call liaison psychiatry experience and this has proved to be popular and rewarding for the students.

The major focus of our fourth year program is the development of clinical method with particular emphasis upon communication and the acquisition of good clinical skills.

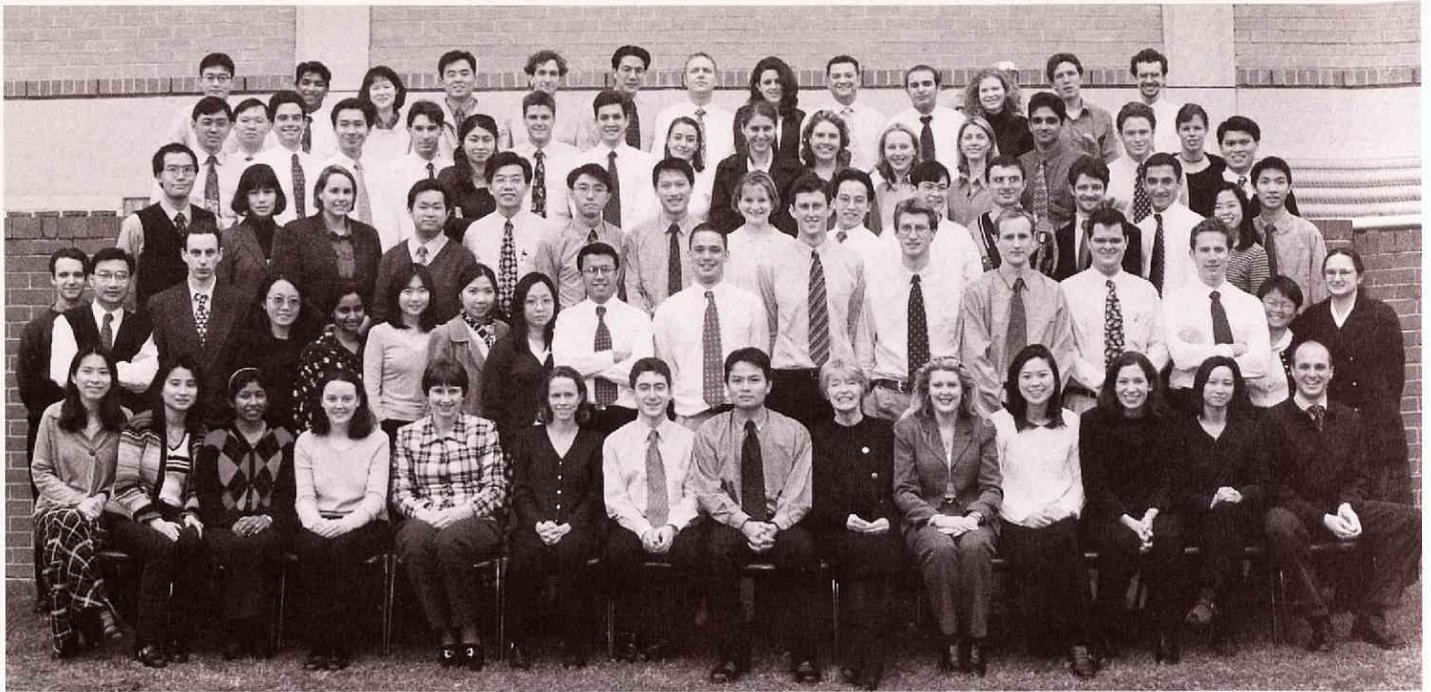
A highlight of the fourth year program was the afternoon seminar of group presentations in clinical ethics at the end of first term, which was again both entertaining and educational.

All fourth year students had the opportunity to spend one term at Geelong Hospital, which they enjoyed. Students also rotated to the country hospitals associated with our clinical school at Warrnambool and Shepparton. These rotations continue to provide excellent patient access and clinical experience. The clinicians at these hospitals are enthusiastic and effective teachers and many have strong links with St Vincent's Hospital.

We are delighted to report the continued high achievements of our final students in their examinations. Ashley Ng was placed top of the year and first in Surgery, Sabina Ciciriello and Kathryn Wiggins also gained first class honours in Surgery. In Medicine, Angela McCullagh was the top student and five other students were awarded first class honours. Five students were awarded Dean's Honours for excellence in their final year and three students were awarded the MB BS degree with overall first class honours. We congratulate all the 1998 graduates and wish them well in the future.

It is to the great credit of our enthusiastic teaching staff that we are able to maintain our high standard of clinical medical education. Their willingness to teach and commitment to our students is most highly valued.

*Wilma Beswick
Clinical Dean*



St Vincent's Hospital and The Geelong Hospital Clinical School Final Year 1998

Back row L-R: Khai Hong Wong, Dilip Hoole, Audrey Yeo, Michael Ee, Andrew Sutherland, Gerald Quan, Justin Dwyer, Yael Gold, Michael Hage, Nick Antoniadis, Natalie Wheaton, Mark Phelan, Kingsley Mudd. **Fourth row L-R:** Sin Kuan Tan, Sze Khen Tan, Brendan Flaim, Bernard Yeoh, David Barit, Lucia Le-Kim, Andre La Gerche, Jeff Brownscombe, Sarah-Jane Morck, Sabina Ciciriello, Angela McCullagh, Marilla Druitt, Hannah Rouse, Ashwin Swaminathan, Ryan Hoy, Kerrie Chappell, Ken Khamly. **Third row L-R:** Constantine Tam, Katherine Lin, Ruth Smith, Hsiang Tan, Koh Cheng Thoon, Richard Yiu, Tony Phan, Maria Neagle, Ashley Ng, I-Hao Cheng, Sam Micut, Paul McKeegan, Altay Altuntas, Effie Chew, Alex Liew. **Second row L-R:** Andrew Barclay, John Nguyen, Martin O'Reilly, Paik-Yee Ng, Premilla Chinnappa, Valerie Tay, Jai-Li Ng, Thao Lu, Graeme Gonzales, Andrew Burns, Craig Aboltins, Andrew Steer, Adrian Fox, James Griffiths, Adam Deane, Christina Chang, Beata Rawdanowicz. **Front row L-R:** Florence Lin, Thao Nguyen, Miriam Solomons, Alison Dwyer, Associate Professor Wilma Beswick, Kate Wiggins, Mark Suess, Michael Nguyen, Dr Jacqueline Walters, Marnie Robinson, Danni Bao, Nicole Hope, Julie Chang, Andrew Middleton. **Absent:** Ben Waldron.

HIGHER DEGREES AND DIPLOMAS CONFERRED 1998

DOCTOR OF PHILOSOPHY (1948)

Bruce James Alexander, BSc - Surgery
 Richard Barry Anderson, BSc - Anatomy and Cell Biology
 Sofianos Andrikopoulos, BSc - Medicine
 David Michael Ashley - Paediatrics
 Lynne Maree Atley, BSc *La T* - Medicine
 Catherine Louise Banwell, BA *Adel*, MA *Auck* - Medicine
 Billy John Bennett, BSc *WAust* - Medical Biology
 James Warwick Bisley, BSc - Anatomy and Cell Biology
 Vivien Rita Bonazzi, BAppSc *Canb*, MSc - Pharmacology
 Steven Valent Borovec, BSc - Microbiology and Immunology
 Jeffery Stephen Boyle, BSc - Medical Biology
 Sibilah Jane Breen, BSc - Anatomy and Cell Biology
 Ian Christopher Bruce, BE - Otolaryngology
 Angela Bruzzaniti, BSc *La T* - Medicine
 Dieter Mark Bulach, BSc, MSc - Microbiology and Immunology
 Belinda Cancilla, BSc - Anatomy and Cell Biology
 Robert John Center, BSc *La T* - Medicine
 Danny Chan, MSc - Paediatrics
 Moh Kok James Chan, BSc - Medicine
 Anne Bernadette Chang, MB BS - Paediatrics
 Fadi Charchar, BSc *La T & Melb* - Physiology
 Guiseppe Donato Ciccotosto - Surgery
 Mario Congiu, BSc - Physiology
 Gregory Alexander Cook, BSc - Medicine

Elizabeth Jane Coulson, BSc - Pathology
 Jeremy Crook, BSc *Tas* - Pathology
 Ian Andrew Darby, BSc - Anatomy and Cell Biology
 Michelle Jane Dawson, BSc - Surgery
 Mirella Dottori, BSc - Medical Biology
 Katerina Athena Drouvalakis, BSc *La T* - Medicine
 Ann-Maree Duncan, BSc - Medicine
 Desiree du Sart, BSc *RMIT* - Paediatrics
 Renee Dutton, BSc *Monash* - Medical Biology
 Assam El-Osta, BSc *La T* - Medicine
 Antolio Filippis, BSc *La T* - Medicine
 Kerry Clare Fitzmaurice, DipAppSc *La T* - Ophthalmology
 James Peter Flinn, BSc - Pharmacology
 Mark Christopher Flynn, BSpPath *La T*, GradDipAud - Ophthalmology
 Brendan Grabau, BA, BSc *Monash* - Surgery
 Ivica Grkovic, MB BS, MMedSc *Croatia* - Anatomy and Cell Biology
 Jane Maree Gunn, MB BS - Public Health and Community Medicine
 Vicki Elizabeth Hammond, GradDipIntDes *RMIT*, BA, BSc - Anatomy and Cell Biology
 Joanne Louise Hart-Favaloro, BSc - Pharmacology
 Helen Penelope Hawe, BSc *NSW*, MPH *Syd* - Public Health and Community Medicine
 Christine Joy Hawkins, BSc - Medical Biology

Siriphun Hiranyachattada - Physiology
 Anne Marie Hocking, BSc - Paediatrics
 Andrew James Holloway, BSc - Biochemistry and Molecular Biology
 Suzanne Joan Holt, BSc - Surgery
 Kirsten Fiona Howlett, BSc - Physiology
 Jung Shan Hwang, BSc - Microbiology and Immunology
 Francesco Libero Ierino, MB BS - Surgery
 Elizabeth Irene Mary Johnson, BSc - Physiology
 Paul Donald Russell Johnson, MB BS - Paediatrics
 Sharon Juliana Joseph, BSc - Anatomy and Cell Biology
 Paul Kalitsis, BSc *Monash* - Paediatrics
 Marina Katerelos, BSc *Monash* - Medicine
 Rosemary Jeanne Keogh, BSc - Medicine
 Ngaire Kerse, MBChB *Otago* - General Practice and Public Health
 Rosemary Elizabeth Kiernan, BSc - Microbiology and Immunology
 Kim Ronesta Kingston, BLitt - Psychiatry
 Mark Huen Choong Lam, BSc - Medicine
 William Lam, MBChB *UK* - Medicine
 Peter Jeffery Leedman - Medical Biology
 Gabriel Liberatore, BSc - Medicine
 Dina Concetta Logiudice, MB BS - Medicine
 Simon Nicholas Stewart Louis, BA, BCom - Medicine
 Duncan Peter MacGregor, BMedSc, MB BS - Pathology
 Helen Elizabeth MacLean - BSc - Paediatrics
 John Martin Mariadason, BSc, DipEd - Medicine
 Phillip Marzella, BSc, GradDipAud - Psychiatry
 Karim Miran-Khan, BMedSc, MB BS - Medicine
 Pradeep Jonathan Nathan, BSc - Psychiatry
 Connie Yuk Ming Ng, BSc - Medicine
 Christopher James Nolan, BMedSc, MB BS - Medicine
 Melanie O'Farrell, BSc - Pharmacology
 Georgina Marie Pearce, BAppSc *Ballarat* - Medicine
 Anna Peeters, BSc - Microbiology and Immunology
 Michael Barry Reed, BSc *Monash* - Microbiology and Immunology
 Sonali Pearl Reid, BSc - Biochemistry and Molecular Biology
 Michael Riffkin - Microbiology and Immunology
 David Bruce Robinson, BSc - Anatomy and Cell Biology
 Edward Roufail, MB BS *Monash* - Anatomy and Cell Biology
 Sarah Joan Russell, BA - Medicine
 Kerrie Margaret Sanders, BSc, GradDipDiet - Medicine
 Qian Sang, BMed - Medicine
 Gian Sberna, BSc *La T* - Pathology
 Robert Scott Schmidli, MB ChB *Otago* - Medical Biology
 Adrian Pierce Serone, BSc - Pharmacology
 Lynne Shandley, BSc *Monash* - Anatomy and Cell Biology
 Neil Martin O'Brien Simpson, BSc *Napier* - Microbiology and Immunology
 Alison Kaye Smith, BAppSc *Curtin* - Medical Biology
 Christine Anne Somerville, MB BS - Medicine
 Justine Southby, BSc - Medicine
 Emma Catherine Starritt, BSc - Physiology
 Peter Neale Stebbing, BSc *UNSW*, MBioTech *Monash* - Obstetrics and Gynaecology
 Mark Simon Stein, MB BS *Syd* - Medicine
 John Stenos, BSc - Microbiology and Immunology
 Xiaolu Sun - Physiology

Mimi Lai-Kuan Tang, MB BS - Paediatrics
 Helen Barbara Treloar, BSc - Anatomy and Cell Biology
 Joseph David Francis Tucci, BSc *La T* - Anatomy and Cell Biology
 Hilary Anne Vaughan, MSc - Surgery
 Peixiang Wang - Microbiology and Immunology
 Zheng Ming Wang - MSc - Pathology
 James Wong, MB BS - Medicine
 Yun Fong Wong, BSc *Aber*, MSc *S'ton*, PGradCertEd *Lond* - Medicine
 Catherine Louise Wright, MSc *Monash* - Microbiology and Immunology
 Hai Dong Yan, BMed, MMed *China* - Medicine
 Susanha Yimyam - Women's Health
 Kim Suzanne Zammit, BSc *La T* - Physiology
 Yana Zavros, BSc *La T & Melb* - Surgery

DOCTOR OF MEDICINE (1862)

Fergus John Cameron, BMedSc, MB BS
 Zemin Cao, MMed *China*
 Thomas David Clarnette, MB BS *Adel*
 Douglas Czarnecki, MB BS
 Michael Joseph Davies, MB BS
 Peter Graham Davis, MB BS *Qld*
 Trevor David Duke, MB BS
 Daryl Efron, MB BS *Monash*
 Suzanne Marie Garland, MB BS
 Geraldine Ann Goss, MB BS
 Sonia Regina Grover, MB BS
 Ralf Heine, MB BS *Goettingen*
 Ian William Richard Holten, MB BS
 Malcolm John Hopwood, MPM *Monash*, MB BS
 Katherine Leslie, MB BS
 Fioana Margaret Lomas, MB BS *Monash*
 Robin Dunn Low, MB BS
 Christopher James O'Callaghan, MB BS
 Cecilia Padang, MB BS *Indon*
 Stephen Sylvivris, MB BS
 James Tibballs, MB BS, BMedSc *Monash*, MBA *Deakin*, MED
 James Montague van Gelder, MB BS
 Doris Young, MB BS

MASTER OF SURGERY (1885)

Henk Giele, MB BS *UWA*
 Samantha Levin, MB BS *Monash*
 Sonia Penelope Robbins, MA, MSc *London*
 Stephen Hamilton Tudge, MB BS
 Ivo Dominic Vellar, MB BS, MD

MASTER OF MEDICINE (1983)

William Mark Atkin, BMedSc, MB BS - Psychiatry
 Kirsten Black, MB BS
 Donna Cherniak - Women's Health
 David Alister Connell, MB BS - Radiology
 Jeremy William Couper, MB BS - Psychiatry
 Kausar Iqbal, DipClinPath *Islam*, GradDipWomHlth - Women's Health
 David Colin Kruse, MB BS
 Chee Hong Ng, MB BS
 John Manolopoulos, MB BS *Monash*
 Bambang Parwoto - Paediatrics

Alasdair Lachlan Angus Vance, MB BS - Psychiatry
Dwi Putro Widodo, BMed *Indon*
Endang Windiastuti *Indon* - Paediatrics
James Kum Loong Wong, MB BS
Ru-Wei Xu, BMed *Nanjing*, GradDipPubHlth *RMIT*

**MASTER OF WOMEN'S HEALTH
(1995)**

Jenny Apostolakos, BA *VUT*, GDipWomHlth
Georgia Gaye Birch, BAppScPhysEd *VicInst*, GradDipEd
Jennifer Ruth Blood
Corrine Venice Garamszegi, GradDipWomHlth
Ann Rosalie Goodwin, GradDipWomHlth
Valerie Ann Lawler, DipWomHlth
Susan Patricia Long, BAppSc *QUT*, BA *Q'ld*, GradDipTeach *ACU*,
GradDipInfoTechCommEd
Miori Sasaki, BA *Japan*
Margaret Joy Sherburn, DipPhysio, BAppSc *La T*
Annette June Swatman, GradDipWomHlth, GradDipWomSt *VUT*

MASTER OF AUDIOLOGY (1997)

Voula Paraskevi Dorkos, BSc *Monash*, GradDipAud
Danielle Kosmider, BSc, DipAud
Luciana Siu-Ping Lau, BSc *HK*
Susan Elizabeth Potter, BSc *Monash*, GradDipAud

MASTER OF PUBLIC HEALTH (1997)

Stephen John Begg, BA *Swinburne*, GradDipPopHlth *ANU*
Duy Derrick Bui, MB BS *Monash*
Ornella Maria Clavisi, BSc *Monash*
Gabrielle Michelle Hawdon, MB BS, BMedSc *Monash*
Clara Mbwili-Muleya, MB BS *Romania*
Ping-Yee Wong, MB BS *HK*, DCH *Glasgow*

**GRADUATE DIPLOMA IN
AUDIOLOGY (1975)**

Sally Joanne Baker, Tina Isabella Bianchi, Catherine Mary
Dunn, Nicole Jane Gatto, Jenelle Susanne Hocking, Ewa Helena
Lancucki, Clare Mielke, Evgeni Mougerman, Leanne Joy Nolte,
Angela Beatrice Pelosi, Matthew Peter Reid, Sarah Harvey
Robertson, Kristian William Robinson, Rae Simm, Jacquelyn
Sally Spring, Rosslyn Norma Strang, Hannah Martha Jennifer
Street, Christopher James Waterworth, Michael Wesley Wong,
Leo Shing Yu

**GRADUATE DIPLOMA IN WOMEN'S
HEALTH (1991)**

Rhonda Joan Birch, Kathryn Louise Brain, Joanne Burns,
Mariam Cranswick, Patricia Laura Hannigan, Sarah Jane
Qualtrough, Vikki Lyn Sinnott, Reiko Wada, Tupou
Waqaruakitoga Tabete Wata

**GRADUATE DIPLOMA IN MENTAL
HEALTH SCIENCES (1992)**

Russell John Barnard, Sandra Gai Boughton, Graham Dene
Burrows, Matthew Laurence Byrne, Andrew Fiedler, Jack Allen

Gerschman, Kathryn Mary Gow, Margaret Jean Graham, Gerard
Anthony Kennedy, Kathleen Anne Moore, Athula Polonowita,
Leonard Rose, Dennis Ming Tak Shum, Simon Peter Stafrace,
Bruce Ronald Sterling, Alison Mary Weber, John Charles White,
Moses Wong

CLINICAL HYPNOSIS

John William Redman

INFANT AND PARENT MENTAL HEALTH

Mary Frances Brown, Danny Edward Garrick, Leela Nahna,
Christine Anne Poste, Pauline Carol Sampson, Sue Elizabeth
Whitehead, Margaret Anne Williams

TRANSCULTURAL MENTAL HEALTH

Sermin Baycan, Maria Cameron, Kris Chapman, Andrew Felix
Firestone, Sandra Isabel Hall, Lucio Naccarella, Elizabeth Ann
Spring

**GRADUATE DIPLOMA IN
ADOLESCENT HEALTH (1997)**

Peter James Dunkley, Narelle Lee Needham

EARLY PSYCHOSIS

Kaia Anne de Burgh, Lorraine Margaret Meades, Marie
Panebianco

HEALTH STUDIES

Julie Andrews, Gail Baker, James Billings, Anne-Michelle Black-
Blandthorn, Peter William Brown, Linde Rosalind Brush, Kim
Burns, Helen Butler, Maria Minto Cahill, Leigh Candy, Anna
Margaret Dansie, Carmel Mary Fraser-Stewart, Ann Christina
Goodman, Julie Hayes, Vaughan Charles Losewitz, Gregory
McCracken, Stephen Messer, Toni O'Keefe, David Harvey
Parker, Jan Payton, Catherine Sharples, Felicity May Sloman,
David Stanley, Gabriella Tange, Maree Therese Tehan, Fay
Trevethick

**GRADUATE DIPLOMA IN DRUG
EVALUATION AND
PHARMACEUTICAL SCIENCES
(1997)**

Patricia Hilary Mooney, Deborah Leigh Scarcella

**GRADUATE DIPLOMA IN
EPIDEMIOLOGY AND
BIOSTATISTICS (1992)**

Carmelina Apicella, Cristos Clifopoulos, Helen Rosemary
Crowe, Robert Winston Davis, Margery Lilian Kennett, Cathy
Krishnan, Celine Brigid Lawler, Mark Andrew Lawrence,
Andrew MacGregor, Georgina Sue McKay, Jennifer Lee
Muirhead, Vivienne Anne Temple, Julia Anne Elizabeth Walters,
Peter Wein

**GRADUATE DIPLOMA IN GENETIC
COUNSELLING (1996)**

Caroline Emily Bowditch, Lisette Jane Curnow, Larissa Anne
Fitzgerald, Anne Glynn, Rebecca Ruth Hankinson, Caroline
Lintott, Ivan Macciocca, Michelle Louise Mourik, Julie Umstad,
Helen Joy Upton, Helen Violet Varney

MB BS GRADUATES 1998

BACHELOR OF MEDICINE (1862) AND BACHELOR OF SURGERY (1879)

Kelvin John Adams, Altay Oguz Altuntas, Nick Chris Antoniadis, Christopher Martin Baguley, Aniza Baharin, Andrew John Barclay, Susan Barnett, Alistair Brendan Bishop, Lanny Bochsler, Andrew Ying Ho Chan, Casey Ka-Shun Chan, Lawrence Chi Kit Chan, Christina Catherine Chang, Julie Chang, Denise Chao, Kerrie Jane Chappell, Simon Murray Chatfield, Ajay Chauhan, Claudia Cheng, I-Hao Cheng, Chi Peter Cheung, Effie Chew, Angela Chien, Lucia Nallamma Premilla Chinnappa, Julian Myong-ho Choi, Elizabeth Cheng-Yi Chow, Yang Ming Chow, Hui Ling Chua, Damian Robert Claydon-Platt, Vu Vu Dang, Adam Matthew Deane, Alison Jane Dwyer, Justin Lindsay Dwyer, Evan James Dyer, Zet Sheng Ee, Naomi Victoria Elliot, Michael Fanartzis, Julia Helen Fisher, Annie Se Chian Fung, Gangadharan Ganesvaran, Helen Caroline Gardner, Sin Yee Gim, Yael Rebecca Gold, Graeme Martin Gonzales, Eileen Elizabeth Gourley, James David Griffiths, Arun Krishna Gupta, Michael Hage, Kirrily Anne Hartnell, Simon Zhao-Xing He, Natalie Jan Hewart, Peter Hill, Yoon Mei Ho, Kent Yik-Kin Hoi, Dilip Noel Hoole, Ryan Francis Hoy, Samantha Kate Hutchison, Joseph James Ischia, Barbara Constance Louise James, Anna Louise Kelly, Kenneth Kampong Khamly, Richard Anthony Kjar, Gordon Chih Wei Ku, Andrew Kyoong, Andre La Gerche, Jiun Ying Lai, Samuel Hoi-Sing Lau, Paula Dianne Coghlan Leach, Ken Jun Lee, Lucia Huong Le-Kim, Chee Cheong Liew, Gary Yin Hoe Liew, Andy Kim Ho Lim, Beng Ghee Lim, Florence Wang-Ju Lin, Katherine I-Chun Lin, Cheuk Ho Lo, Thao Ngoc Lu, Thenmozhi Manoharan, Paul Anthony McKeegan, Samuel Micut, Andrew Robert Middleton, May Yee Mok, Jillian Elissa Morgan, Maria Neagle, Eu Nice Neo, Irene Ng, Jia-Li Ng, John Thanh Ngoc Nguyen, Michael Chinh Nguyen, Thao Thi Nguyen, Gabryelle Hazel Vic Nicholls, Sophie De Lisle Nottle, Martin John O'Reilly, Carolyn Ann O'Shea, Grant Siu Kee Pang, Christos Pavlidis, Wendy Leanne Perret, Tuong Dien Phan, Cecilia Anna Pousette, Penelope Jayne Preston, Mark John Putland, Harry Ha-Hung Quach, Gerald Mun Yuen Quan, Beata Anna Rawdanowicz, Kate Audrey Robins-Browne, Marnie Nicole Robinson, Samuel James Robson, Shamon Roshan, Jonathan Bruce Ruddle, Mohamed Saleem, Emma Elizabeth Secombe, Rachel Elizabeth Shanks, Ruth Megan Smith, Jia Lin Soon, Lucas Dominic Speed, Jang Wen Su, Durai Raj Subramaniam, Niko Surano,

Mark Benjamin Suss, Andrew Douglas Sutherland, Rosemary Anne Sutton, Mei-Ling Sharon Tai, Anthea Swee Chin Tan, Sin Kuan Tan, Sze Khen Tan, Thean Hsiang Tan, Concetto James Tartaglia, Darren Choon Aik Teoh, Hua Sen Ting, Koh Cheng Thoon, Yu-Pin Kevin Tsao, Irena Vigderovich, Benedict John Francis Waldron, Crispin Alexander Foo-Yin Wan, Mark Andrew Warren, Claire Louise Williams, Khai Hong Wong, Penelope Pak Kiang Wong, Peter King Shing Wong, Peter William Wright, Bryan Ping Yen Yan, Cheng-Hon Yap, Audrey Wei-Ying Yeo, Bernard Seng Keat Yeoh, Cheung Richard Yiu, Kah Kit Yoong

BACHELOR OF MEDICINE AND BACHELOR OF SURGERY WITH HONOURS (1997)

Craig Alexander Aboltins, Travers Mark Gratta Anderson, Danielle Phuong Bao, David Barit, Natalie Pam Barton, Liam Joel Broad, Jeffrey John Brownscombe, Huei-Min Chen, Marcus Chuen Kae Choy, Sabina Ciciriello, Melinda Joy Dalman, Brendan David Flaim, Adrian Michael Fox, Francesco Gaillard, Haris Murtaza Haqqani, Natalie Harrison, Nicole Jacqueline Hope, Tim Anton Iseli, Brian Huong Canh Le, Angela Mary McCullagh, Sarah-Jane Morck, Subanesan Nadesapillai, Ashley Peng Chee Ng, Paik Ye Ng, Hannah Clare Rouse, Ashwin Swaminathan, Constantine Silun Tam, Valerie Shiok Hann Tay, Steven Ye Ching Tong, Edward John Upjohn, Natalie Jane Wheaton, Kathryn Joan Wiggins, Elaine Yee Hang Wong

BACHELOR OF ARTS AND BACHELOR OF MEDICINE AND BACHELOR OF SURGERY WITH HONOURS

Joo-Inn Chew, Anna Jane Lee

BACHELOR OF MEDICINE AND BACHELOR OF SURGERY AND BACHELOR OF MEDICAL SCIENCE

Paul David Bent, Christopher Paul Burgess, Marilla Lucille Druitt, Sharon Mei Yee Lee, Luigi Marino, Kingsley John Mudd, Mark Edward Phelan, Andrew Craig Steer, Elizabeth Le Thomas

BACHELOR OF MEDICINE AND BACHELOR OF SURGERY WITH HONOURS AND BACHELOR OF MEDICAL SCIENCE

Andrew Thomas Burns, Kenneth Chung-Ren Pang, Dominic James Clifford Wilkinson

DEAN'S HONOURS 1998

FINAL YEAR

Sabina Ciciriello
Haris Haqqani
Anna Lee
Angela McCullagh
Sarah-Jane Morck
Subanesan Nadesapillai
Ashley Peng Chee Ng
Kenneth Chung-Ren Pang
Kathryn Wiggins
Dominic Wilkinson

FIFTH YEAR

Kathryn Maree Field
Jenny Hoang
Molly Kathryn House
Caroline Jung
Emma Suzanne Magrath
Lorraine Yulaine Ong
Helen Ann Schultz
Cameron Peter Shaw
Adam Gareth Testro

FOURTH YEAR

Wai Pheng Alicia Au
Michael James Desmond
Heather Marion Francis
Helen Michelle Garrott
Sam Christopher Hume
Dominic Fook Ann Lee
Beng Liam Lim
Timothy David Walker
Eppie Mildred Yiu

THIRD YEAR

Bruce Charles Vivian Campbell
Noel Chi Fen Chan Wan Kai
Neil Israelsohn
Sameer Suhas Jatkar
Paul Cheuk Ying Lee
Lloyd Antony Roberts
Andrew James Weickhardt

SECOND YEAR

Zenia Yin Chow
Andrew Adel Guirguis
Ingrid Ruth Horner
Jessica Anne Howell
Stephen Chu-Sung Hu
Christopher Chak-Ming Leung
Qiang Li
Wai Yin Tam
Ru Dee Ting
Tomos Evan Rhys Walters

FIRST YEAR

Ju Pin Ang
Laurel Naomi Bennett
Alexander Angus Cottle
Anne Christine Dawson
Alexander Incani
Kenneth Siu Kei Law
En-Ling Leung Ki
Meena Mittal
Tse-Chieh Teh

FINAL YEAR TOP STUDENT 1998



ASHLEY PENG CHEE NG

Ashley Peng Chee Ng was the top student in 1998, and was awarded a First Class Honours MB BS degree. He also won the Australian Medical Association Prize, the NOVARTIS Prize, the Rowden White Prize, the Jamieson Prize in Clinical Medicine, the Beane Scholarship, the Robert Gartly Healy Prize in Surgery, the EH Embley Prize in Anaesthetics, the Howard E Williams Prize in Paediatrics, the Peter Ryan Prize in Surgery and the Michael Ryan Prize in Clinical Surgery.

Ashley was born in Johor Bahru, Malaysia, the elder son of parents who are both Monash graduates, and he came to live in Australia at the age of three. Following primary school in Auburn and Deepdene, Ashley was educated at

Ivanhoe Grammar School, where he became Captain of Music and Dux of the School. He was awarded a 1991 Australian Students' Prize in VCE and his scientific bent was rewarded by selection in the CRA National Summer Science School.

In spite of his keen interest in protons and photons and his musical talents, Ashley's choice of a medical career is not unexpected, as his father is a distinguished consultant physician and his mother a biological sciences teacher, though he broke with family tradition in forsaking Monash for the University of Melbourne for his undergraduate training.

After an impressive pre-clinical career, Ashley undertook a Bachelor of Medical Science degree at the Walter and Eliza Hall Institute of Medical Research under the supervision of Drs Doug Hilton and Warren Alexander, and received the UMMS BMedSc Prize 1995 for his study entitled 'NR2, an orphan haemopoietin cytokine receptor: expression pattern

and genomic structure'.

Ashley continued to combine medical studies and extracurricular activities during his clinical years at St Vincent's Hospital and Geelong Hospital Clinical School and his fine tenor voice could be heard in the common room from time to time. We were however, a little uneasy about the Judo and glad he gave up snow boarding which he tried during an elective attachment in Denver, Colorado.

Ashley has enjoyed the challenge of his clinical years and greatly values the companionship and support of his colleagues. Although he continues to develop his outstanding vocal talents and toys with the idea of a singing career, his clinical aptitude and scientific intellectual curiosity make the challenge of a career in medicine irresistible. Ashley will undertake his internship at St Vincent's Hospital, and is interested in a career path focusing upon infectious diseases or paediatrics.

PRIZES AND AWARDS 1998

FINAL YEAR

Australian Medical Association Prize
Ashley Peng Chee Ng SVH/GH

The NOVARTIS Prize
Ashley Peng Chee Ng SVH/GH

Rowden White Prize
Ashley Peng Chee Ng SVH/GH

MEDICINE

Jamieson Prize in Clinical Medicine
Ashley Peng Chee Ng SVH/GH

Keith Levi Memorial Scholarship in Medicine
Dominic Wilkinson ARMC/NH

Robert Gartly Healy Prize in Medicine
Angela McCullagh SVH/GH

Sir Albert Coates Prize in Infectious Diseases
Haris Haqqani RMH/WH

Upjohn Award in Clinical Pharmacology and Therapeutics
Nicole Hope SVH/GH

SURGERY

AOA(Vic) Orthopaedic Prize
Andrew Steer SVH/GH

Beane Scholarship in Surgery
Ashley Peng Chee NG SVH/GH

EH Embley Prize in Anaesthetics
Ashley Peng Chee NG SVH/GH

Proxime Accessit Prize in Surgery
Kate Robins-Browne ARMC/NH

Robert Gartly Healy Prize in Surgery
Ashley Peng Chee Ng SVH/GH

OBSTETRICS & GYNAECOLOGY

Alfred Edward Rowden White Prize in Clinical Obstetrics
Kathryn Wiggins SVH/GH

Edgar & Mabel Coles Prize in Obstetrics (RMH/WH, SVH/GH)
Kathryn Wiggins SVH/GH

Prize in Clinical Gynaecology
Tim Anton Iseli RMH/WH

Robert Gartly Healy Prize in Obstetrics
Kathryn Wiggins SVH/GH

PAEDIATRICS

Child Growth & Development Study in Paediatrics
Christina Chang SVH/GH

Clara Myers Prize in Surgical Paediatrics
Sabina Ciciriello SVH/GH
Dominic Wilkinson ARMC/NH

Howard E Williams Prize in Paediatrics
Ashley Peng Chee Ng SVH/GH

PSYCHIATRY

John Cade Memorial Medal in Clinical Psychiatry
Angela McCullagh SVH/GH
Andrew Steer SVH/GH

GENERAL PRACTICE & COMMUNITY MEDICINE

RACGP Prize in Community Medicine
Kate Robins-Browne ARMC/NH

OCCUPATIONAL MEDICINE

Edgar Rouse Prize in Occupational Medicine 1998
Subanesan Nadesapillai
Randal Leung

FIFTH YEAR

Royal Australian College of Ophthalmologists' Prize 1998
Constantine Silun Tam

Hedley F Summons Prize in Otolaryngology 1998
Ruth Meagan Smith

Australasian College of Dermatologists and Herman Lawrence Prize in Dermatology 1998
Edward John Upjohn

General Practice and Community Medicine Prize
Francis Yuk Pang Ma

Crawford Mollison Prize in Forensic Medicine
Tina Shattock

The Fulton Scholarship
Emma Magrath

The Kate Campbell Prize in Neo-Natal Paediatrics
Caroline Jung

The Vernon Collins Prize in Paediatrics
Michelle Clonan
Adam Testro

The Max Kohane Prize
Emma Magrath

Ian Johnston Prize in Reproductive Medicine/Biology
Rebecca Telford

The John Adey Prize in Psychiatry
Cameron Peter Shaw

FOURTH YEAR

The Harold Attwood Prize in Pathology
Shiin-Yun Yvonne Ta

Geriatric Medicine Prize
Timothy Walker

THIRD YEAR

PHARMACOLOGY

Boots Prize
Samer Jatkar

PATHOLOGY

Walter and Eliza Hall Exhibition
Fiona Joo Meng Chionh

MICROBIOLOGY

Glaxo Microbiology and Immunology Prize
Bruce Campbell

SECOND YEAR

ANATOMY

Dwight Prize
Stephen Chu-Sung Hu

Exhibition Prize
Stephen Chu-Sung Hu

TF Ryan Prize
Stephen Chu-Sung Hu

PHYSIOLOGY

Glaxo-Wellcome Prize
Ingrid Ruth Horner

GENERAL BIOCHEMISTRY

Exhibition
Andrew Guirguis

FUNCTIONAL BIOCHEMISTRY

Exhibition
Christopher Chak-Ming Leung

NEUROSCIENCE

Sunderland Prize
Tomos Walters

PHYSIOLOGY/INTEGRATED BODY FUNCTION

RD Wright Prize
Daniel McKay

BEHAVIOURAL SCIENCE

Novartis Prize
Jessica Howell

FIRST YEAR

BIOMEDICAL PHYSICS

GA Syme Exhibition
James Huang

TF Ryan Röntgen Prize
Chilton Yoon Loong Chong

INTRODUCTION TO MEDICINE

The Australasian College for Emergency Medicine, Victorian Region Prize
Anne Dawson

MEDICAL BIOLOGY

WH Swanton Exhibition
Ju Pin Ang

Baldwin Spencer Prize (for Zoology Practical Work)
Sophia Samuel

MEDICAL CHEMISTRY

Exhibition
Ka Earl Tan

ANATOMY

Mathew W McKenzie Award
Ju Pin Ang

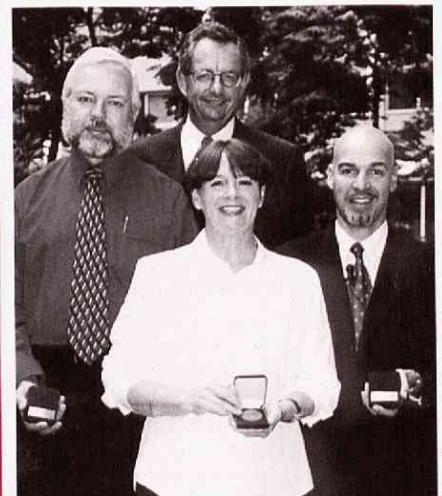
TEACHING REWARDED

INAUGURAL EXCELLENCE IN TEACHING AWARDS

At the end of last year, students in the first three years of the medical course had the opportunity to nominate their best teachers for the 1998 inaugural Excellence in Teaching Awards. The outcome of their vote was announced when the Dean presented medals for excellence in teaching to three medical teaching staff in March this year. Hundreds of second and third year students greeted the awards with enthusiastic applause, and joined the Dean in offering warm congratulations to the recipients.

Award awinners were: for the first year, Dr Craig Adams, Department of Anatomy and Cell Biology; for second year, Mr Graham Parslow, Department of Biochemistry and Molecular Biology; for third year, Mrs Sandra Uren, Department of Microbiology and Immunology.

The recipients commented on how moved they were by the students' recognition of their teaching. Dr Adams said: 'I sat down with my Department Head, Professor Andrew Kaye, early last year to discuss a career pathway. He said I had to make a choice between teaching and neurosurgical training. He gave me ten seconds to make up my mind! My career choice was teaching and this award validates that decision and means a great deal to me.'



The Dean, Professor Richard Larkins (back) with the three award winners (L-R) Mr Graham Parslow, Mrs Sandra Uren and Dr Craig Adams

FROM THE STUDENTS

GENERAL PRACTICE EXPERIENCE

Inese Tucker and Johnathan Marriott write about their time spent on general practice rotation in 1998.

A COUNTRY GENERAL PRACTICE ROTATION

WHEN I DROVE into Warrnambool, dusk was quickly fading into night. The general practitioner with whom I was about to spend two weeks had very generously picked me up from my home in Melbourne and driven me the whole way. I had chosen to come to Warrnambool because it was by the sea – whale-watching was one of its attractions – otherwise, I knew it was a major rural centre of 50 000 people and, in terms of general practice, I expected that it wouldn't really be much different to the city. After three and a half hours of driving from Melbourne we arrived. The first thing that struck me was the amazing view: the house overlooked a wide river which reflected the light of the moon and the chain of lights around the restaurant on the other side.

The next morning I was up bright and early. Dr Fairbank was going to the hospital to see his palliative care patients before the morning session at the clinic. During the course, we had come across virtually no palliative care other than a few lectures. I hadn't really thought about it since. First we saw a man who had cancer of the prostate which had extended to his vertebrae and spinal cord and left him paralysed and in considerable pain. He was in hospital for respite care which he did not seem to like. To live at home, he needed a wide range of services and community resources, not to mention his many medications. I saw him on several occasions and talked to him about his problems. Other than being sleepy, he looked withdrawn and seemed generally unhappy.

We visited the same man at home some days later, and he was looking much happier – even chirpy! Although he was bed-bound, at home he seemed more in control and had more dignity than in hospital. Working almost solely in hospitals as a student, I had never thought about the negative effect of hospital which can change the way a person feels and how others see them. This guy was just a new man when at home with his wife and cat. Although home visits are time consuming and consequently not well remunerated, seeing a patient in their own

surroundings made me realise how much can be missed by just evaluating patients in consulting rooms or hospital.

The practice I was with had four doctors, who each attracted their own sort of patients. Dr Barratt was interested in obstetrics, Dr Quinn in sports medicine and Dr Chow attracted a younger crowd of patients. The building was an old period home, making the rooms enormous – each had their own examination room. Three of the doctors used acupuncture (needles or laser). I found this particularly interesting as during our training non-western treatments were virtually never mentioned, let alone suggested as a first-line treatment. The effects on some patients were astounding. One lady told me that the pain caused by trigeminal neuralgia was so debilitating she was going to kill herself – until she had acupuncture and then the pain disappeared entirely and she returned to her normal life.

Other than sitting in with each doctor in turn and seeing the typical folks bringing in lists of medications for repeat prescriptions, coughs and colds, children with fevers and people wanting flu vaccinations, I must mention a few interesting characters. For example, the typical farmer diagnosed with hypertension: 'Doc why should I take those pills/eat something healthy/exercise when I feel fine. I'm as strong as an ox!'. And the man who travelled from another town to get injections for impotence so no-one would know he had a new girlfriend (not that) soon after his wife's death. I also visited a nursing home one morning to see patients and watched one of the general practitioners assisting with a knee replacement (you wouldn't see that often in the city!).

Despite Warrnambool being a large country centre, the 'country experience' certainly was different to the city. The general practitioners did a lot more procedures in their rooms, and the practice was much busier. The well publicised problems for rural general practitioners, such as being on call all the time and being unable to take leave, were not such a major concern in Warrnambool. I was told that there was not a shortage of doctors as such, but even so, locums were expensive and

extremely difficult to find. But even if a locum wasn't found, each doctor still took six weeks holiday and the others took over his share of work. As for after hours on call, two practices had got together so that only one night in eight was on call, which seemed to work well.

On the whole I found the experience really good. The doctors and patients alike were eager to offer information and were very positive. I learned a lot about how to conduct interviews in a short period of time, and how to deal with different patient personality styles. I have always been interested in working in the country, and this experience certainly didn't change my mind, but instead reinforced the good things both about general practice and the country lifestyle.

Inese Tucker



INESE TUCKER

GENERAL PRACTICE IN THE SUBURBS



JOHNATHAN MARRIOTT

THE MEDICAL practice nestled amongst the leafy avenues of Ivanhoe was a flurry of activity. I had arrived at a time of great change for this well-established practice and chaos would be an apt description of the scene which greeted me. The

quaint old brick building which many Ivanhoe folk had attended for their medical needs over the years was undergoing extensive renovations to meet the demands of modern general practice. The air was full of sawdust, labourers were walking in and out, and the sounds of hammering and sawing made quiet, sensitive communication with patients an even greater challenge. But people still get sick and the local long-time patrons weren't going anywhere else to be treated. So I took up a sawhorse and sat patiently, waiting for my contact, Dr Andrew Pattison.

I spent two days a week at the practice for four weeks. During that time it was expected I'd learn more about common medical conditions and generate an understanding of what general practice entails. My work was evenly divided into seeing patients on my own and observing the doctors at work. Doctors Pattison, Gallichio and Huang had varying styles and I found observing the manner in which they approached people a useful educational aid. Being able to evaluate consultations, some where both parties were satisfied, but also some where difficulties arose, has given me a greater appreciation about the importance of communication and ideas on how to improve my own developing skills.

The doctors made every effort to expose me to a range of problems facing

patients from many different backgrounds. I was presented with the opportunity to observe and interact with people dealing with alcoholism, chronic disease and death over the four week period which gave me an insight into how these sensitive situations could be handled. It was a fascinating cross-section of a metropolitan community. Like any other suburb, each day seems to pass without incident, but delve a bit deeper and you reveal the most amazing stories about the lives of the people within it. Throughout my time I was reminded of the privileged role of a medical practitioner: privy to, and sharing in the most personal details and emotions people can experience.

While the doctors made up time on their ever-growing patient list I would sit among the receptionists. Here was a band of ladies whose efforts ensured the smooth running of the practice. They were a well-oiled team without whom the practice would have been an even greater bombshell than it actually was. I enjoyed the sometimes witty exchanges that would take place between them and a cheeky doctor who'd asked too much of them – however these entertaining interludes were rare. When one of the patients came in late in the day after experiencing a heart attack, the manner in which Dr Gallichio and receptionist, Trish, calmly combined to meet the patient's comforts and transport needs was teamwork at its best.

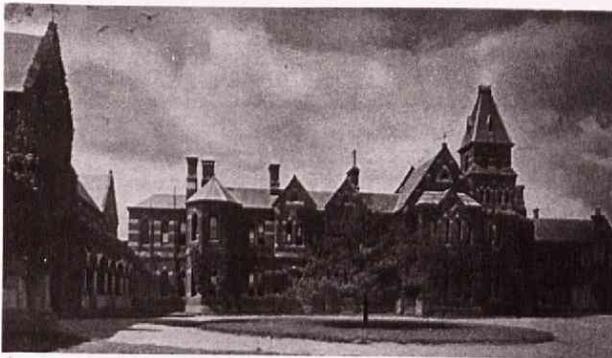
I came to realise how much effort the general practitioners were putting in for their patients. One incident really highlighted this to me and made me think further about the importance of general practitioners. Dr Pattison had been caring for an elderly lady requiring palliative care for cancer; a patient of his for some twenty years. At his home visits she was genuinely buoyed by his appearance and caring words, and she appreciated his honesty and integrity. At one of these visits her son, also a regular patient, expressed his view to me that I

should endeavour to become a specialist as in that way I could really help people. It was an insult to Dr Pattison and the other doctors at the practice who'd looked after his mum. To maintain her quality of life, Dr Pattison had spent a lot of time coordinating different levels of care from the community and visiting her at home, not to mention twenty years of caring for her as a patient.

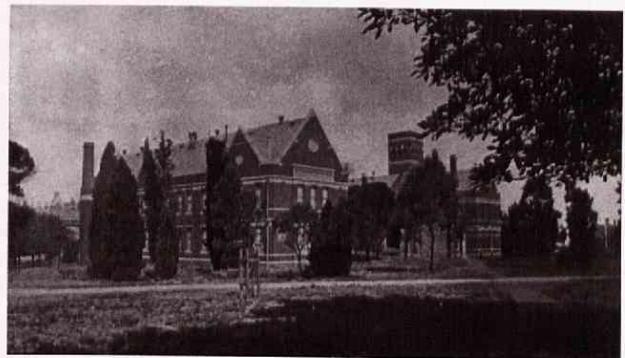
Fortunately, most patients expressed their appreciation. I found my consultations being comprised of a small amount of medicine and a large amount of me listening to them praise the doctors. I looked at photos they'd brought in to show their doctor and listened to tales of a bygone era of Ivanhoe and the history of the practice. It was very noticeable how therapeutic it was for many of the patients just to visit the doctor. It seemed there wasn't a person in the community who hadn't been down for at least a check up. Everyone on the street or in passing cars acknowledged the doctors. I thought that sort of thing only happened in the country.

I was well looked after by all at the clinic and felt a small sense of sadness at leaving. I remember Dr Pattison informing one of the receptionists that he was taking his 'mate' to lunch. My initial disappointment at being left behind soon vanished when I realised he was referring to me. Indeed that big plate of nachos went down a treat. I think it helped me that he took an interest in me as a person by exploring my background and my thoughts on medicine and life. In turn I felt more comfortable learning in an environment where I was more than just another student passing through the system. Perhaps the most gratifying aspect was that the doctors there enjoyed their work which makes it very encouraging for me to look forward to my future profession.

Johnathan Marriott



MELBOURNE UNIVERSITY TRINITY COLLEGE C.1900



MELBOURNE UNIVERSITY ENGINEERING AND GEOLOGY SCHOOL C.1900

BEAST OF BURDEN

Mae Tao Clinic, Thailand - December, 1997

by Ken Pang, MB BS 1998

BREAKFAST IS FINISHED and the paper has been read. My arrival home from elective travels two weeks previously brought many joys, and the re-establishment of this morning ritual is one I quietly cherish. But today, I am sad. A newspaper article lies on the kitchen table. I've cut it out but I don't think I want to read it again. Not for a while. Not if it provokes anew this sadness that gnaws so at my innards. This feeling is gruesome. It is not that I have not been sad before. I have, but before my sadness was personal – egocentric, if you like. Now, I am sad for others and I am helpless to assist. I begin to wonder about a little girl . . .

She would have been four or five years old, perhaps. I first saw her in the distance approaching from the river as she walked back towards the main settlement of the camp. I think she was following her father but I didn't really see him. I was transfixed watching the girl: across her shoulders she carried a coolie's stick, each side from which was balanced an old petrol can heavy with water. Her close-shaven head was cast towards the dusty ground but, as the skinny legs of this little beast-of-burden brought her within reach, she briefly looked up at me, revealing a face of courage and resolve. That was it. Not a word exchanged, just a meeting of eyes. She has since become significant to me, symbolising those qualities I remember most fondly in my experience of her people – not just that day at the Huay Kalok refugee camp but in the weeks I spent at the nearby Mae Tao Clinic on the Thai-Burma border.

The Mae Tao Clinic is located in Mae Sot, along the Burmese border in Thailand's north. Sustained by a thriving gem trade, in the past Mae Sot was known as a lawless, frontier town but more recently has become associated with the plight of the Burmese refugee. Altogether, over 100 000 Burmese refugees live along the border region. Some are ethnic Burmese but the majority is from minority racial groups such as the Shan and the Karen. They have fled to Thailand in an effort to escape the terrors of the ruling Burmese military junta which for more than a decade has suppressed efforts towards democracy and waged war against Burma's ethnic minority groups. Whilst many refugees have found factory work



Children at the Huay Kalok refugee camp

as cheap, illegal labour in towns such as Mae Sot, many others are confined to remote internment camps like Huay Kalok that are not only crowded but under-serviced. Given their illegal immigrant status, the Burmese are largely denied access to Thai medical facilities. This occurs despite immense health problems, be they those endemic to the jungle border regions (malaria, typhoid, malnutrition, TB, intestinal worms) or those specific to the ongoing military offensives (land mine injuries, effects of torture).

In 1988, Cynthia Maung, a young Burmese doctor and herself a recent refugee to Thailand, established a small clinic outside Mae Sot to address the growing and unmet demand for medical care amongst her people. Since that time, she has looked after thousands of patients. Her clinic has steadily gained renown, and in one international newspaper Dr Cynthia was heralded as 'Burma's Mother Theresa'. The services have today expanded to include a small inpatient facility as well as outpatient clinics providing general, obstetric, family-planning, paediatric, basic eye and nutritional care. Drawn predominantly from the refugee ranks the staff now comprises several doctors as well as tens of so-called 'medics' trained at the clinic in the area of primary health care.

Funding nonetheless remains limited and the infrastructure primitive. Clinic buildings – where the staff not only work but also eat and sleep – are ramshackle. For instance, the paediatric outpatient clinic was housed in a small open-air building with thatched roof, bamboo supports and makeshift wall partitions: during consultations, local dogs and chickens would wander in and out, often settling down inside in an effort to escape the tropical sun.

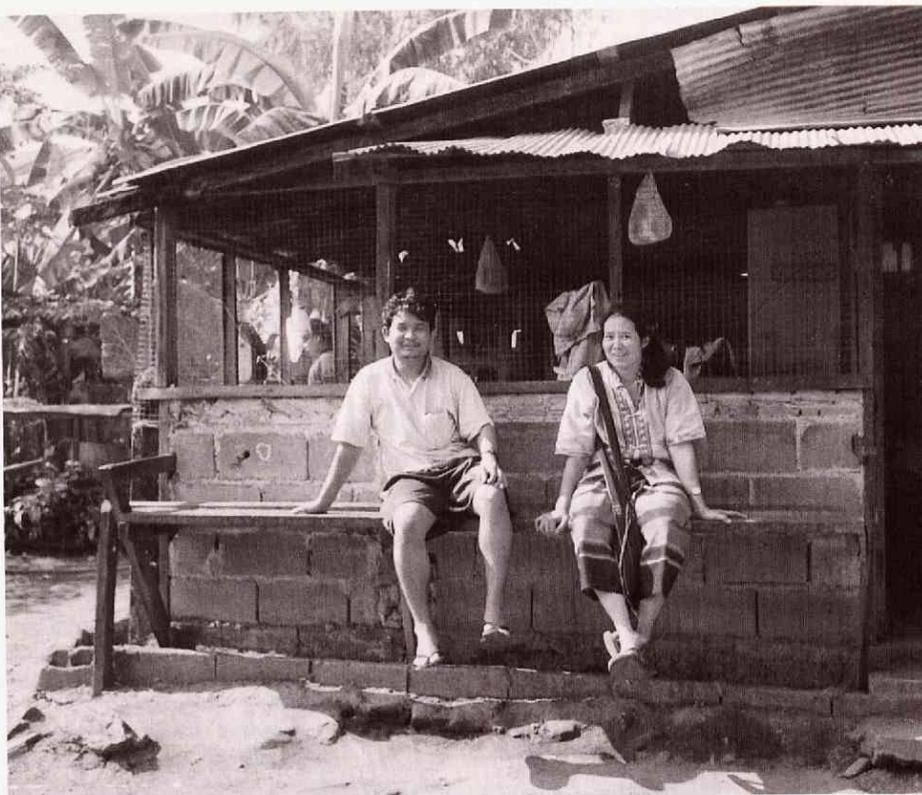
At the clinic, visiting medical students enjoy a fairly independent role in patient care. I spent my time in the daily outpatient clinics, seeing people with the help of one of the medics. Although patients could not speak English the medics could (to varying degrees) and were able to translate from their native Burmese or Karen. Given that their only formal medical training had been a crash-course over six months, the medics usually considered me their senior notwithstanding the fact that most had a wealth of clinical experience and, without me, would otherwise have conducted the consultations by themselves. Together, the medic and I made the management decisions for the majority of patients that we saw. Where the clinical situation was unclear or warranted inpatient admission, the guidance of one of the doctors was sought. The cases were diverse and patients were commonly seen for malaria, intestinal worms, tuberculosis, and malnutrition.

The opportunity to participate in the lives of the clinic staff was the most rewarding aspect of my stay. Theirs are lives in whose stories joy and sorrow, courage and fear, disappointment and hope all intermingle. For these stateless people, the future is uncertain. Given the current Thai economic crisis, forcible repatriation threatens like a spectre in the background. More acutely, they must hope that the clinic escapes Huay Kalok's fate. For some, passage to the West is the short-term goal but, for all, the desire to return to a Burma that is free, just and peaceful remains paramount. Amongst the medics, the current state of limbo at least affords the opportunity for further learning. Most were genuinely keen to add to their own limited training not only in the field of medicine but also the English language. And so it was that I found myself helping people hone their English skills and giving the occasional

medical tutorial. More than anything else, these tasks allowed me to feel that I was making a contribution towards the clinic and its people. This was a unique situation. Even after five years of medical school, it's easy to feel superfluous in a working medical environment. Being at Mae Tao gave me the chance to be valuable in other, non-medical areas, and the heartfelt thanks that I received for my efforts in that makeshift classroom will long be with me.

Today, having just read an article describing the attack and destruction of Huay Kalok by Burmese forces the – first armed incursion across the border in more than twelve months – that little girl's face haunts me. I wonder about her fate and that of the other ten thousand refugees at the camp.

Learning of the attack on Huay Kalok and the lives lost was painfully disturbing, as was the knowledge that, without shelter and supplies, the remaining inhabitants of the camp will likely be ravaged by disease in the ensuing months. Yet, there's more. There's disappointment. Disappointment that those simple aspirations spoken of so longingly at the clinic – freedom, justice and peace – must now seem further away than ever for my friends.



Dr Cynthia (seated right) and Myo Win, one of the medics

CYCLONES IN PARADISE

The Cook Islands

by Suzi Nou, MB BS 1998

When my fellow medical student, James Gladden, and I arrived at the medical students' quarters at Raratonga Hospital on the main island of the Cook Islands, we were met with horror stories (largely exaggerated) of medical students running emergency departments and wards with little help from doctors. Leaving the panic-stricken students' quarters for the calmer island of Aitutaki we started to revise drug doses and soon realised that a lot of the books there were so old as to not include some drugs, let alone their dosages. We sent a fax to Therapeutic Guidelines detailing our situation and requesting their help to help us 'save a few lives'. They responded by sending out two complete sets of Guidelines – one to the Raratonga Hospital and another to us on Aitutaki. We would like to acknowledge the generosity of the Therapeutic Guidelines. We did manage to 'save a few lives' and trust that future visiting medical students to the Cook Islands will find them useful.

AITUTAKI. In my guide book it says it means 'to keep the fire going'. In my dictionary, it sits right next to paradise. On the map, it is one of the Cook Islands, nestled south of Hawaii between Samoa and French Polynesia. Of the Cooks, it is the second most populated island and receives the second highest frequency of tourists. But this tourist industry is only able to support one resort and a handful of motels. And only two bars. The major sell-out destinations, it is rumoured, buy images of its white beaches and aqua waters for their glossy advertisements.

However, the beauty of this place is the people. I was called in to eat their food as I rode my bicycle past their houses. I rode on the backs of their motorbikes (without a helmet!). I ate breadfruit, coconuts, paw paws and mangoes from their trees. I ate the fish they caught. I swam at their private beaches. And I stayed with them during a cyclone.

As my sunny paradise was swept by overpowering, wind-driven rain I inadvertently found myself walking the main road, now devoid of traffic and tourists. The only people about were locals buying last minute supplies, tying down roof tops and cutting down coconut trees. While six extra flights left the island, I waited for Tropical Cyclone Pam.

Unlike the locals, I did not share their sense of calm. This, to me, was an unrecognised fear. Remembering images of the destruction wreaked by Cyclone Tracy, I sat on the edge of disaster. I wanted to know what to do, which shelter to go to and what medical supplies to bring. And who would stay here, on the top of the hill in the middle of the island with nine year old Tereora, her fractured femur held in traction by a bucket of sand?

For the local people it was an unavoidable situation and treated as

such. 'If it comes, it comes' they said. 'If I die, I die' they also added. Pam was only one of three so far in a bad year. Pam was just a part of life in the tropics during cyclone season.

So I waited, on the hill. Frustrated by the isolation and the sense that the rest of the world outside the hospital door was whirring in a frenzy much like the weather, I ventured out with one of the doctors and visited each of the village shelters. When night came I found myself in the hospital, the voices of Tereora and a nurse-aide lost to the howling of the wind. During that sleepless night, locals would come to join us. Some came for the sense of security. One brought a television, permanently tuned to the constant weather updates. More came as the water rose and washed up against their back doors. A girl came in after receiving an electric shock. While my friend and colleague told me about myoglobinuria as a complication, I prayed that Cyclone Pam would pass so the doctors could return to the hospital by the morning and, after what seemed like an endless night, she eventually did.

Weeks later I followed the cyclone's easterly path to a smaller outer island. Atiu, a rugged raised coral reef with narrow beaches wedged between coral cliffs. I was sent to provide what I could while the island's only doctor was holidaying overseas. Naively accepting the reassurance that I would have the rare inpatient, a maximum of three hours of clinic and the rest of the day at the beach, I was quickly overwhelmed by the power of my position. I rostered the nurses, fed the many inpatients, ordered drugs and even drove the ambulance (much to the surprise of some of the locals who could not drive, let alone think that women could do so!). I could request round the clock electricity (usually turned off at night) and could charter extra flights for patient transfers (usually only one flight per weekday) and enlist the aid of every car owning local (there were only a few) to light the runway at night.

My predecessors had described that, starting at eight, the only thing I would be called upon for would be to review people's hypertension and diabetes. Then I would be required to stay on call (usually by sleeping in the heat of the day) until the end of the official work day at three pm. The rest of the day was mine to spend at the beach.

However, on my first official working day, I was called out at seven am with the instructions 'bring oxygen'. I managed to navigate my way, with no map or street signs and arrived to find a man lying in the middle of a lounge room four hours into a massive, and worsening, stroke. The oxygen tank was empty (as was every other tank on the entire island). We placed the man in the back of the pick

up truck (the ambulance) and it became pretty obvious that things were not going well. We lost his pulse on the way to the treatment room. Resuscitation was ceased at eight am, the time that work officially began.

While my colleague made arrangements with the family, I started the first clinic (of my life!). I waited expectantly for the request that I review someone's blood pressure. My first lady was noticeably jaundiced with a huge liver and an alarming history of sudden weight loss. Hmm. The next was twenty weeks pregnant, had sustained a fall while drunk a few days previously and was having vague abdominal pains that may have been coming and going, increasing in intensity and frequency. Hmm. I was told another lady had appendicitis until I discovered her appendicectomy scar. Hmm. And everyone's blood pressure was normal.

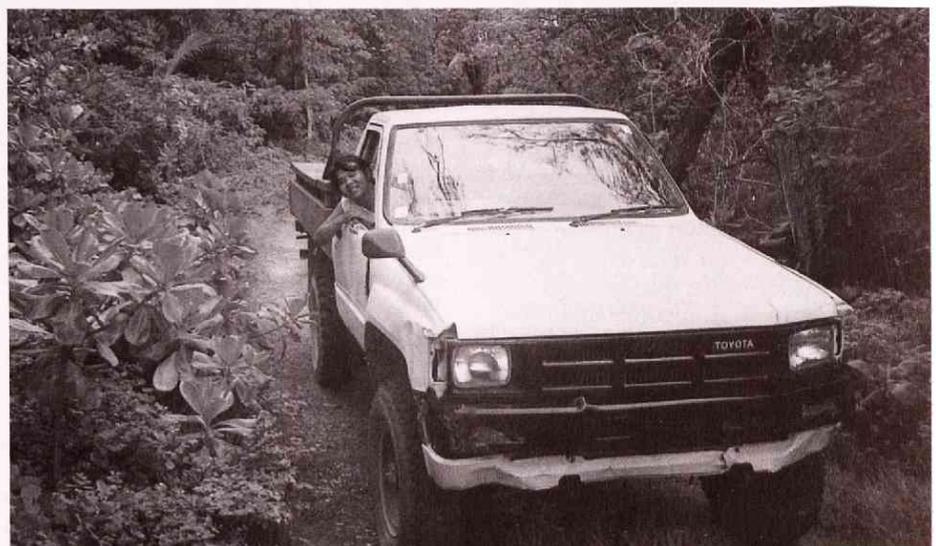
So this was Atiu: a rugged coastline, rough medicine, and hardy people. And like on Aitutaki, it was the people who made the difference. I had arrived with no-one expecting me (telecommunications are rather haphazard at the best of times) but within hours it felt as if the whole island of 900 people knew about me. I remember the admiration I had for the wife of the man who had passed away. As we stood on opposite sides of him, her hand on his chest, I put my hand on hers and told her how sorry I was. She took her hand out from under mine, grabbed it firmly and looked up with her teary eyes into mine, and at a moment when she had every right to be selfish, to be irrational, to be angry at the young medical student foreigners, she said a warm, deep, 'thank you'.

During my time in the Cook Islands, I was to feel the effects of a cyclone for each of my eight weeks there. Every cloudy day heralded a storm that could become a cyclone somewhere in the vicinity. There was Pam, Martin, Susan. They say that the ones with women's names are worse. They say that namesakes are bad luck . . . I held my breath as Susan headed in the other direction. Also during this time, I was to feel the effects of working in a community where a finite limit of supplies hits like a concrete wall. No oxygen. No beta blockers. There are not enough drugs so they come back every two weeks to receive more. Leading, ironically, to probably the best controlled hypertension in the world!

A student on Rarotonga, frustrated that there was no more Hemacel to help a rapidly dying man, said 'life is cheap here'. But no, of course, life is not cheap. Death is just accepted naturally as a part of life, rather than the end of it. It sounds 'unmedical' but their medicine seems less valuable. The Islanders know that it can only do so much, they don't expect their lives to be saved and are grateful for any benefit: as the cyclones come and go, so too does their health, their doctors and the medical students. Just part of life's cycle in paradise.



Inspired by the beauty of Paradise (Aitutaki) who could help but make their own postcard



It looks like any other truck but this is my first practice run as ambulance driver!

PALAMANER ACCOUNTS

An Elective in Rural India

by Dominic Wilkinson, MB BS 1998

AFTER A WHILE I forgot that I was doing it: tallying up the rupees for tests or treatments, and only offering the cheapest alternatives. It was only when I came back to Australia that it struck me how differently we had worked in our outpatients department in Palamaner. Even now, months later, I am far more aware of the cost of medicine than I ever was before. But in India, for the vast majority of patients, it is impossible to divorce yourself from considerations of what is affordable, rather than what is ideal.

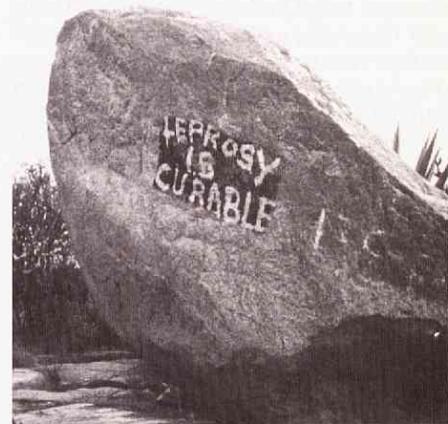
A two year old child, weak and sick with pneumonia, was sent away on oral amoxil. When I saw her in the outpatients, it was clear to me that she needed more in the way of medical care than we could provide. She was febrile and lay quiet and uninterested across her mother's lap despite my pokings and proddings and cold metal stethoscope. Her breathing was fast and laboured. But the small general ward in the hospital where I was working had only one small oxygen cylinder and no oxygen masks. (If you needed it, you had to improvise by cutting holes in the tubing). The nearest large hospital was about fifty kilometres away, and I carefully wrote out a letter referring the parents to this centre. With one of the attendant staff translating, I explained the importance of going to the other hospital, but before the parents left one of the doctors wrote them a script for amoxicillin. This puzzled me, but she explained later, in her pragmatic way, that it was unlikely that the parents would go to the hospital. If they didn't make it, it would be better to have the antibiotic on board than nothing at all.

I have wondered since whether that little girl lived. Did her parents spend several weeks' wages to get her seen elsewhere, and be admitted for IV antis? Did they even fill out the prescription? The harsh reality was that a male child would have fared better – his parents would have been more willing to spend money on his health. I will never know.

However, in the Palamaner hospital, sick children were a bit of a rarity. This small sixty-bed hospital in rural south India had started out life as a community leprosy project. Although it had since branched out into tuberculosis, ophthalmology and a bit of general medical care the taint of the deforming disease still stuck to it. Hence, in my time there, I saw relatively little in the way of paediatrics and no obstetrics whatsoever.

My first inkling of the different ways that things were managed was when I found a shoe shop on the hospital grounds. This was not an opportunistic infection, in the way of a fast food outlet in a children's hospital, but rather was one of the fundamentals of treatment. Run by rehabilitated patients, it provided shoes made out of micro-cellular rubber and old tyres. For patients with treated leprosy there was little we could offer from a medical perspective except to patch them up when they developed ulcers. The shoe shop could make a far greater difference to their lives. Spreading out pressure across the soles of anaesthetised feet helped keep them from developing sores and ulcers, and out of the spiral of infection and poor healing that led to deformity. The shoes cost patients 120 rupees, less than five Australian dollars, but I would still see patients walk in barefoot or in flimsy thongs because they couldn't afford this amount. For me the shoes served another vital function, as I learned quickly to assess a patient's past history (of leprosy at least) by looking at their feet.

Leprosy is one of that great medical family of mimics. The imaginative and creative mycobacterium sculpts and shapes the skin of those it afflicts into all manner of lumps and bumps, patches and thickenings. Among the villagers, the leprosy hospital had become known as the 'patch hospital'. Years of trying to teach people to come if they had pale areas on their skin had become generalised over the years such that all manner of skin disease would come through the outpatients door. The endless parade of scabies, tinea, eczema, psoriasis, and impetigo would leave me scrubbing my hands vigorously at the end of the day. Later, suddenly aware of an itchy scalp, an itchy arm, I would stop in my tracks and wonder nervously... In fact the skin conditions were my great saviour in the outpatients department. My extremely impoverished Telugu (the local language) was able to cope with the limited history-taking needed for these. I could just about manage 'does it itch?' and 'put the ointment on every day'. Half in jest we sometimes referred to ourselves as 'putamundu (ointment) doctors'. Every second patient we would send away clutching a piece of paper on which was inscribed, in holy script, some combination of Whitfield's ointment, salicylic acid, dexamethasone, sulphur, Vaseline; the exact mix depending on the



Public Health advertising in rural India!

nature of the complaint (and also on our whim). Needless to say this was not exactly 'best practice'. On one occasion, distracted by the itchy eczematous rash of a young girl, I had already started to scrawl a prescription for a steroid ointment when I noticed a pale patch above her elbow. The great mimic had almost sneaked past unnoticed.

At least once or twice a day we would have patients come in with sputum positive tuberculosis. Although these were treated in a separate room as inpatients, there were nothing like the precautions taken in Australia. Nurses and doctors would wander in and out of their rooms with impunity. Sometimes though, in the clinic, the endless procession of coughing and spluttering patients would start to make us feel nervous. As a particularly unkempt and cachectic man sat down in front of one of the three doctors seeing patients in the outpatients room, they would reach for the cloth mask in their shirt pocket. Paranoia, more infectious than an acid-fast bacillus, would set in rapidly, and it was not uncommon for us to find ourselves at the end of a morning staring at each other through cloth masks, like a group of over-dressed bandits. It can't have inspired great confidence in our patients.

Our most common prescription was for vitamins, an alphabet of coloured pills. Few if any patients went away without at least one vitamin supplement. I found this hard to adjust to initially. I would look on as they were dispensed for colds, coughs, aches, weakness or headaches, and silently feel a little condescending towards the placebo pills which I knew were frowned on in contemporary practice. But bit by bit

I started to appreciate that the issue was not as straightforward as I thought. Many of the patients, even if presenting with a relatively minor complaint, were also under treatment or follow-up for leprosy or TB. In such patients it was vital that they returned for regular appointments. Among the local people there was a strong belief in the power of tablets, and to be sent away without anything would imply that their symptoms were without foundation. (In fact there was an even stronger belief in the power of injections, and frequently patients would plead for an injection to be given). The other issue was whether the vitamins might have a useful therapeutic effect. The diet of the rural Indians who lived nearby was often meagre and lacking in basic nutrients. Their main meal might be a watery soup containing a few green leaves and a few lentils, eaten with rice. Often children in the clinic would have silver patches in their eyes, not a sign of Midas' touch, but of poverty and lack of vitamin A. In this context there was a real possibility that

vitamin supplements might help. After a while I doled out the alphabet without much further thought.

Travelling for a few weeks in a place like India it is impossible to really understand the people or their culture, to gain more than a rudimentary understanding of their health and its problems. But it is in the nature of such a journey that you end up learning more about yourself and your home. I met an American on my travels who had come to the opinion that the whinging poor of America should be given a ticket to stay in India for a week to learn about real poverty. I found his position a little extreme, but I have come, more and more, to understand how fortunate we are in Australia. There is so much that we take for granted, not the least of which is a health care system that attempts to care for all, regardless of financial status. It is something to be proud of and something worth defending.



An old treated leprosy patient (clawed and wasted hands) in the grounds of the hospital.

WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

by Professor Suzanne Cory

Director, Walter and Eliza Hall Institute of Medical Research

THE WALTER AND ELIZA HALL Institute is Australia's oldest and most respected medical research institute. A great tradition of excellence in fundamental biomedical research, honed over an eighty year history, has secured for it an outstanding international reputation. Its researchers have been honoured with many international prizes, including, in 1960, the Nobel Prize for Physiology or Medicine to Sir Macfarlane Burnet. The current faculty includes six Fellows of the Australian Academy of Science, five Fellows of The Royal Society and four Foreign Associates of the US National Academies of Sciences.

An innovative organisation of over 370 people, the Institute is located on the 'Parkville strip', in an ultra-modern building equipped with state-of-the-art technology. Its close ties to the neighbouring Royal Melbourne Hospital facilitate translation of the fruits of its research into the clinic. As the Department of Medical Biology of the University of Melbourne, the Institute has a strong emphasis on postgraduate training and it attracts some of the best and brightest biomedical PhD students and postdoctoral fellows from around Australia and overseas.



Professor Suzanne Cory

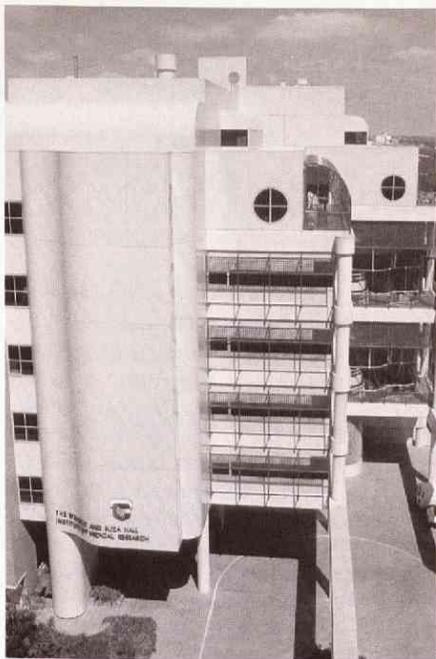
A BRIEF HISTORY

The Hall Institute's roots trace to the middle of last century, when the Englishman Walter Hall came to Australia to seek his fortune in the gold rush. Much of Hall's wealth came from Queensland's Mt Morgan gold mine, but he also acquired substantial holdings in the booming pastoral industry and in transport. Hall's widow, Eliza, was persuaded to establish a million-pound charitable trust and, after her death,

Richard Casey and Harry Allen, Dean of Medicine at The University of Melbourne, organised for a small portion of the trust's annual income to be used to found an institute of medical research.

In April 1915 the new Melbourne Hospital in Lonsdale St agreed to provide a home for the fledgling institute. Tragically, however, the director-designate, Gordon C Mathison, suffered fatal wounds in the ANZAC landing at Gallipoli. Dr Sydney Patterson, a Briton, took up the post in 1919 but returned to England in 1923. He was succeeded by Professor Charles Kellaway, a Melbourne graduate, who had worked with Sir Henry Dale at the National Institute of Medical Research in London. Kellaway attracted a talented coterie, including four who became Fellows of the Royal Society. He also ensured that the Institute had custom-built laboratories next to the new Royal Melbourne Hospital when it moved to its present premises in Parkville.

Sir Macfarlane Burnet, Kellaway's most eminent protégé, became the third Director in 1944. The Institute's excellence in virus research during the first decade of his leadership forged a burgeoning international reputation. By 1957, however, Burnet felt the need for change and decided to concentrate on



The Walter and Eliza Hall Institute of Medical Research building in Royal Parade Parkville

the body's response to infection rather than on infectious agents. He abruptly switched the focus of the Institute to immunology and published a seminal paper describing his clonal selection theory of antibody production. This theory had profound influence and the Institute became the world centre for immunology, contributing almost fifty per cent of the immunology literature during the late fifties and sixties.

Burnet's successor in 1966 was his former student, Gustav Nossal, appointed as Director at the astonishingly young age of thirty-four. In tune with the new era, Nossal set about a dramatic expansion and diversification of the Institute. He appreciated the need for state-of-the-art technology and built up sophisticated centralised services, culminating in the construction of the magnificent facility in which the Institute is currently housed.

The immune system remained a central research theme: Nossal elegantly confirmed Burnet's clonal selection



Gus Nossal and Macfarlane Burnet

theory and explored how the immune system distinguishes 'self' from 'non-self'; Jacques Miller, who had discovered the role of the thymus in conferring immunity, showed with his student, Graham Mitchell, that T lymphocytes 'helped' B lymphocytes accomplish their task of making antibodies; Ken Shortman traced the development of T cells in the thymus; Ian Mackay pioneered clinical research on autoimmunity; Thomas Mandel initiated transplantation biology; and Graham Mitchell founded a vigorous program in immunoparasitology, focused on schistosomiasis, leishmaniasis and malaria.

Haematology, molecular biology and cancer research also flowered during this era. Don Metcalf and his team discovered and characterised the colony stimulating factors (CSFs), 'hormones' needed for blood cell production, and took them to the cancer clinic (see below). Jerry Adams and Suzanne Cory introduced molecular biology, initially to investigate antibody production and later to study the origins of cancer.

Nossal's outgoing personality and great gift for communication and public oratory, coupled with a formidable scientific intellect, made him Australia's foremost advocate for science. His influence and vision have created an enduring legacy.

THE INSTITUTE TODAY

The current Director of the Institute, appointed in 1996, is molecular biologist and cancer researcher, Professor Suzanne Cory. The major research programs of the Institute remain centred on the blood cells and their diseases. Fundamental studies of the control of blood cell production underpin and complement research into the molecular origins of the leukemias and lymphomas, autoimmune diseases such as diabetes and arthritis, and the control of parasites, particularly malaria. Another program studies the early development of the nervous system and a new laboratory for breast cancer research has been created in conjunction with the recently established Victorian Breast Cancer Research Consortium.

Aware of the immense opportunities heralded by the era of the Human Genome Project, the Institute is also investing heavily in genomics and genetic susceptibility to a variety of diseases, including insulin-dependent diabetes, leukemia, malaria, glaucoma, osteoporosis and multiple sclerosis. This genetics program has been greatly enhanced by the establishment of the Melbourne node of the Australian Genome Research Facility (AGRF), under the direction of Hall Institute researcher Dr Simon Foote. With its sophisticated robotics, the facility is one of the most automated in the world and provides rapid throughput DNA sequencing,

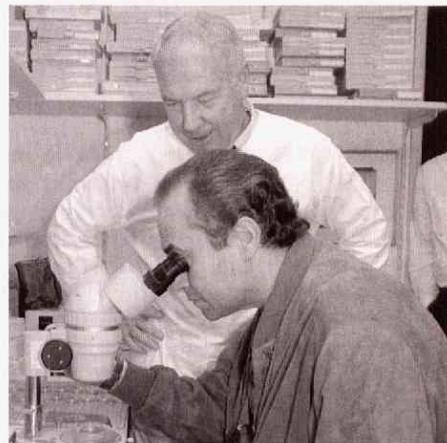
genotyping and mutation detection, on a cost-recovery basis.

Bioinformatics is an essential foundation for genome science and to strengthen its capability, the Institute has recruited Professor Terry Speed, a Melbourne graduate who spent the last ten years heading the Department of Statistics at the University of California at Berkeley.

Outstanding recent achievements of scientists at the Hall Institute include:

Taking cytokines into the clinic

Cell production in the body is controlled by hormone-like molecules called cytokines found on neighbouring cells or circulating in bodily fluids. Two decades of painstaking research by Professor Don Metcalf and his colleagues resulted in the isolation and characterisation of the blood cell cytokines, or Colony Stimulating Factors (CSFs). These cytokines are now used to protect cancer patients from the bone marrow-damaging effects of chemotherapy – more than a million and a half people have benefited, including renowned tenor Senor José Carreras, and a billion dollar industry has developed.



Don Metcalf with José Carreras

CSF research also produced a revolution in the procedure of bone marrow transplantation. In 1987, G-CSF was injected into patients for the first time in the world at the Royal Melbourne Hospital. Studies in the laboratory of blood from these patients revealed a totally unpredicted action of G-CSF: 'stem cells' had migrated into the blood from the bone marrow where they normally reside. A subsequent clinical study by Dr George Morstyn (then at the Ludwig Institute) demonstrated that these stem cells could be used for bone marrow transplantation. Around the world, stem cells are now routinely harvested from blood rather than marrow – a much cheaper and less painful procedure. In addition, mobilised stem cells have allowed the use of considerably higher doses of chemotherapy for breast cancer,

and a large collaborative international study is currently under way to determine the impact of this treatment on women with breast cancer.

Clinical trials are also under way for LIF, another cytokine discovered in the Cancer and Haematology Division, now directed by Professor Nick Nicola. LIF may be able to ameliorate major peripheral neuropathies occurring as a side effect of chemotherapy.

Cytokines perform their function by binding, in a lock-and-key fashion, to dedicated receptors on the cell surface. Binding triggers a series of biochemical reactions which reach deep inside the cell and 'reprogram' the DNA, enabling the cell to respond to its environment. A major new family of cytoplasmic regulators called SOCS proteins (for Suppressor of Cytokine Signalling) has recently been discovered by Dr Doug Hilton and his colleagues in the Cooperative Research Centre (CRC) for Cellular Growth Factors. These proteins act as a classic negative feedback loop to turn off the signal triggered by certain cytokines. Without such loops, cell growth could continue unchecked, resulting in cancer. The CRC is investing heavily in studying these proteins, confident that a new generation of 'smarter' therapeutics will eventuate.

Chromosome translocations and leukemia

Many leukemias and lymphomas are hallmarked by specific chromosome abnormalities. By cloning the abnormal chromosome region found in Burkitt's lymphoma, researchers in the Molecular Genetics of Cancer Division, led by Professors Jerry Adams and Suzanne Cory, proved that the DNA rearrangement had activated a cancer-provoking gene (oncogene), called *myc*, resulting in loss of control of cell division. They then created transgenic mice by injecting the mutated DNA into oocytes, with dramatic results: every mouse born with the abnormal gene went on to develop lymphoma before twelve months of age. These experiments proved beyond doubt that Burkitt's lymphoma resulted from mutation of the *myc* gene and created a paradigm for cloning the oncogenes responsible for other lymphomas. Like *myc*, most of these oncogenes facilitate cell division. However, the *bcl-2* gene activated by the chromosome translocation found in follicular lymphoma proved to be very different. Dr David Vaux showed, with Cory and Adams, that *bcl-2* exerts its oncogenic action by inhibiting cell death. Together with Andreas Strasser and Alan Harris, the researchers went on to

elegantly demonstrate in mouse models that the *myc* and *bcl-2* mutations can act in concert, driving the inexorable and rapid development of lymphoma.

Elimination of unwanted or damaged cells is essential for proper body function. Flawed regulation of this process contributes to many human diseases: while insufficient cell death can lead to cancer and autoimmune disease, too much provokes transplant rejection and neurodegenerative diseases and contributes to tissue damage after heart attacks and strokes. Improved understanding of the regulation of apoptosis is therefore likely to lead to new approaches to diagnosis, treatment and prevention of many diseases. Researchers in the Molecular Genetics of Cancer Division have recently discovered several new genes controlling apoptosis, some of which inhibit cell death and another which enhances the process. Intriguingly, one of the inhibitors is essential for sperm production and defects in this gene may prove to be involved in certain types of infertility of men.

Combating malaria

Malaria is one of the major scourges of tropical countries, debilitating 300 to 500 million people a year and killing up to 2.7 million. The innovative program to understand and combat this dreaded disease started nearly twenty years ago and remains the central focus of the Infection and Immunity Division, now headed by Professor Graham Brown. The development of an effective malaria vaccine is being vigorously pursued by Dr Robin Anders and his collaborators in the CRC for Vaccine Technology and the results of their first clinical trials will be available later this year. In a 'world first', Dr Alan Cowman and his colleagues can now incapacitate individual genes within the malaria parasite. The new technology will enable the researchers to deduce the function of many malaria genes, thereby enabling development of clever new strategies to cripple the parasite. They have already used it to identify the gene responsible for the principal cause of death from malaria – brain damage caused by the clogging of capillaries by parasite-infected red blood cells. Blood cells infected with parasites lacking this particular gene lack the thousands of sticky knobs usually present on infected red blood cells and can no longer adhere to endothelial cells under flow conditions mimicking those in blood vessels.

In a major new initiative, the malaria team has established a collaborative program with the Eijkman Institute for

Molecular Biology in Jakarta. Funded for three years by AusAID, the program will focus on drug resistance and the pathogenesis of cerebral malaria. Its other important goal is to strengthen research capacity in molecular biology in Indonesia.

Improving vaccination and immune responses

Our greatest weapon against infection is still vaccination. A radical new approach to vaccination is injecting DNA rather than the protein itself – providing the blueprint rather than the product. When introduced into skin or muscle, cells engulf the tiny loops of DNA and follow its instruction to make the vaccine. Because DNA vaccines are stable and cheap to produce they have great potential, particularly for developing countries. Up to now, however, immune responses to DNA vaccines have only been weak. Drs Jefferey Boyle and Andrew Lew in the Autoimmunity and Transplantation Division may now have overcome this barrier. They modified the immunising gene so that its protein product could find its way from skin cells to lymph nodes, where immune responses are normally generated. The stunning result: immune responses increased 10 000-fold. This exciting development is being pursued further with the Cooperative Research Centre for Vaccine Technology.

T lymphocytes are the body's major weapon against viruses and cancers. There are two major types killer T cells, which seek out and destroy infected or malignant cells, and helper T cells, which assist in the fight. Researchers in the Immunology Division, led by Professor Ken Shortman, are currently paying particular attention to a third type of cell – the dendritic cell. This octopus-like cell has long 'tentacles' which attract T cells by displaying on their surface a 'bait' made from bits of viruses or cancers. Dr Bill Heath and PhD student Sally Bennett have found that once the helper T cell recognises these 'foreign' protein fragments (antigens), it signals to the dendritic cell which then activates the killer cell. Better understanding of this cellular ménage à trois may lead to more effective vaccination procedures for individuals who have only a limited number of helper T cells – for example, HIV-infected individuals or cancer patients.

Understanding and combating diabetes

In insulin-dependent diabetes, the body's immune system reacts against and destroys the insulin-producing beta

cells of the pancreas. One of the components that provokes the immune attack can be insulin itself. Professor Len Harrison and his team in the Autoimmunity and Transplantation Division have shown in diabetes-prone mice, that insulin delivered through the mucosal membranes of the nose, airways or gut induces regulatory T lymphocytes that can block destruction of beta cells. In collaboration with Dr Peter Colman of The Royal Melbourne Hospital, they have

commenced a controlled trial of intranasal insulin for the prevention of insulin-dependent diabetes.

Some people have an inborn risk of developing insulin-dependent diabetes because they have inherited one or more susceptibility genes from their parents. Dr Grant Morahan and his colleagues in the Genetics and Bioinformatics Group have pinpointed the chromosomal location of a previously unknown diabetes susceptibility gene which acts

early in the disease and is more likely to affect females than males. Work is under way to identify the nature of this gene and how it enhances susceptibility.

As it moves into the twenty-first century, The Walter and Eliza Hall Institute of Medical Research remains focused on innovation and excellence, firmly committed to its goal of mastery of disease through discovery.

AN INTERVIEW WITH PETER DOHERTY, NOBEL LAUREATE

by Sharon Keeling

Peter Doherty and Rolf Zinkernagel were awarded the 1996 Nobel Prize for Physiology or Medicine for their discoveries concerning the specificity of the cell mediated immune defence and Peter Doherty was named Australian of the Year in 1997.

After graduating from the University of Queensland in 1962 with a Bachelor of Veterinary Science, Peter Doherty practised as a vet in the Animal Research Institute in Brisbane (1963-67). He then completed a Masters in Veterinary Science in 1966 before undertaking a PhD in the Department of Experimental Pathology, Moredun Research Institute in Edinburgh (1967-71). His early postdoctoral studies were in the Department of Microbiology at the John Curtin School of Medical Research (JCSMR) at the Australian National University in Canberra (1972-75).

He took a position as Associate Professor/Professor at the Wistar Institute, Philadelphia, Pennsylvania (1975-82) and returned to Australia to the JCSMR as Professor and Head, Department of Experimental Pathology (1982-88).

Since 1988, Professor Doherty has been the Chairman of the Department of Immunology, (Michael F Tanner Chair of Biomedical Research), St Judes Children's Research Hospital, Memphis, Tennessee and Adjunct Professor, Departments of Pathology and Pediatrics at the University of Tennessee. He has been a visiting scholar in the Department of Microbiology and Immunology, Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne since November 1998.

The Nobel Prize was awarded for the discovery that killer T lymphocytes must recognise both the virus antigen and the self histocompatibility antigen molecule in



Professor Peter Doherty at a meeting with postgraduate students during his time in Melbourne in May 1998. L-R: Melinda Munns, Department of Obstetrics and Gynaecology, Peter Doherty, Chrisan Samuail, Department of Paediatrics Orthopaedic Research Unit

order to kill a virus-infected cell.¹ Doherty and Zinkernagel proposed that the virus corrupts an antigen on the surface of an infected cell and that the killer T cell is, in fact, recognising altered self.^{2,3} This model that major histocompatibility antigens must be altered in non-self recognition is now well accepted, and has had clear implications for transplant rejection, autoimmune disease and vaccine development.

On 26 May 1998 Professor Doherty gave the Mathison Lecture, entitled 'Cell Mediated Immunity and Virus Infections' as part of the Dean's Lecture Series. The lecture theatre was overflowing with listeners from a range of age groups and disciplines and Professor Larkins described his presentation as '... history, an overview of the state-of-the-art, cutting edge, humorous and irreverent'.

Professor Doherty granted this interview to Chiron when he was in Melbourne in 1998.

SK How has the Nobel Prize changed your life?

PD It's put me in a public arena that I wasn't in before. I was an American scientist and quite well known in my field. Since the Nobel Prize, of course, that makes it a public thing. It's the only prize that does that. I'd won a lot of other prizes and they really don't have that effect at all. Everyone knows about the Nobel Prize, it's extremely prestigious. It's meant that I've found myself talking to groups and [giving] general lectures to the public, [and to] school children, both in this country and in the United States.

Just before I came down here I was [in] one of the committee rooms of the United States Congress talking to members of the House Ways and Means Committee, which sets the National Institutes and Health Budget. So it's made my life very different and, of course, the Australian experience has added considerably too. I have not only had the Nobel Prize constituency, I have had the Australian constituency through the Australian of the Year Award. I've had experiences as diverse as addressing the National Press Club and appearing on *Club Buggery* so that's not what normally happens to a research scientist.

SK Some people think of 'big science' versus 'small science'. 'Big science' being large institutions, lots of money, lots of equipment, lots of people, and 'small science' meaning smaller institutions, smaller groups working at the bench with a Bunsen burner. Do you think that there are different roles to play for different types of research?

PD Well, nobody's working with the Bunsen burner any more, but you can almost do molecular genetics in your back yard. I mean it doesn't require all that sophisticated equipment. So you can

do really good science in quite a small institution. But you do need a certain critical mass, you need groups of people to talk to, you need a culture that values science. It wasn't always the case in some of the Australian universities. They became extremely bureaucratic and rigid. You need to value the innovative person.

The research institutes in Australia have been very effective for the dollars that have been spent. I think the only thing that worries me about so much of Australian research being in research institutes is that, to some extent, it weakens universities. What has to happen is that these two cultures need to come back together, which requires universities to be much more flexible and less bureaucratic. A lot of that was forced on them by the funding mechanisms that were being used, and the very central control that developed from Canberra.

So, in a sense it's sort of upsetting to see funding cut. In a way, it's a good thing to see universities getting out from under Canberra's rigid control. Personally, I think the more education is turned back to the states and taken away from the federal arena the better. A lot of people would not agree with that but I think that, having seen the diversity of American institutions, . . . it's much better to have a diversity in pluralism than the awful down-leveiling homogenisation that happened under Dawkins. I thought it was a disaster.

SK Do you think that the practice of clinical medicine and pursuing basic science are mutually exclusive?

PD They're not mutually exclusive. It's a very difficult balancing act to have a significant presence in clinical medicine and to do significant research. Many people do it. I have enormous admiration for them. We have positions, for instance, at my hospital, which is fairly typical of American academic medicine, where people will have thirty per cent clinical commitment at maximum, seventy per cent protected time to work in the research laboratories. I think that if it gets to fifty-fifty it gets very tough unless they've got extremely good associates who run all the research effort. But it can be done and some people do extraordinarily well. I personally don't know if I would really want to be treated by someone who was spending thirty per cent of his or her time in the clinic. We find that their fellows on the ward actually watch them very closely. Especially in respect to prescription drugs, to make sure they don't get the dose wrong or something. So it's a tough one but I think it's feasible.

SK The new curriculum at the University of Melbourne . . . incorporates

either a Bachelor of Medical Science or a Science Degree. A significant proportion of the recruitment is going to be post-graduate. Do you think that medical doctors should be trained in science and do you think medicine is an art or a science or both?

PD Well it's both. I mean the medical art is still there and it's always going to be enormously important, and it's a science as well. It depends on what particular medicine you're practising and how much those two components actually balance. I like the American system where people first take a four-year degree. But it's not a narrow science degree. The American college degree, no matter whether you've majored in english, history or biology, you're required to do a foreign language and you're required to do some science. It doesn't matter what it is, it's a general degree. Wouldn't it be great, for instance, if our lawyers had some scientific background, especially the ones that go into politics?

SK That's very broad isn't it, much more so than we have?

PD I think it gives a little more maturity. Certainly I would never have won the Nobel Prize if I'd gone through that system because I would never have become a veterinary scientist. I probably would have found something like history or something that seemed to be better, and I might have written a good book.

SK In yesterday's lecture you talked about how we should be funding discovery and not simply technologically derivative research. How do you fund discovery?

PD There is a very good mechanism for funding. You'd fund it through the National Health and Medical Research Grant Scheme or the Australian Research Grant Scheme. You'd just fund the best science. The Americans are very convinced of this. The Republicans, who are very oriented towards economics and business and so forth, recognise that the function of the university scientist is really to find the new things, and so you fund the people who have got really bright ideas and that leads to technological development.

A grant application has to come across as being really good science and feasible science. You don't fund the best science on the value of whether it's about a particular topic, or whether you think it's going to have a commercial application, now you can do that in other contexts. The CRCs, the Cooperative Research Centres, are funded to devise applications of science; that's fine. It's a good system. The Americans don't do that. They don't need to. The venture capital position, and so forth, is strong enough but you can do that through the private sector.

Discovery comes from people who are good scientists, who are competent, who are doing what looks to be rational, logical science. You can decide to make a discovery. What you've got to fund are the people who are doing what looks to be really good science. Now the discovery might come from a completely unexpected observation, completely by chance.

SK How do we encourage young scientists in this country?

PD I think there is a lot of enthusiasm to it. I think they have to feel there's a possibility of getting a job, so we need to build a scientific culture. We need to build as much science as we possibly can. It can't just be done from governments; it's got to be done from different sources. I think that young scientists, like everybody else, have to realise that there is a risk, there's nothing safe in this world. Even now, I think if you look at young physicians, it's a lot tougher. Everything is tough. There are no guarantees any more. It used to be that if you got a medical degree or a law degree you were assured of a great living and all the rest of it. That's not true any more.

I guess medical doctors still get jobs. But they're probably not paid as well as they were. It's changed. I mean one has to be a little adventurous. One also has to be flexible. You may start out in science and you may end up doing investment banking, knowing a lot about science, but knowing where to put the money. You may get a PhD and end up taking a law degree and doing patent law. So there are all sorts of levels, but I think that should not discourage – the motivation to do science should be the real desire to do it, a real ambition to do it, and excitement. If you've got that, you should do it. Don't mess around with what you want to do with the rest of your life. If you are going to do it for the rest of your life, don't necessarily think you're going to do it in Australia, because science is international. It's an international activity, internationally pursued and a lot of the jobs are not necessarily going to be here. So you've got to be adventurous basically. If you're a quiet, homebody type and you want to sit at home, well, you know, think about accountancy.

SK Why do you think science pays so poorly?

PD Because it's largely government funded. America has the system of private universities that compete for the best talent. Salaries are much higher. Everything is so rigid and government controlled here. There's this great Australian flattening of everything, the 'pancake model' for society. Australia is in real danger of losing a lot of its senior

scientific talent. The younger groups, some of whom have established themselves here, are now leaving because they just can't afford to live in the capital cities and raise families. Someone in the States offers them twice, three times the salary. Australia is losing people and it's going to get worse. The Americans are talking about doubling the medical research budget. In Australia there are rigid enterprise agreements. It's probably the tremendous bureaucracy and tremendous centralised control. There's sort of a lack of freedom in some sense.

SK Therefore a medical graduate with an interest in science will need to go overseas?

PD Anyone who really wants to make it in science needs to spend some time in another country and make a broader set of contacts. I don't think you can just sit in Australia any more than you can sit in Iowa. You need to get out and encounter a broader culture. Now that doesn't mean they should not come back, but I think it's necessary to spend some time away.

SK Melbourne has a population of about four million people. We have two medical schools. In your address to the National Press Club in 1997, you comment that it's better to have institutions of excellence with a concentration of skills and talent, rather than fragmented smaller departments where you don't build up critical mass. Do you suggest that we should only have one?

PD Not necessarily. But I think you could probably share some of the teaching and functions and so forth. I think Flinders and Adelaide are doing this. Paediatrics is being done through Adelaide for Flinders. You need to ask: 'Are you producing too many medical graduates?'

SK When you designed experiments involving the transplantation antigens and virus infection . . .

PD They were not designed as experiments like that. We were looking at viral immunity. We were looking at the killer T cell response and virus infections. We wanted to compare different mouse brains, thinking there might be a genetic effect, and when we compared the different mouse brains we found that there was an absolute restriction in the killing effect.

SK Was the result a surprise for you?

PD Yes, that was a complete surprise. So then we did a lot of experiments and came to some conclusions about what transplantation systems were for and what the nature of the transplantation system was. So it was a classic case of a good set of

experiments which were rational enough, not perfect, not all that imaginative, but were designed for a particular purpose which led to a totally different finding. Then, we were lucky enough, or had enough sense, to realise what it meant. A lot of science is like that.

SK When you realised that there was an MHC restriction on the killer T cell activity, were the consequences for transplantation immediately apparent to you?

PD Well, it became apparent that this was what transplantation was about. It was about controlling the immune response in our cells, and so that was the argument we made. We were able to explain a whole area of biology that hadn't been explained. Our explanation was not accepted by many.

SK How long did it take from your initial papers in *Nature* 1974 for the medical and scientific community to accept that MHC restriction was real?

PD They accepted it was real as a phenomenon fairly quickly, within two or three years, because people replicated the experiments. So it was a big phenomenon; a lot of people talked about it. But they did not accept our explanation of it. They thought there were two receptors; one for the transplantation molecule and one for the virus. And we argued that it was a single receptor, some sort of complex, and this is what really explained transplantation. The other model did not explain transplantation. Then, what changed everyone's mind, of course, was the determination of the crystal structure of the MHC molecule that showed that it was corrupted by virus. So that actually happened between the work that we did between 1973 and 1986.

SK The antigen that is presented with the MHC, you were explaining in your lecture last evening, is actually as short as eight amino acids?

PD Yes, it is eight amino acids. Classically on the Class I System in the transplantation type model, it's eight amino acids.

SK So is it possible, for any given viral infection, to identify those peptides that are presented with the MHC complex and make a vaccine with that so that it vaccinates for fifty different viruses purely by compiling together a series of peptides?

PD Actually, the fifty different is usually if you're trying to make a peptide vaccine you've usually got to cover all the HLA types that are common. So what's happened is that about twelve to fifteen different peptides have been linked together, in a candidate etched on bone marrow vaccine, for instance. So, yes, it is possible to do that. But actually if you're going to make a vaccine you'd

want to make protein into the whole system as well because you want to -

SK Rather than just the short peptides, because the immune response is better?

PD Because you'll need antibodies to really neutralise viruses.

SK Is there anything that you'd like to say to the medical graduates of the University of Melbourne?

PD Support your University. In the United States, the alumni provide enormous resources for the universities, whereas here all the universities are in trouble. They're all trying to deal with the fee problems, with cuts and amalgamations that have been forced on them. They need to change. They need to become more flexible and less bureaucratic and I think that Melbourne University is. I think it's really becoming an interesting institution. It has always been an impressive institution but the universities need support from their alumni. If you are thinking of a bequest, think about your university because there are all sorts of areas where a university can make very good use of funds and can put them behind young people. Help to grow the scientific culture, the biomedical culture, the biomedical research culture. If you care about something, biomedicine, or you care about ethics, or physiology or whatever, think about some money in the long term. If you've done very well out of your medical career; give something back.

- 1 Zinkernagel RM and Doherty, PC, 1974. 'Restriction of in vitro T cell-mediated cytotoxicity in lymphocytic choriomeningitis within a syngeneic or semiallogeneic system'. *Nature* 248: 701-702
- 2 Zinkernagel, RM and Doherty, PC, 1974. 'Immunological surveillance against altered self components by sensitized T lymphocytes in lymphocytic choriomeningitis'. *Nature* 251: 547-548
- 3 Doherty, PC and Zinkernagel, RM, 1975. 'A biological role for the major histocompatibility antigens'. *Lancet*:1406-1409

Sharon Keeling is a 1989 graduate and an advanced trainee of the RACP (Paediatrics). She completed a PhD in developmental neurobiology at the Ludwig Institute for Cancer Research in Melbourne last year and is currently Clinical Genetics Fellow at The Institute of Medical Genetics, University of Wales College of Medicine, Cardiff.



MINUTES OF THE ANNUAL GENERAL MEETING 1998

The annual general meeting of the University of Melbourne Medical Society (UMMS) was held at 6.30 pm on Tuesday 9 June 1998, in the Sunderland Theatre, Medical Building, the University of Melbourne. The meeting was preceded by the Dean's Lecture entitled *The damaged baby. Who is at fault?* This was delivered by Professor Michael Permezel, Professor of Obstetrics and Gynaecology, Mercy Hospital for Women, and Austin and Repatriation Medical Centre.

1. Minutes of the annual general meeting 1997

The minutes of the 1997 Annual General Meeting, previously published in the 1998 issue of *Chiron* and circulated to UMMS members, were adopted as a fair record of proceedings.

2. Chairperson's report

In December 1997 Gordon Clunie retired from his position as Dean of the Faculty of Medicine, Dentistry and Health Sciences and Head of the School of Medicine. Gordon Clunie was Dean of the Faculty from 1995 to 1997. We would like to formally acknowledge the outstanding contributions he has made to the discipline of surgery, to medical education and to the University of Melbourne.

Congratulations to the editorial team of Professor Emeritus Harold Attwood and Ms Liz Brentnall for another excellent edition of *Chiron*. Harold Attwood retired at the end of 1997 and we would like to extend our appreciation for his valuable contribution to *Chiron* as Editor over the last three years.

Once again, our thanks go to the Medical Defence Association of Victoria for their continued generous support of *Chiron*.

The first edition of the *Melbourne PostCard* newsletter was produced in October 1997. Two issues have been published so far and have received very positive feedback from UMMS members. We would like to acknowledge Sharon Keeling and Lorraine Baker for initiating this idea and congratulate Sharon Keeling and Caroline Gibson for producing an excellent publication.

The first stage of the extension to the medical building was completed in November 1997 and was opened officially by The Honourable Dr David Kemp MP, Federal Minister for Employment, Education, Training and Youth Affairs on 22 January 1998.

The Bachelor of Medical Science prize for 1996 was awarded to Rathan M Subramaniam for his study entitled *Tolerance to Model Self Antigens*.

There were three winners of the 1997 Peter G Jones elective essay prize. Marilla Druitt (*One Elective Story*), David Iser (*Yo, Balanda Boy*) and Megan Rees (*Science, Sculpture and Sexuality: A research elective in female urogenital anatomy*).

The Annual UMMS Lecture, entitled *The New Millennium in the Garden of Hippocrates and Gates*, presented by Professor Richard Larkins, was well attended last year and published in the 1998 *Chiron*.

The Dean's Lecture Series in 1997 was, once again, well attended and concluded with a medical ethics seminar *Health Care in a Multicultural Society* convened by Professor Richard Smallwood. This seminar was published in the 1998 *Chiron*.

The Continuing Medical Education program, was sadly discontinued at the end of 1997 as it was felt that the continuing education needs of graduates were being met by the General Practice Divisions and the Colleges. Some departments may offer continuing education courses as needs arise. We would like to thank Robin Orams and her colleagues for their role in this area.

Forthcoming events this year include the UMMS Lecture and Function. Details will be announced and members will receive invitations later this year.

Members are reminded of the remaining Dean's Lectures for this year and the ethics seminar which concludes the series *Too young to know? Too young to decide? – Consent and confidentiality in adolescent health*.

Membership of UMMS at the end of 1997 was 3692.

3. Financial report

The Financial Report, for the twelve months ending 31 December 1997 was circulated and it was noted that there was deficit of \$6360 compared to a surplus of \$1171 in the previous year. This deficit was largely due to respondents of the 1997 survey receiving free membership. The budget balance at the end of 1997 was \$68 983. A motion to accept the financial report was carried.

4. Election of Committee 1998-2001

Nominations for the election of six members of the Executive Committee of UMMS closed on Tuesday 2 June 1998. The five elected members of the UMMS Executive Committee were eligible for reappointment and under section 7.3 of the constitution were proposed for re-election. They are: Dr Lorraine Baker, Dr Thomas Kay, Dr Andrew Rothfield, Dr David Westmore and Mr Michael Wilson. A motion to accept the re-election of these members was carried.

There is one vacant position available and no nominations have been received so far. Nominations will be received at any time.

5. Further business

The new medical curriculum went through the accreditation process last week. At this stage of the proceedings, the accreditation committee have made the recommendation to the Medical Board to accredit the curriculum.

A question was raised about the changes to the University of Melbourne Alumni Society. It was suggested that a brief article outlining the changes be included in a future edition of *Melbourne PostCard*. The UMMS Office will follow this up.

There being no further business the meeting closed at 6.40 pm.

NOTICE OF ANNUAL GENERAL MEETING 1999

University of Melbourne Medical Society

The Annual General Meeting of the University of Melbourne Medical Society (UMMS) will be held at 7.00 pm on Tuesday 13 July 1999, in the Sunderland Lecture Theatre, ground floor of the medical building, the University of Melbourne, Parkville. The meeting will be preceded by the Dean's Lecture in which Professor Margaret Hamilton, Director, Turning Point Alcohol and Drug Centre will deliver a lecture entitled *'Drugs: health politicised? Drug policy in Australia and its impact on our current and future health'*.

Business

- Minutes of 1998 Annual General Meeting
- Chairperson's Report
- 1998 Financial Report
- General Business

UMMS 1997 BMEDSc PRIZE

Andrew Craig Steer

for his study entitled

The Epidemiology of Rheumatic Heart Disease in Schoolchildren in Samoa

Rheumatic heart disease (RHD) and acute rheumatic fever are common causes of children being admitted to the National Hospital in Samoa and RHD is a common cause of death in young adults. However, the prevalence of this disease in the Samoan community, particularly in rural areas, is unknown.

This study had four aims: (1) to estimate the prevalence of RHD in schoolchildren aged 5-17 years in Samoa, (2) to assess the relationship of age, sex, urbanisation, socio-economic status, crowding, race, pyoderma and nutritional status to RHD in this group, (3) to describe the clinical presentation of RHD in this group, and (4) to determine the carriage rates of beta-haemolytic group A streptococci (GAS) in the pharynx and skin of schoolchildren aged 5-10 in Samoa.

This study examined 8767 schoolchildren aged 5-17 from rural and urban areas in Samoa in a cross-sectional prevalence survey from May to September 1997. Children were examined for evidence of RHD by a local paediatrician with fifteen years experience in RHD and a local physician with cardiology training in New Zealand.

The prevalence of RHD in schoolchildren aged 5-17 years diagnosed by clinical criteria was 77.8 per 1000 (95% CI 64.0 - 91.6). This is the highest prevalence found in the world to date. However, echocardiography has not yet been performed on the cases diagnosed clinically. Previous studies suggest that the prevalence of RHD diagnosed by echocardiography is likely to be about 30 per 1000, which is still amongst the highest in the world. Compared to children in urban areas, children in rural areas were found to be at 86% increased risk of RHD (OR = 1.86, 95% CI 1.37 - 2.53, $p < 0.001$). Compared to females, males were at 75% increased risk (OR = 1.75, 95% CI 1.38 - 2.34, $p < 0.001$). Children with a Samoan father were at increased risk (OR = 4.25, 95% CI 1.06 - 17.1, $p < 0.05$) and children born in Samoa were also found to be at increased risk (OR = 2.06, 95% CI 1.20 - 3.50, $p < 0.05$). Clinically RHD followed a similar pattern to other developing countries: the mitral valve was the most commonly involved valve (98%), mitral incompetence was more common in younger age groups and mitral stenosis was more common in older age groups. GAS carriage was found to be very common in schoolchildren in Samoa. However, most GAS carriage was in pyoderma lesions (32.1% of children) rather than the pharynx (2.4% of children).

The major implication of this study is that there are likely to be other areas of the world with prevalence of RHD as high as that found in Samoa-if this proves to be the case, RHD is a major cause of morbidity and mortality in developing countries. RHD primary prevention programs need to be focused on rural areas in Samoa. The possibilities of links between Polynesian race and RHD, and pyoderma and RHD, warrant further research.

This work provides important epidemiological information that will aid in our understanding of the pathogenesis of rheumatic fever as well as providing vital information locally on the incidence of rheumatic heart disease in the Samoan population.



THE UNIVERSITY OF MELBOURNE MEDICAL SOCIETY CONGRATULATES

Professor Suzanne Cory

Professor of Medical Biology and Director of the Walter and Eliza Hall Institute, was made a **Companion of the Order of Australia (AC)** for her service to science as a leader in biomedical research, to the advancement of the understanding of the molecular basis of cancer and to the community as an advocate for improved science education in schools and universities.

Professor Ian Taylor

was made an **Officer of the Order of Australia (AO)** for service to medicine in the field of plastic and reconstructive surgery and the transfer of living bone grafts by using micro-vascular techniques.

Dr Peter Brown (MB BS 1957)

was made a **Member of the Order of Australia (AM)** for service to medicine, particularly in the field of plastic and reconstructive surgery, and to overseas medical aid programs.

Professor Michael Denborough (MB BS 1979, BSc 1977)

was made a **Member of the Order of Australia (AM)** for service to medicine, medical research and education to the community.

Associate Professor Donald Marshall

(MB BS 1957)

was made a **Member of the Order of Australia (AM)** for service to medicine, particularly in the field of plastic surgery and reconstructive surgery and to Interplast.

Dr Peter Robin Macneil

(MB BS 1953)

was awarded the **Order of Australia Medal (OAM)** for service to rural medicine, and to community health.

1998 REUNIONS

MB BS 1933 SIXTY-FIVE YEARS REUNION

18 September 1998 at the home of RJD Turnbull

From RJD Turnbull - The sixty-fifth anniversary of the 1933 graduate year took place on 18 September, 1998 at our home. Only four members were left who were able to attend and they were John Hayward, Lorna Lloyd-Green, Norman Cust and myself. Apparently there are ten of us still alive and in communication. The names of those who were

unable to attend were Harry Druey, Campbell Duncan, Frank Ebell, Dorothy Sinclair, Mendel Starke and William Holesworth. If anyone wishes to contact them, please contact me for their addresses.

We hope that there will again be at least four of us in attendance for our sixty-sixth!

MB BS 1935 SIXTY THREE YEARS REUNION Naval and Military Club



MB BS 1935 SIXTY THREE YEARS REUNION

Back Row L-R: Alan King, Mick Dunn, Boyard Taft, James Smibert. **Front Row L-R:** James Riddell, Vin Youngman, Bill Gayton, Nancy Lewis, Alan Jackson.

MB BS 1938 SIXTY YEARS REUNION

30 September 1998 at the Naval and Military Club

From Horace Tucker – Of the survivors I wrote to seventeen of whom twelve graduates and one widow replied.

The twelve of us who attended all thought it was a great success. All are retired although Jack Mullany and Bob Waddell had only retired in the last few months.

The youngest present was Margaret Henderson at eighty-two and very sprightly. Many of us had had or still had medical problems but these were put aside for a couple of hours.



MB BS 1938 SIXTY YEARS REUNION

Back Row L-R: RKED Wards, EG Strahan, MPK Morrissey, HS MacKenzie, AJ Christophers, JC Mullany, RW Waddell, IC Heinz. **Front Row L-R:** TEC Robertson, MM Henderson, HF Tucker, MHL Henderson, PJ Parsons.

Organising a Reunion Dinner?

University House, on the campus of the University of Melbourne is the ideal venue.

The House is able to cater for reunion groups ranging in size from 30 to 250 guests.

We offer a variety of competitively priced menu packages to suit any occasion.

Please contact Mr Martin Zarb on 9344 5254 for menus, costs, a tour of the facilities and further information.



**MB BS 1941
FIFTY-SEVEN YEARS REUNION**

18 September 1998 at University House

From James Guest – To celebrate our graduation fifty-seven years ago, we had lunch at University House and it was a lively occasion. September was chosen as this is the month in which we graduated, being the first group to be in the

foreshortened course which was a result of the Second World War.

Twenty-three attended and apologies were received from Roxie Abbey, Sue Wheildon, Wyn Champion, Nairne Elder, Jim McCracken, Ian Stahle and Keith Harrison. Of the original group of 101 only a few were untraced.

There were no formal speeches, but the idea of alumni making a contribution to teaching facilities in the redesigned medical course was raised and a moderate response obtained.

We decided to meet again in the year 2000.



MB BS 1941 FIFTY-SEVEN YEARS REUNION

Standing L-R: Frank De Crespigny, Peter Bird, Brian Costello, Doug Atkinson, David Pitt, Michael Benson, Lach Hardy-Wilson, Bill Sloss, Stewart Moroney, John Noonan, John Billings, Beric Glanville Hicks, Knox Jamieson. **Seated L-R:** Jim Guest, Arthur Parkin, Elizabeth Kenny, Mary Wheeler, Alex Gale, Sheila Clifton, Marcia Jack, Clarice Arendsen, Ida Seward, Tom Griffiths.

REUNION ANNOUNCEMENTS

THINK AHEAD

When did you graduate? Is next year your fifth or fifty-fifth since graduation? Reunions are best planned well ahead of time. Your classmates who are living overseas or interstate will travel to Melbourne for reunions if they have enough advance notice. Venues also need to be booked well ahead.

Please let us know of your plans – we like to publish information about reunions in *Chiron* and in the *Melbourne PostCard*. We can obtain, on your behalf, a list of graduates from your year and sets of address labels from the Alumni Office and advise you on alternatives you may wish to explore regarding University venues.

We are also able to help you publish a reunion booklet containing details of graduates' activities since graduation. Reunion booklets give those who attend the reunion something to remind them of the event and those unable to attend a means of catching up with old friends and colleagues.

MB BS GRADUATE ANNIVERSARIES IN 2000

- | | |
|------------------------|------------------------|
| 10th year class of '90 | 40th year class of '60 |
| 15th year class of '85 | 45th year class of '55 |
| 20th year class of '80 | 50th year class of '50 |
| 25th year class of '75 | 55th year class of '45 |
| 30th year class of '70 | 60th year class of '40 |
| 35th year class of '65 | 65th year class of '35 |

UMMS OFFICE c/- School of Medicine

The University of Melbourne Parkville Vic 3052
Telephone: (+61 3) 9344 5888 Facsimile: (+61 3) 9347 7084
Email: umms@medicine.unimelb.edu.au

1999 REUNIONS

20TH YEAR OF 1979

October 1999
Dr Lorraine Baker
bh (+61 3) 9857 7016
ah (+61 3) 9804 3749

25TH YEAR OF 1974

Dr David Tuxen
(+61 3) 9592 4174

45TH YEAR OF 1954

November/December 1999
Professor Norman Beischer
(+61 3) 9419 8485

50TH YEAR OF 1949

29 October 1999
University House
Dr Noel Cass
(+61 3) 5974 1489
email: noelcass@bigpond.com

55TH YEAR OF 1944

25 March 1999
The Lyceum Club

60TH YEAR OF 1939

8 April 1999
Graduate House

30TH YEAR OF 1969

Dr Kevin Moriarty
(+61 3) 9817 3418

MB BS 1942
FIFTY-SIX YEARS REUNION

31 May 1998 at Leonda Reception Centre,
Hawthorn

From John Tucker – Each year for the last three years we have held a reunion luncheon at Leonda on the Yarra. The change from an evening dinner to a luncheon has been welcomed by most and we now intend to keep with that. We have, however, found that having the gatherings every year is possibly too much and the next reunion is planned for June 2000.

I felt there was a distinct possibility (although for the life of me I can't think why) that the assembled folk may be getting sick of me doing so much talking and so, for this meeting, I asked Ian Chenoweth to act as master of ceremonies. Actually, I asked Ruth Chenoweth first and she declined which was a pity, but Ian, although an after

thought, did it very well, particularly as he had not been given any warning.

We did not have a guest speaker but quite a number of people rose to their feet to speak including Lyn Billings who gave us a brief update on the great work she and John do giving lectures on their method of family planning. At the time of writing, I have heard they are about to make yet another visit to China. One can't help but admire their energy and we wish them all well. Bray Lewis put up a good case for a fund to help retired members of the profession.

Thirty-six attended the luncheon of which twenty were 1942 graduates. They were: *Lyn (Thomas) and John Billings, Norman and Phyllis Chamberlain, Ruth (Farrer) and Ian Chenoweth, Brian and Sheila Cleahan, Bill and Peg Cooper, Rae (Cochrane) and Roy Davies, Patsie Flemming, John and Peg Gooch, Hymie and Edith Hoffman, Bray and Zara Lewis, Austin Ley, John and Joyce Monk, Len and Rita Satchell, Arthur and Dorothy Schwieger, Jim Sinclair and Joan Bell, Bill and Ann Spring, Des Sisely, John and Margaret Tucker, Quin and Pat Whitehead and June Zwar.*



MB BS 1942 FIFTY-SIX YEARS REUNION



MELBOURNE UNIVERSITY GENERAL VIEW C.1900

**MB BS JULY 1943
FIFTY-FIVE YEARS REUNION**

**10 March 1998
Leonda Reception Centre, Hawthorn**

From Bill Swaney – We held the reunion to celebrate fifty-five years for the MB BS 1943 graduates on 10 March at

'Leonda' in Hawthorn, for lunch. We had fifty-five people attend, of whom thirty-four were graduates.

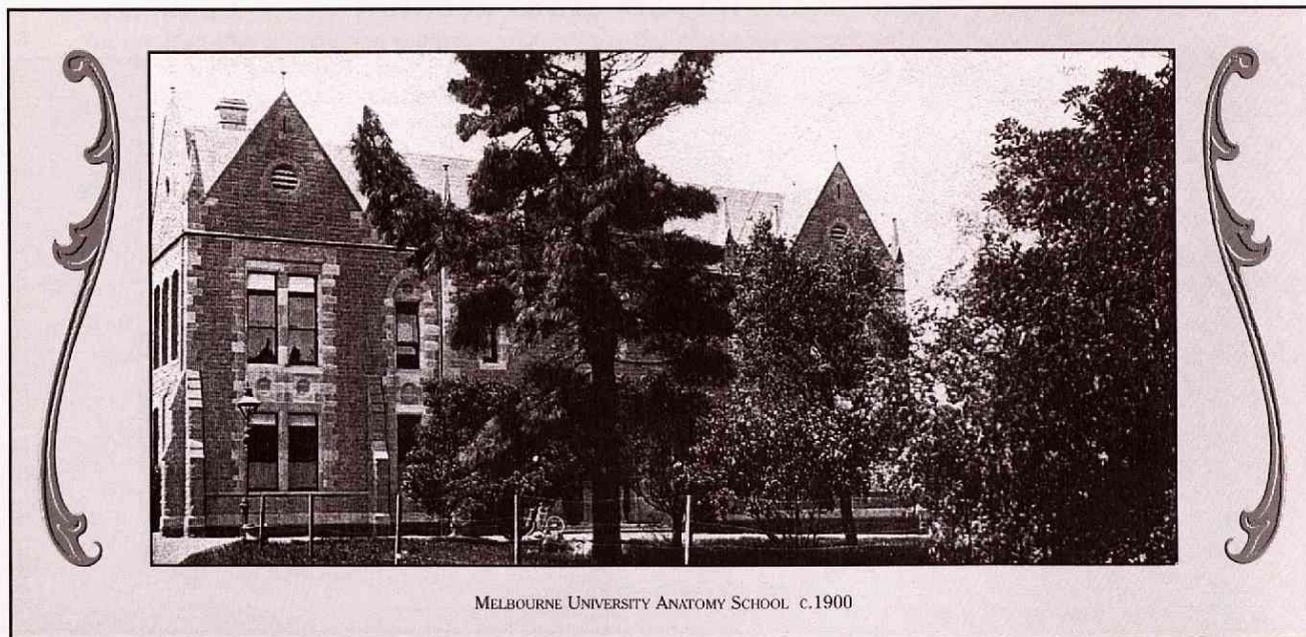
It was a very pleasant occasion, starting at twelve noon and most people stayed until 4 pm.

We were fortunate to have Richard Travers speak to us. He is a rheumatologist with a great interest in medical history and his subject was 'What is success?'. This entailed a review by Paget in the 1850s of 1000 medical graduates and an account of their success or failure. This was very well received.



MB BS 1943 FIFTY-FIVE YEARS REUNION

Back Row L-R: Trevor Connolly, Stevens Dimant, Winston Rickards, Peter Fox, Bob Sellwood, Clem Ahern. **Second Row L-R:** Frank Callaghan, Keith Lipshut, Bill Swaney, Alan Rosenhain, David Cowling, Quin Whitehead. **Third Row L-R:** Ken Howsam, Bill Spring, Sandy Ferguson, Zettie Pryde, Gwen Hargreaves, Dulcie Rayment, Cyde Salwin. **Fourth Row L-R:** Effie Ross, Marie Cockbill, Betty Spinks, Percy Cowan, Alf Bardsley, Peter Read, Russell Jones. **Front Row L-R:** Bill Hughes, Michael Shaw, Mac Brett, Garry Bennett.



MELBOURNE UNIVERSITY ANATOMY SCHOOL c.1900

MB BS 1945 FIFTY-THREE YEARS REUNION

23 April 1998 Melbourne Cricket Club

From Nate Myers – The reunion to celebrate fifty-three years since our graduation was held in the Committee Room of the Melbourne Cricket Club. This was courtesy of Dr Don Cordner, a member of the class of '45 and a Past President of the Melbourne Cricket Club, who played in the 1940s and captained the team.

As on previous occasions, spouses and partners were included in the invitation, and the initial response was such that there would be fifty-one attending (thirty-four graduates and seventeen spouses). Late withdrawals – brought about, on the one hand by influenza and on the other by fatigue following 'a hard night's work' – left a final number of forty-eight (thirty-two graduates and sixteen spouses/partners).

The evening was a very happy and successful occasion, saddened only by the realisation that since our previous dinner, held in 1995, several of our colleagues had passed away: Peter Jones, Gwen Pinner and Betty Wilmot. Of the original number who graduated I am pleased to report that the majority are surviving well, and the appearance and *joie de vivre* of all who attended augers well for the future.

The function was organised for 6 pm for 7 pm, to enable conversation and reminiscing to precede dinner. Seating was 'free' and those present sat at the several tables

arranged more-or-less in circular fashion. It was not long before many moved around the room, remembering to take their rolls and napkins with them! In this way, all in the group were able to sit with various colleagues at different times during the evening. Even better than this, many took advantage of the microphone, and told stories, recalled anecdotes, and generally entertained those present. In this regard, one should particularly note the contributions of Ian Mackay and Des Hurley. On the other hand, one comment was that talking around the tables was preferable to the anecdotes at the podium.

Time passes all too quickly, and at 10.30 pm departees left with the thought that we would meet again in the year 2000. Apologies were received from Barry Christopher, George Pestell, Paul Rowan, Mary Bennett (Levinson), John Farrer, Dermot Foster, Bertram McCloskey, Paddy Barrett, Ross Hayes, Tom Walsh, Luke Murphy, Charlotte Anderson and Iris Leber.

Many wondered whether the evening function should be replaced by a luncheon, but the consensus was that the occasion was sufficiently important to warrant an evening event.

This was the eleventh reunion of the Class of 1945; the first was held in 1956 and we believe that this was the first reunion held in the post-war era. Caroline Gibson of the UMMS office sent the following information. 'On Saturday June 23, 1956, the Class of 1945 held a reunion to celebrate their eleventh year since graduation at the Hotel Australia. Sixty-two people attended.'

A further reunion is planned for 2000, and in due course details regarding this will be circulated.

The Meville Hughes Scholarship

The inaugural Melville Hughes Scholarships for postgraduate research in surgery were awarded to two alumni who began their PhD studies this year. The 1997 scholarship was awarded to Dr Marinis Pirpiris (MB BS 1992) whose PhD candidature is in Single Event, Multi-Level Surgery. The 1998 scholarship was awarded to Dr Susan Carden (MB BS 1987) whose PhD candidature is in Paediatric Ophthalmology.

The valuable scholarships are funded by a bequest from an anonymous benefactor and are named after Melville Hughes (MB BS 1915) who died in the First World War in 1916, and his sister Florence Hughes who died in 1962.



L-R: Mr Lance Dimsey, trustee of the Florence and Melville Hughes Trust; Dr Susan Carden; Professor John Furness, Associate Dean (Research); Professor Kerr Graham, Department of Orthopaedics, Royal Children's Hospital, who accepted the award on behalf of Dr Pirpiris.

**MB BS 1948
FIFTY YEARS REUNION**

**20 April 1998
Graduate House**

From Graham Cooper – The fiftieth reunion of the class of 1948 was held at Graduate House on 20 April 1998 and was attended by forty-three graduates. Of the ninety-three who graduated in 1948 thirty have died. So it was a good attendance, particularly as there were quite a number of Western Australian graduates. The venue was good and the three course meal and wine excellent and very reasonable.

**MB BS 1977
TWENTY-ONE YEARS REUNION**

**25 & 26 April 1998
All Saints Winery
Wahgunyah and Frog Hollow, Albury**

From Carolyn Re – The twenty-first anniversary of the 1977 University of Melbourne medical graduates was celebrated with dinner at All Saints Winery, Wahgunyah on Saturday, 25 April 1998, followed by brunch at Frog Hollow in Albury the following morning. Despite the novelty of holding the reunion well away from Melbourne, over 125 enthusiastic people attended, resulting in an evening of magnificent food, wine and camaraderie.

The highlight of the reunion was undoubtedly the technical wizardry of Mack Jost and Richard Smith who scanned hundreds of photographs of the graduates, both from student days and from recent photographs, and ran a continuous loop slide show throughout the dinner. The laughter and reminiscences continued well into the night, fortified by a glass of All Saints Estate Classic Release

Liqueur Muscat, bottled and labelled especially for the occasion. We look forward to the twenty-fifth reunion!

Graduates attending the reunion were: *Nancy Aun, Rosemary Ayton, Noel Bayley, Christine Bayly, Davie Beale, David Booth, John Broderick, Anne Brooks, Peter Bruckner, Russell Calder, Lynda Campbell, Robert Campbell, Ray Carne, Peter Champness, Alan Chong, Louise Christie, David Clift, Stephen Cordner, Simon Costello, Matthew Cotter, Maria Del Core, Dwina Dobriansky, Andrew and Fiona Edwards, Roger Fitzgerald, Jane Foster, Susan Furphy, Gary Geier, Colin Gillmore, Scott Giltrap, Graeme Harrison, Graeme Hart, Denis Holland, Linden Hope, David Iser, Mary Jackson, Mack Jost, David Leembruggen, Deborah Lewis, Christopher Ley, David Lindsay, Amanda Ling, Peter Longden, Karen Louey, Peter Lugg, Anthony McCarthy, Wayne McGregor, Rob Melville, Andrew Monk, Robyn Nagel, Scott Nicholson, John O'Donnell, Pat O'Dwyer, Mark Pilbeam, Keith Prest, Ian Price, Andrew Ramsay, Jill Ramsey, Carolyn Re, Bill Reilly, John Scarlett, Frank Scheelings, Fiona Shaw, Devin Shiels, Michael Shehan, Richard Smith, Tony Speer, Phillip Steele, Colin Stewart, Peter Stone, Allan Storti, Kel Stribley, John Stubbe, Tony Sutherland, Kristina Tavcar, Hugh Torode, Joe Trapani, Bill Twycross, Katrina Watson, Sue Williams, Jenny Woods, Jeffrey Zajac, Shirley Zaklikowski.*



MB BS 1977 TWENTY-ONE YEARS REUNION

MB BS 1988 TEN YEARS REUNION

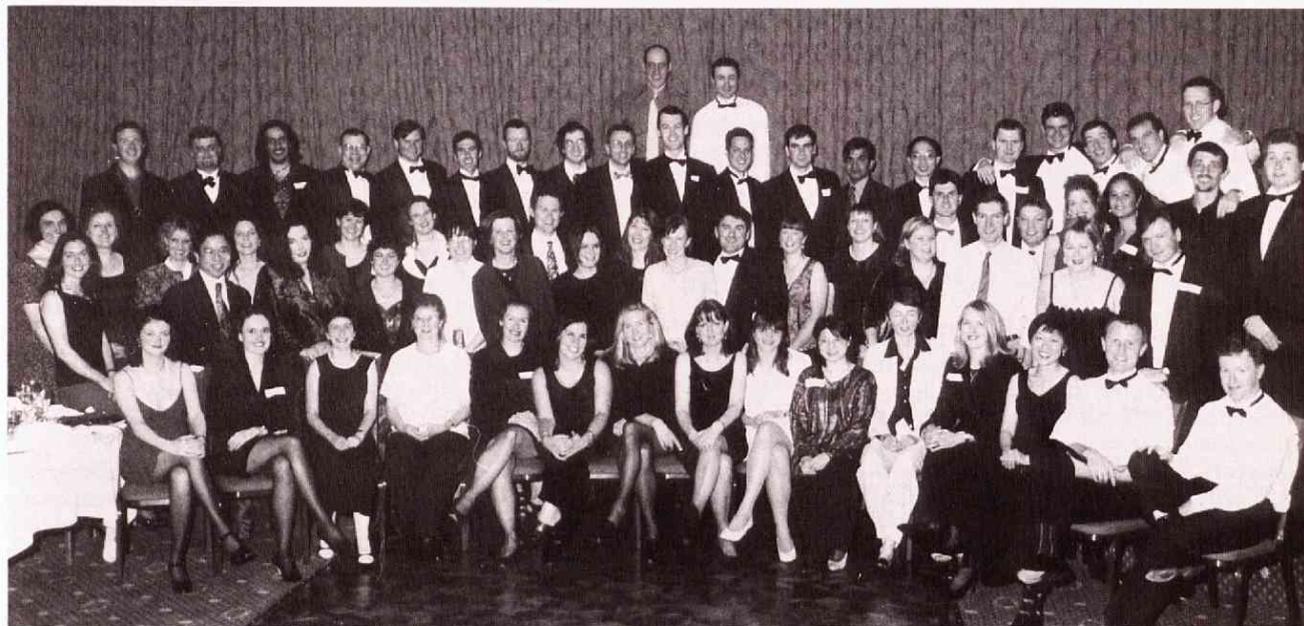
16 October 1998
Leonda Reception Centre, Hawthorn

From Andrew Tauro – To celebrate the ten year anniversary of the 1988 graduating year, a formal dinner dance was held on Friday 16 October 1998, at Leonda Reception Centre in Hawthorn. Of the 220 graduates invited, 65 were able to attend the night, with partners making up 95 people in total. Unfortunately, as is inevitable at this stage in our careers, many graduates are currently working overseas and hence were unable to attend the night. Highlights included excellent and very entertaining speeches, each with a different slant, from Martin Delatycki, Anita Clarke and Iain Skinner, representing the three clinical schools, and also from our MC for the night and co-organiser, Joshua Honig (FMUTA).

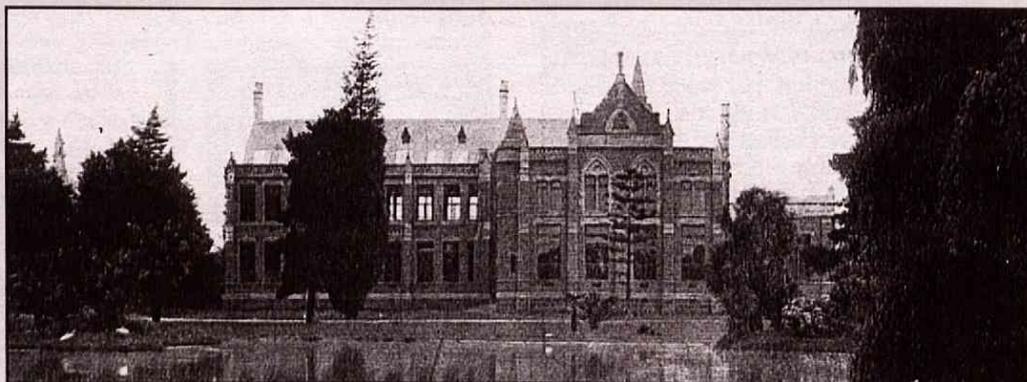
Special mention must also go to Gavin Wright for coming all the way across the Tasman Sea from New Zealand for the occasion. There was plenty of catching up, gossip, reminiscing and, no doubt, flagrant lies told! A few

uninhibited (intoxicated?) folk even ventured on to the dance floor to re-live those wild, reckless, heady days of the eighties thanks to Josh Honig's superlative choice in music (much like in *The Wedding Singer*). And we were all in bed at a respectable hour.

The evening was attended by: *Ian Anderson, Daniela Azaredo (neé Torado), Sam Battaglia, Lisa Bendtsen (neé Smith), Kathleen Braniff, Melissa Butler, Peter Carter, Anita Clarke, Jenny Conway, Maria Lisa Coperchini, Andrew Crawford, Sandy Darling, Martin Delatycki, Lyndall Dennis, Fio De Vincentis, Lorelle Drew, Adrian Dunlop, Steve Ellen, Jenny Eury, Peter Evans, Craig French, Jim Glaspole, Matt Hayhoe, Josh Honig, Tina Horng, Trish Hough, David Hoyle, David Huppert, Jenny Hynson (neé Herbert), Caroline Johnson, Jenny Kimmins, Jane Leong, Ronald Leong, Liz Lester, Ian Lindsey, Joanne McClean, John Mackay, Jenny Mather, Fiona Maughan, Colin McKenzie, Jo Melick, Ashley Miller, Terry O'Brien, Jenny Proimos, Lena Sanci, Linda Schachter, Adele Shabshis, Alex Shepherd, Gary Silver, Iain Skinner, Rachel Skinner, Lynette Squires, Simon Stafrace, Peter Subramaniam, Tom Sweeney, Marie Swieca, Andrew Tauro, Melissa Thomas, Nghia Tran, Platon Vafiadis, Robyn Vafiadis (neé McDonald), Claudio Villella, David Walder, Michael Wells, Debra Wilson and Gavin Wright.*



MB BS 1988 TEN YEARS REUNION



MELBOURNE UNIVERSITY BIOLOGY SCHOOL c.1900

OBITUARIES

ROSS MCDONALD ANDERSON AM

MB BS 1950
1923-1998



ROSS ANDERSON

ROSS ANDERSON, Victoria's senior neuropathologist, died on 24 August 1998.

He was born in Gardenvale in 1923, the sixth child and youngest son of Martha and Bill Anderson. His father was a partner in Brown, Prior and Anderson who were for many years printers of the major official publications of the University. Ross went to local schools and was later a boarder at Scotch College. On leaving school he joined the Second Australian Imperial Force and served in Australia and in New Guinea, including the Battle of Milne Bay, from 1941-45. On discharge, with

the rank of sergeant, he entered the University of Melbourne as a medical student. Graduating in 1950, he spent two years at the Alfred Hospital where he was RMO to the neurosurgeon, Hugh Trumble, and the neurologist, Leonard Cox. It was largely their influence and Ross's lifelong admiration for them that determined his later career. After a brief flirtation with neurosurgery, he decided to become a neuropathologist. No specialist of that discipline existed in Melbourne at that time, although Cox, as a young man, had published distinguished work in that field.

Hearing of Ross's intention, Professor ESJ King, who was recruiting staff to rebuild a depleted Department of Pathology, appointed him Lecturer in Neuropathology in 1955. With the combined sponsorship of King and Cox, Ross was awarded a Nuffield Dominion Travelling Fellowship in 1956. He spent the next two years at the Hospital for Nervous Diseases in London training in neuropathology with Professor Blackwood and Dr Bill Mair. On his return to Melbourne he rejoined the Pathology Department which he served with great distinction for the next thirty years. He was promoted to Senior Lecturer in 1961, Reader in 1968 and was Chairman from 1986 until his retirement in 1988.

Ross had a greater expertise and wider experience in neuropathology than anybody else in Melbourne. To increase his experience and to make his expertise widely available he developed an unusual and highly demanding type of practice. In addition to his University duties, where he was an able and extremely popular lecturer and tutor, he became consultant neuropathologist to several major teaching hospitals. He conducted regular sessions at the Alfred, the Royal Children's, the Royal Melbourne and St Vincent's Hospitals, to examine neuropathological specimens and to consult with neurologists, neurosurgeons and pathologists. Within a few years he became accepted as the final court of appeal in neuropathology.

Ross continued this unusual type of practice until 1971 when, during sabbatical leave in London with his old friend Bill Mair, he became interested in electron microscopy. This technique was well established in the Pathology Department but Ross had shown little interest either in it or in experimental pathology. On his return from London, he developed, in collaboration with Dr Xenia Dennett, an electron microscopy diagnostic service for muscle and nerve biopsies and began several experimental studies, most notably examination of a porcine model of malignant hyperpyrexia.

By the late 1970s Ross became convinced that the

neuropathological needs of Melbourne could not be satisfied adequately by a single person and he persuaded the Health Department to initiate a special training program in this discipline. By the time he retired from the University in 1988, four fully-trained people were available to cope with the ever increasing demands for neuropathology in the major hospitals. He was the chief instigator for the foundation of the Australian Society of Neuropathology and was its foundation president. He was awarded an AM in 1994 for his service to neuropathology.

After he retired from the University, Ross continued as a hospital consultant and developed a new interest in forensic neuropathology. He spent several sessions a week at the Victorian Institute of Forensic Medicine until shortly before he died. In addition, he contributed each year to a very popular postgraduate course in neuroanatomy and neuropathology.

What manner of man was it who, so unobtrusively, achieved so much? Blessed until his last few years with good health and a loving and supportive family of which he was immensely proud, Ross's main attributes were dedication to his work, total absence of pretension, a well developed sense of humour with an inexhaustible supply of jokes, and a most unusual capacity for friendship and happy collaboration with his colleagues. A considerable athlete as a young man with a full blue for athletics, he loved outdoor activities and watching sport, especially tennis and golf. He claimed that a round of golf was one of the essentials of life, played regularly each week and could hit a ball quite an extraordinary distance for one of only average stature.

Ross was, in the best sense, a University man. In addition to his many clinical colleagues and interests, he had friends and admirers in all areas of the University ranging from his department and faculty, to University House and the famous poker school. He was a first class teacher, especially in small groups and the autopsy room. He was popular with both undergraduate and postgraduate students who appreciated both his ability and genuine interest in their problems.

He is survived by his wife of over fifty years, Joan, his daughter Jill and sons Robert and Ken. A third son, Don, was killed accidentally over twenty years ago.

John Hurley

ALEXANDER ROY BARTRAM

MB BS 1957, FRACS, FAOA
1931-1998

HEATHER MARGARET BARTRAM

(NÉE HOSKING)

MB BS 1955
1931-1998



LEX AND HEATHER BARTRAM

LEX AND HEATHER BARTRAM died tragically in a light plane crash on Mt Jagungal in the Snowy Mountains on the Anzac Day weekend in 1998. They were returning to their home in Albury after a weekend in Merimbula with two other couples - one couple being both friends and medical colleagues Ian and Jane Pike. The loss of these six prominent Albury people shattered the local community and touched the lives of hundreds.

Lex and Heather both belonged to medically oriented families in which the University of

Melbourne is a constant. Lex was the youngest child of Roy and Dora Bartram. Roy Bartram, MB BS (Melb) 1915, was a much loved general practitioner. Lex's older brothers David (MB BS 1947) and John (MB BS 1954), also studied medicine at Melbourne University. His two sisters, Pat and Jocelyn, both studied nursing and married doctors.

Heather was the youngest child and only daughter of Jack and Alice Hosking. Jack graduated BCE, BSc in 1916 from the University of Melbourne and joined the Melbourne Harbour Trust. Heather's brother Howell Hosking (MB BS 1944) is married to Joan Mowlam, (MB BS 1945). Heather went to school at PLC and her lifelong interest in the school was typified by her presidency of the Albury Branch of PLC Old Collegians.

Lex was born in Mt Barker, South Australia, but the family moved back to Melbourne when he was four. He grew up in Canterbury and was educated at Wesley College. After matriculation he studied forestry at Creswick for two years, but realised medicine was his first love and commenced his MB BS in 1952. He retained his love for trees, the bush and the mountains all his life. He was in Queen's College (another family tradition) throughout his medical training and rowed for the College. After resident years at the Royal Melbourne and Prince Henry's Hospitals, Lex gained his FRACS and, in 1964, went into general surgical practice in Wangaratta with Hal Stanistreet. In 1971 Lex and Heather moved to Albury where Lex and Neil Buckmaster practised in partnership for many years. Throughout these years Lex and Heather were tremendously supportive and hospitable towards students, residents and registrars at the Wangaratta and Albury Base Hospitals.

Over the years in these country base hospitals Lex did more and more orthopaedic surgery, particularly associated with road trauma, and in 1984 he was elected to Fellowship of the Australian Orthopaedic Association – a change in direction which he found very fulfilling. He always raged against the appalling loss of life and serious injuries resulting from the rising rate of traffic accidents in the 1960s and 70s and in his typically outspoken way did not mince words towards young or unlicensed drivers for their stupidity on the roads.

With the onset of arthritis in his hands and shoulders he was forced to reduce the heavy work of orthopaedic surgery, and a few years before his death he ceased surgery and concentrated on consultative and medico-legal work. He retired from practice at the end of 1997.

Lex had a wicked sense of humour and, after suffering a Bell's Palsy in the 1960s, a quirky look to accompany his raised eyebrow and frequently outrageous comments. Under this exterior though, he was an incredibly kind and loving person: concerned, never too busy to listen to a son, a daughter-in-law or grandchild, a friend, a colleague or patient, and to extend understanding support.

Heather and I met on our first day at the University of Melbourne in orientation week, 1950. We became firm friends and were group and study partners throughout the course. In 1956 we shared a room at the Royal Melbourne Hospital as JRMOs (interns). Heather and Lex met as students, bought their engagement ring three weeks later, and the love affair lasted all their lives. They were married at the beginning of 1957, Lex's final year. When Lex was constantly on call as RMO at the Royal Melbourne Hospital, as Surgical Registrar at Prince Henry's Hospital and the children were babies, Heather 'put up her plate' and worked from home. After their move to Wangaratta and then to Albury, she increased her work load and continued to practise, now from Lex's rooms, in the areas of family planning, women's health, counselling and adolescent health.

She worked for a number of years in the Adolescent Department of the Albury Health Department, giving school-based and public lectures in health and sex education and individual consultations. She worked for the establishment of the first family planning clinics in Albury and Wodonga and supported the establishment of family planning clinics in outlying rural centres, despite significant opposition to these clinics at the time. In more recent years she worked and lobbied hard for the successful establishment of the South West Breast Screening Clinic in Albury – the first outside a capital city.

In 1986 Heather moved into her own rooms, and commenced the Border Hormone Clinic. The Clinic grew very rapidly and established close links with the Jean Hailes Foundation. Other women doctors joined the Clinic, including Jane Pike (who was killed in the plane crash), and Lex & Heather's son, Michael, commenced sessions there in addition to his own practice. Heather was in great demand as both doctor and public speaker – since her death the local community have acknowledged this very strongly. The devastation and loss suffered at Heather's death has been expressed in the outpourings of grief of many of her patients. At the time of her death she had a very long waiting list and was fully booked for speaking engagements for the next twelve months.

Lex and Heather lived life fully. They were totally committed to and involved in the lives of their four sons, Peter, David, Michael and Simon, their daughters-in-law and their nine grandchildren. Lex's response to every suggestion, whether a weekend away (as on the fateful weekend), an extra choral rehearsal, or a friend or son wanting to discuss some issue, was always: 'Well, let's get on with it'. Their door was always open to family and friends, young or old in need of some tender loving care – some stayed and were looked after for weeks. They were original members of the Murray Conservatorium Choir, and loved that association – Choir members sang at their memorial service.

Heather was an incredibly capable person. A generous hostess, she could organise meals for four, fourteen or twenty-four without notice, still finding time to talk with and listen to everyone. She knitted jumpers for every new baby born within her wide circle, and cooked casseroles and cakes for those who were ill. From the earliest days she had been involved in the boys' preschools and schools, the pony club and the local Riding for the Disabled group, then the farm, the horse stud, and she supported Lex's canoeing and bicycling expeditions. Lex paddled in Murray River Marathons and won his sections a few times. They both loved bush walking, bird watching, skiing, the mountains, camping trips to remote parts of Australia and overseas travel. Another inland camping trip had been planned at the time of their deaths, and Lex had new challenges planned for retirement, sadly not to be fulfilled.

Lex and Heather will be mourned for a long while by their family, their many friends, their colleagues, their patients and the people of Albury.

Barbara Sawyer (née Stuart)

LLEWELLYN SWISS DAVIES

**MB BS 1937
1913–1998**

LEW DAVIES was born in Bowen, North Queensland, and after graduating in medicine from Melbourne University joined the resident staff of Brisbane General Hospital. He enlisted for service with the Australian Imperial Force in 1939 and in July 1943 he was posted to the Plastic Surgery Unit at Concorde Military Hospital for training under Colonel KW (later

Sir Kenneth) Starr. Subsequently, Major Davies served in charge of No 4 Plastic Surgery Unit at Morotai. Following discharge from the Army in 1946 he was appointed Surgical Supervisor at the Brisbane General Hospital and Children's Hospital which positions included plastic surgery, initially working under the first visiting plastic surgeon to the Brisbane General Hospital – Phillip Macindoe.

In 1951 Llew Davies was appointed Visiting Plastic Surgeon to the Brisbane General Hospital and Children's Hospital, Honorary Plastic Surgeon at the Mater Hospital and Visiting Specialist Plastic Surgeon at Greenslopes Hospital. He became a well known and successful plastic surgeon and his experience and skill were recognised in 1965 when he was awarded an Honorary Fellowship of the Royal Australasian College of Surgeons. He has been described by those who worked with him as 'impeccable, pleasant, quiet, indomitable, persistent and humble'.

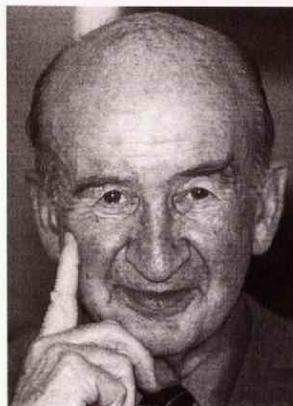
After retirement from private practice in Brisbane, Llew and his wife moved to Armidale, NSW where his daughter and son-in-law Dr David Breusch FRACS lived. He continued to work part-time after his wife Joyce died in 1987. He retained his interest in the medical world, was an avid reader of the journals and shared his enjoyment of the garden with his second wife Rhondda. In the last few years his activities were curtailed by the onset of Parkinson's disease.

Llewellyn Davies is survived by his wife Rhondda, his two sons – Llew, a consultant physician in MacKay and Douglas, a computer scientist – and his daughter Sue, a physiotherapist.

He will be remembered as one of the pioneers of plastic surgery in Queensland.

Jim Peters

**EDWARD SR (BILL) HUGHES KT, CBE
MD, MS, LLD Monash (Hon), FRCSEng, FRACS, FACS, Hon FRCS
1919–1998**



BILL HUGHES

SIR EDWARD HUGHES, generally known as 'Bill' or 'ESR', dedicated his life to surgery, involving himself in all its aspects: teaching, operating, researching and sitting on numerous committees. This was made possible by another dedicated person – Alison his wife – who quietly and selflessly supported him in everything he did. He allowed himself one other indulgence: his family, whom he loved and of whom he was very proud.

Bill was born in the country town of Bruthen, but his bank manager father moved the family to Caulfield when Bill was four years old. There, Bill attended St Paul's kindergarten with me and I remember him as a person able to concentrate and do well right from those early days. Through the years Bill often gave me good advice: at the age of five he said to me, very seriously, 'You know John, I think you would do better if you didn't talk so much'. Apparently, I showed him around Grimwade House when he arrived as a new boy in 1928, and he often used to have a go at me saying that I had obviously felt so important taking him around the school. He was recognised as a good average student at school, but it was his sporting ability that really drew attention. He was a very good footballer – very fast, and spectacular on the wing. With marvellous coordination in all sports, in 1937 Bill was by far the fastest in the school over hurdles although, due to a knee injury only a week before the event, he didn't make the 'Combined Sports' to represent his school.

Although Bill still played football at university, gaining a Blue after playing intersarsity football for some years, he concentrated more on his studies – prompted perhaps partly by oncoming deafness. He soon became recognised as a first class student and it was no surprise when he topped his year in 1943 with honours in every subject.

By 1950 Bill was appointed to the honorary staff at the Royal Melbourne Hospital having gained Australian and English fellowships in surgery, a Master of Surgery, a Doctor of Medicine and having completed four years postgraduate study, the last year of which was at St Marks Hospital, London where he became interested in colon, rectal and anal surgery. With his tremendous enthusiasm and energy he soon generated a large surgical practice with particular interest in colon, rectal and anal surgery. He could well be considered the father of that specialty in Australia and laboured tirelessly to improve his technique, particularly in ways to reduce the incidence of post-operative infection in bowel surgery.

Bill kept full records of all his operations, both public and private, and spent much time studying them, producing over 200 journal articles, many papers delivered at meetings and two text books. He gave much of his energy to committees: the Royal Australasian College of Surgeons (where he was President from 1975-78); the AMA Council; as Chairman of the Sir Robert Menzies Foundation; and as Founder of the Stoma Management Association. He established the Road Trauma Committee which led the world making the wearing of seat belts compulsory in Victoria, and in 1964 was given the extraordinary honour of being appointed the Sims Travelling Professor. He chose to take his theatre sister (Bridget Moynihan), and an anaesthetist with him on his three month trip through South-East Asia, paying the extra two fares out of his own pocket. This trip confirmed all my ideas of this amazing man. He could work tirelessly for long periods, remaining pleasant and cheerful, and his enthusiasm would never wane. The Asian students and doctors loved him, straining to hear his every word and laughing, all the time, at his jokes. They would wait for him in the breakfast room of the hotel and surround the table with constant questions, drive us off to the hospital for a full day of operating, clinical rounds and lectures, then invariably accompany us out to dinner leaving us back at the hotel near midnight. Next morning, Bill would arrive at breakfast with a report of the previous days proceedings written out for Bridget and me to read while he talked to the gathered students and the day would start again. Never did I see him angry or unpleasant. At Madurai all the students, and many of the doctors who felt they could be spared, came to the airport to see him off. They made an amazing sight as we looked down from the aeroplane – a sea of faces, smiling and waving. In 1967 he revisited all these regions in South East Asia and was received with tremendous enthusiasm everywhere he went.

All who worked with Bill appreciated his unchanging demeanour, good company and extreme loyalty. Several of the young doctors who trained under him have become leaders in their specialty.

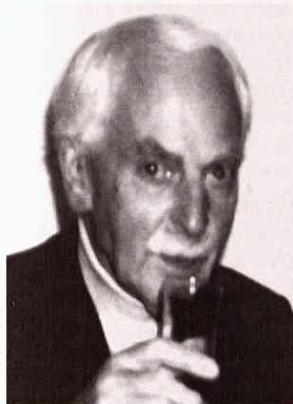
The story of how he chose Bridget to be his theatre sister is worth repeating. For various reasons, Bill lost both his anaesthetist and theatre sister in 1963. About a week later he entered the Cabrini Hospital surgical ward to see his patients and was shown around by a girl new to the hospital. As he was leaving he said to her 'you speak with an accent, where do you come from?' and she replied 'Yugoslavia'. As he got to the car park he thought 'that girl's not Yugoslavian'. He went back to the ward and said, 'where did you say you come from?'. She started to laugh in the manner which endeared her to so many people and Bill immediately asked her to be his theatre sister. She refused, saying she had no experience of surgery, but a few days later Bill asked her again saying he would teach her, which he did. She knew nothing about surgery at the beginning but developed into the perfect theatre sister. After her death in 1985 Bill wrote a beautiful monogram called 'My Theatre Sister'.

Bill was Professor of Surgery at Monash University from 1973 to 1984 and received a knighthood in 1977. He knew he was talented, and I feel sure he worked so hard because he wanted to help as many people as possible. Bill will be remembered as a great husband, father, doctor, surgeon and friend.

John Tucker

JOHN OCHILTREE LAVARACK

MB BS 1938, PhD 1953
1914–1998



JOHN LAVARACK

JOHN LAVARACK, the eldest son of General Sir John and Lady Lavarack, was born in March 1914 at Camberley, England. He subsequently spent much of his childhood at Duntroon, Canberra, and was educated in Melbourne at Scotch College where he did leaving honours and was awarded the Harper Senior Resident Scholarship at Ormond College in 1932. He elected to study medicine and in the first year of his course won the Sir Baldwin Spencer Prize for Zoology. He graduated MB BS in 1938, with honours in Medicine, and became

a resident medical officer at the Alfred Hospital in 1939.

In 1940 John enlisted in the Second Australian Imperial Force and served with distinction in the Australian Army Medical Corps until 1946. He saw action in the Middle East, North Africa, and the Battles of Milne Bay and Buna in the South-West Pacific Theatre of the Second World War. In North Africa he became one of the celebrated 'Rats of Tobruk' and his work at Milne Bay in 1942 was specially commended. He completed his military service as a specialist pathologist.

In 1947, his experience as an army pathologist led to his appointment as Lecturer and Demonstrator in the Pathology Department of the University of Melbourne. The following year he commenced his research concerned with the changes occurring in the microscopic appearance of peripheral nerve fibres after injury and their functional correlation. This research involved collaboration with the Professor of Anatomy, Sydney (later Sir Sydney) Sunderland. In 1949 John transferred to the Anatomy Department as Senior Lecturer in Histology and Embryology. He completed his Doctorate of Philosophy in 1953 and was awarded an Australian NHMRC CJ Martin Fellowship which enabled him to spend a year at King's College, University of London. John was appointed Reader in Embryology and Histology at the University of Melbourne in 1956 and occupied this position until his retirement in 1979.

During his thirty years as a member of the Anatomy Department, John had to meet a considerable teaching and administrative load which made an extensive inroad into his time for personal research. Accordingly, he was very glad to be given twelve months overseas study leave at the end of 1971 to allow him to work in embryological research in the Strangeways Laboratory at Cambridge University.

John was a scholar who found absorption in a wide variety of subjects including history and philosophy, but his greatest love was natural history. A devoted gardener, he endeavoured to find a means in his garden at Kew to provide shelter for frogs whose population was in decline along the Yarra River. He was keenly interested in music and thought that the critic Neville Cardus had found a perfect combination in music and cricket, a game which, together with horseracing, formed sports which John vastly enjoyed.

John is remembered by his former students and colleagues alike as a restrained man respected for his courtesy and helpfulness. His students still speak of the excellence of his blackboard drawings which made his lectures in embryology, a subject of some complexity, clear and memorable. His colleagues remember especially his thoughtful consideration and gentlemanliness in all his doings. In Geoffrey Chaucer's words 'He was a verray parfit gentil knight'.

John is survived by his wife Pat and their son Julian.

Geoffrey Kenny

ROBERT JEFFERY LONG

MB BS 1926
1902–1998



JEFFERY LONG

JEFFERY LONG died at his home in Williamstown, Victoria, on 31 December, 1998. He was born in Melbourne on 26 November 1902, the youngest of four children, and his secondary school years were spent on his parents' farm in South Gippsland. He matriculated from Leongatha High School, aged just sixteen years, and then spent two more years at Wesley College after his parents retired to Melbourne.

Jeff graduated from Melbourne University in 1926, coming ninth in the State. He spent his final two undergraduate years living at Queen's College – an experience

he valued highly. He was a resident at the Royal Melbourne, Royal Women's, Royal Children's and Fairfield Hospitals and his goal was always general practice.

In 1934, after several years of locum work in Melbourne and country Victoria, Jeff began general practice in Williamstown. At the Williamstown Hospital, then the only Melbourne suburban public hospital, he continued to develop his surgical skills, including the use of local anaesthesia for some general surgery. During the Second World War he initiated early post-operative ambulation some time before it was common practice in city hospitals.

Jeff was always interested in the whole lives of his patients – he cared for several branches of many families, over several generations. His diagnostic and surgical skills, care and compassion and twenty-four hour availability endeared him to the community.

In 1939 Jeff was elected to the Williamstown City Council where he served for thirteen years. With fellow councillor and colleague, Dr Alec Dobbin, he was instrumental in the Council establishing the first mass chest x-ray screening program in Victoria.

Apart from medicine Jeff's great loves were carpentry, history and etymology – dictionaries of several languages were always at arm's length, crosswords a frequent relaxation. The arrival of European migrants in Williamstown enlivened his interest in the origins of words. On home visits time was often spent discussing the history and language of the family – yet he had no ear to speak foreign tongues!

After retirement in 1985 Jeff continued his love of reading, including professional journals and textbooks, and was able to share in church and Probuc activities until persistent vertigo increasingly limited his activities.

Jeff and his wife Frieda, who died in 1997, were married for over sixty years. Her great support was integral to his care of his patients. Their children are Elisabeth (UK), Margaret, Janet, Michael and Christopher.

Janet Long

RONALD FRANCIS HINDE LOWE

DipPharm 1934, MB BS 1939, DO 1945, MD 1966, FRCS, FRACS, FRACO, FCOph (UK), PhC 1913-1998



RONALD LOWE

RONALD FRANCIS LOWE was born in East Caulfield, Victoria, educated at Wesley College and later at the University of Melbourne. He obtained a Diploma of Pharmacy in 1934, switched to medicine and completed a medical degree at the University of Melbourne, graduating in 1939. During his medical course he won the Stirling Prize with first class honours in Surgery.

He then embarked on a distinguished post-graduate career, obtaining the Diploma of Ophthalmology and a Doctorate of

Medicine from the University of Melbourne, where he was a member of the Faculty of Medicine from 1962-73. He became a Fellow of the Royal Australasian College of Surgeons in 1947 and was awarded the Gordon Craig Travelling Fellowship which took him to England, where he obtained the first Fellowship ever awarded in ophthalmology by the Royal College of Surgeons of England. Other honours followed and he became a Foundation Fellow of the Royal College of Ophthalmologists, United Kingdom, in 1989.

In the Second World War he served as Captain-Major in the Australian Imperial Force in New Guinea and Darwin. Towards the end of the War he was seconded ex-army to the Royal Victorian Eye and Ear Hospital (RVEEH) where he began a great career in ophthalmology. His influence on the Hospital was considerable. He held the position of Senior Honorary Ophthalmic Surgeon from 1955-1973 and remained an Emeritus Ophthalmic Surgeon to the Hospital from 1973 to the time of his death. During this period he was a member of the Board of Management of the Hospital from 1955 to 1984; Dean of the Clinical School 1962-1968; Ophthalmologist in Charge of the Glaucoma Unit from 1963 to 1975; and Chairman of the Honorary Medical Staff 1970-1973. He was also a member of the library and building committees. In recognition of his valuable contributions the library at the RVEEH was named The Ronald Lowe Library.

His contributions to ophthalmology were enormous. He became President of the Royal Australian College of Ophthalmologists in 1973 and was awarded its Gold Medal in 1996 for distinguished service. He was Chairman of the Ophthalmic Research Institute of Australia from 1980-86, and was awarded the Shorney Prize for Research in Ophthalmology by the University of Adelaide in 1965 and in 1969.

On the international scene he was a foundation member in 1958 of the Asia-Pacific Academy of Ophthalmology, culminating in his presidency of the Academy from 1968-72. He was a foundation professor and vice-president of the Academia Ophthalmologica Internationalis 1991-93.

His prolific publications included papers in many international eye journals. The British journal published twenty-five of his papers, the American journal eleven, and other international journals twenty-eight in toto. His main contribution was in the field of glaucoma although, in his later years, his final papers in Australian journals were devoted to the historic early medical scene in Melbourne and surrounds.

Ronald Lowe developed a large and successful practice at 82 Collins Street in Melbourne where he practiced for over forty

years. He was devoted to his patients who reciprocated his devotion. He had a grand vision and undoubtedly helped change the face of medicine and the progress and future of the RVEEH, his great love, where his memorial service was held.

Ronald Lowe's was a very busy, full and eventful life, which helped shape the future of ophthalmology and the Hospital. His first wife, Lois, died in 1985, but fate smiled kindly on him in 1987 when he married Zena, who gave him great happiness and devoted care, particularly through his final illness. He battled against cancer for several years and is survived by his wife Zena, his son Richard, and by his younger brother Rupert.

Judith A Quilter

Librarian, The Ronald Lowe Library, RVEEH

WALTER JOSEPH MOON

**MB BS 1945, FRACP
1919-1999**

WALTER JOSEPH MOON (Wal to his friends) was the youngest of three children. His father was a prominent Melbourne bookmaker. Educated at Assumption College Kilmore and St Patrick's College Ballarat, he was a gifted student and skilled in cricket and football.

He entered the University of Melbourne Medical School in 1939 and married fellow medical student, Maureen Shepherd, quite early in the course. After graduating in 1945, with two children in the family, he did a junior resident officer year at Warrnambool Base Hospital and then entered rural practice in Kerang, Victoria.

A typical country GP he was by turn physician, surgeon and obstetrician and was involved in the sporting and community life of the town. Maureen developed cancer at an early age and died in 1952 leaving a young family of five children. This tragedy was, ultimately, to shape Wal's professional career.

Over the next five years he built up a considerable regional reputation as a surgeon. He married Peg Wilkes and began a second family of five children.

In 1957, following appointment as Assistant Medical Superintendent at the Austin Hospital, the family moved to East Ivanhoe. Later that year, following the resignation of the incumbent, he was appointed Medical Superintendent.

As a result of his personal and professional experience with cancer, Walter was convinced that wherever possible chronic cancer patients were best nursed at home. Patients would also benefit from a multidisciplinary approach involving consultation between physician, surgeon and radiotherapist. He now had the opportunity to persuade the staff and Hospital Board to accept his ideas.

In 1958 a cancer unit was established and medically staffed by a combination of honorary and salaried medical staff. Changes in admitting policy were made which ultimately changed the image of the hospital from one which provided terminal care for cancer patients to one which involved active treatment and discharge home. Walter Moon's commitment to regarding the patient and his symptoms and not the disease as paramount was essential to this process. Collaborative research in pain relief and chemotherapy with the University of Melbourne Department of Pharmacology assisted the aim of letting the patient stay at home for as long as possible.

In March 1962 Walter was seconded to the role of Senior Medical Officer to the Austin Consultative Clinic (ACC) which replaced the former cancer unit. He implemented his new model for treatment regimes. This ensured that 'all aspects of present treatment and future possibilities [were] well and truly aired' by the sessional radiotherapist, surgeon and physician attached to the ACC, meeting weekly in conference with hospital medical staff.

In 1968 the ACC was again reorganised and Walter became Chairman. He had realised that terminal cancer poses emotional

and spiritual challenges which required a different kind of therapy. He insisted that patients had access to spiritual succour as readily as narcotics and welcomed the nursing, social work and hospital chaplaincy departments into the team. Thus was the patient helped in all aspects of his suffering.

His work was recognised by appointment to the Royal Melbourne Hospital as a Senior Oncologist and appointments at the Peter MacCallum Clinic and the Preston and Northcote Community Hospital. His pioneering work was also recognised by the Mayo Clinic and Dame Cecily Saunders, who worked with him in Melbourne, praised his contribution to palliative care.

In the 1970s the Austin Hospital had developed into a teaching hospital attached to the University of Melbourne's Faculty of Medicine and Walter's outstanding gift for teaching became evident. He thought too many doctors treated the disease and not the patient and advised students to 'get your backside by the bedside, put your mouth into neutral and *listen* to what the patient is telling you'. Likewise, he was always on the lookout for students with the 'right stuff' for oncology and ensured that their calling did not escape them.

His research into better methods of pain control sparked a parallel interest in drug dependency. In the late 1960s, at his urging, a drug dependency clinic was established at the Austin, and methodone management of heroin addiction was introduced to the clinic quite early in its development. He also insisted that these patients were treated with every courtesy as part of rehabilitating their self esteem and that they be escorted to the clinic room and introduced to the doctor. Woe betide any staff who referred to his patients as 'clients'.

In 1980 his second marriage was dissolved, his health was beginning to fail and he was living with his daughter in a self-contained cottage in her back garden. With his daughter acting as chauffeur he continued to attend the weekly evening drug dependency clinic despite the effects of chronic bladder cancer, a heart attack and quadruple bypass cardiac surgery. His last attendance at the clinic was two days before his death. He retired for his usual afternoon nap and did not wake up when brought his evening meal.

Walter Moon was buried with his first wife, Maureen. Among his many mourners were numerous continuing long term patients. He is survived by four children of his first marriage, one son having pre-deceased him, and the five children of his second marriage.

Frank O'Rourke

PETER NEVILLE ROSE

MB BS 1960, FRCPA
1935-1998



PETER ROSE

PETER ROSE died suddenly from a pulmonary embolism on 29 January 1998, barely two months after he had chanced to feel his own enlarged spleen and been found on investigation to have acute blastic transformation of an unsuspected myeloproliferative syndrome.

He was born in Brunswick and lived his early life in the shadow of the Brunswick tram depot. He attended Brunswick State School, Moreland Central School and University High School, then completed his education at Melbourne Grammar School

having been awarded a full scholarship. A competent athlete he was awarded the Rusden Cup for his achievements as an all-

rounder in sports and studies, and matriculated at sixteen, staying on at school to broaden his education prior to entry to medicine at Melbourne University.

During his student years he developed an interest in chess and played competitively until the pressure of studies and studenthood overtook him. However, his passion for that game was able to be indulged in his later years when he became an enthusiastic member of the Melbourne Chess Club. One of his great ambitions was to become a champion veteran player, but sadly his premature death prevented him attaining this goal.

After graduation he was a resident and then senior resident at the then Footscray Hospital. He returned to Footscray Hospital as a pathology registrar, and later assistant pathologist, after early training in this discipline under Vernon Pleuckhahn at the Geelong Hospital.

After leaving Footscray he opened a private pathology service at Frankston, and threw himself into developing a first class laboratory also servicing the needs of the Frankston Hospital. These were the days before Medicare, and it was a source of pride to him that about one third of his practice was in an honorary capacity to this hospital. In order to improve the efficiency of his practice he decided that computerisation was mandatory. However, there were no laboratory systems to buy, so he travelled to England and investigated the available technologies, settled on a machine and taught himself the then most efficient Assembler language. Returning, he developed a system that was to prove so attractive and innovative that it quickly became state-of-the-art.

With the advent of Medicare and its considerable financial benefits, particularly in pathology, Peter became disillusioned about the future of this discipline, forecasting (correctly) that it would be the end of pathology as practiced by pathologists and that it would become a lucrative industry controlled by commercial enterprise. A sincere advocate of the public health sector he found himself increasingly at odds with his role in private pathology, and when he was encouraged to share his computer knowledge he gave up his laboratory to establish a small computer software house.

In this venture he further developed his system, which was subsequently acquired, and used for many years, by several large private pathology services in Australia, Canada and New Zealand, and by a number of Victorian hospitals. In 1984 Peter wrote a customised information technology system for the Victorian Cytology Service and subsequently, in 1989, for the groundbreaking Victorian Cervical Cytology Registry; an achievement which gave him great pride and which he continued to nurture until his death. Although not actively practising pathology these activities enabled him to remain in touch with its wider science. He was an avid reader of scientific literature, continually fascinated by the advances in molecular biology and new technologies that have so changed the face of pathology.

Peter was a proud and gentle man who touched many lives, quietly and with dignity. He was intensely proud of his three children, and always a little ruefully envious of the skills and apparently simpler lifestyle of his brother, an artist on the central coast of New South Wales. He enjoyed his golf - which had re-emerged as a challenge and a passion in his last three years following a successful operation to replace a painful arthritic hip - and he was about to seriously tackle croquet, having finally almost succeeded in his battle against the seaside elements to establish a weedless croquet lawn. He derived immense pleasure from his last major venture, the home he built with his second wife at Shoreham, and it was fitting that this man, who demanded very little from the material world, should in the last weeks of his life have enjoyed the first bountiful crop of summer fruit from the small orchard he had for the past five years so lovingly tended.

GM

EDWARD DONOUGH M RYAN

**MB BS 1940, BA 1936, DO 1946, FRACS, FRACO
1913-1998**



EDWARD RYAN

EDWARD WAS ONE of those people who would always improve your day when you happened to meet him. He was quick with a warm greeting and a witty aside, always ready to tell you a story or include you in his confidence. He was able to talk on most topics with erudition and insight. His interests spanned a wide range of subjects from Australian history through the classics to collecting silverware and, of course, the Geelong Football Club. Despite his many achievements he had a gentle and understated manner that well reflected his humility.

Born in 1913, Edward was the eldest son of Victoria's first surgeon to practice ophthalmology alone rather than in combination with ear nose and throat surgery as had been done in the past. He went to school at Xavier College where he was not only the Dux at school but achieved a double blue in athletics and football.

Initially Edward studied arts at the University of Melbourne continuing an interest in the classics fostered by the Jesuits. He was of the opinion that a medical graduate should be a roundly educated person, well-versed in literature and the classics as well as in art and music. He continued these interests with a passion throughout his life. Following his arts degree he enrolled as a medical student and graduated in 1940 doing his residency at St Vincent's Hospital.

His medical career was interrupted by the Second World War and he enrolled in the RAAF becoming a squadron leader in the 24th Medical Clearing Station during the Pacific campaign. He was mentioned in Dispatches for his work in the landing at Hollandia.

Following the War, Edward completed his post-graduate training in ophthalmology, later becoming a Fellow of the Royal Australian College of Surgeons. He took over his father's practice in Collins Street, a practice he was to maintain for nearly fifty years. A true general ophthalmologist with a diverse range of interests, he had a particular focus and skill in lacrimal disorders and perpetuated his Father's use of Boric acid and adrenaline drops for a variety of surface disorders. Edward is well remembered for 'The Dissatisfied Patient', a witty paper on refraction in various types of patients based on personality rather than refractive state. This combination of insight and honesty made him popular with his patients, many of whom became his firm friends as well as enjoying the benefits of his ophthalmic skill and knowledge.

Edward's main professional interest was in the pathology of the eye and he worked for many years with the late Hugh Greer at the Royal Victorian Eye and Ear Hospital. After Hugh Greer's death, Edward was Acting Pathologist for two years. He was an examiner in pathology for the Royal Australian College of Ophthalmologists for many years.

His professional life was enhanced by his association with St Vincent's Hospital. He was an Honorary at St Vincent's for many years and a particular patron at St Paul's School for the Blind where students were given individual attention. Close both in age and location of rooms to his cousin Hugh Ryan, they shared many of their cases together including assisting at each other's surgery.

Edward had a wide range of interests and hobbies beyond medicine. First among these was his love for the Geelong Football Club where he was Medical Officer for many years. In

1985 the Club recognised his services by making him a life member. A devout Catholic, he used to say his faith had only been challenged on four occasions, each of these corresponding to losing a Grand Final. He was a keen golfer, playing at Royal Melbourne Golf Club and enjoyed field shooting-both quail and snipe. He maintained his association with Xavier being president of the Old Xavierians Association on two occasions. Edward married Margaret Timmins during the Second World War and from this happy marriage produced thirteen children of whom twelve survived. To them we extend our deepest sympathy.

Mark Daniell

ALICE ELIZABETH (BETTY) WILMOT, OBE

**BSc 1934, Dip Diet 1938, MB BS 1945, DCH (London) 1949,
MPH (California) 1967
1912-1998**

BETTY DEVOTED HER CAREER to maternal and child health: she led the department which trained and supported maternal and child health nurses (also called infant welfare nurses) and she set up the structures which led to an excellent pre-school service providing teaching and health programs for young children. Her department was the basis of the innovative Early Childhood Development Program which was designed to provide an environment with the personnel to support families in a variety of ways which would enhance their ability to raise children. Her experience at a school which encouraged community service and her early work during the great depression were influential in establishing this career.

Betty attended Merton Hall at Melbourne Church of England Girl's Grammar, then the University of Melbourne where she completed a science degree in 1934. She wished to proceed to a Master of Biochemistry and a research career but the depression made this impossible and she accepted a newly established position as dietitian and welfare officer with the Victorian Railways. Her work was in nutrition education through lectures and written material for the general public.

This led to a career in public health and gave Betty a lifelong interest in nutrition and education. She completed a Diploma of Dietetics in 1938, then began a medical degree, graduating in 1945. Her hospital residencies were in medicine and paediatrics then she took up an appointment as a school medical officer in Tasmania. In 1948 she was awarded a British Council Scholarship and went to London where she obtained a Diploma of Child Health and toured England and Scotland visiting child health centres. Returning to Victoria she was seconded to work with migrant children and spent some months at Bonegilla Hostel before returning to Tasmania.

In 1950 Betty was appointed to the position of Assistant Director of Maternal, Infant and Preschool Welfare for the Victorian Government Department of Health. Here she worked closely with paediatrician Kate Campbell. They rewrote the textbook for workers in the field. Developed from the *Guide to Infant Feeding* 1929, *A Guide to the Care of the Young Child*, became a reference book for many health professionals and went into its seventh edition during Betty's time at the Health Department.

Betty was appointed to the World Health Organization's Western Pacific Region in 1952 and worked as a regional adviser in maternal and child health until 1956 when she returned to Melbourne as Director of Maternal, Infant and Preschool Welfare. In 1966 she travelled throughout the USA visiting centres of excellence and completed her Master of Public Health at Berkeley, California. She remained with the government through reorganisation of the Health Department to become the Health Commission and was promoted within the Commission. She retired in 1977.

I first met Betty in 1972 (I only dared call her Dr Wilmot then!) when I started as a preschool medical officer. She was always keen to develop new services and gave her staff quite a

lot of leeway to try out new proposals. Betty had many advanced ideas and during her time in the Health Department she helped to introduce subsidised preschools, full medical checks for children in preschools and municipal day care centres, some free dental clinics for preschool children, free family planning clinics staffed by nurses and doctors employed by the Health Department and local antenatal clinics which related to major public hospitals. Problems we saw in the preschools during the seventies and eighties – poor nutrition, severe dental caries, orthopaedic problems, chronic ear infections and hearing loss, delayed immunisation, undiagnosed developmental disability and behaviour disorders – are hopefully detected much earlier now due to the improvement in early childhood care.

After retirement, Betty continued to live in South Yarra where she kept up her lively interest in the Lyceum Club and in maternal and child health. She was an enthusiastic traveller and managed many interesting trips even when hampered by bilateral hip disease. She attended meetings of the International Association of Lyceum Clubs at Stockholm in 1981, Dijon in 1985, and Hamburg in 1986, also visiting Athens and Rhodes on this trip. She helped to run the Lyceum Travel Circle and contributed for many years. She became increasingly frustrated by her lack of mobility but kept up her long term interest in the Victorian Medical Women's Society, remaining on the committee until 1989 and contributing a detailed memoir to the *Centenary Booklet* in March 1996. I am indebted to her contribution for much of this material and also to the *Lyceum Club Newsletter* of September 1997 where she was written up as one of their 'living treasures'. Betty received her Order of the British Empire in 1978 for her contribution to maternal and child health.

Rosalie Cooper

UMMS regrets the passing of

Michael Louis Acton
 William Edward Bradley
 Helen Byrne
 Henry Roy Clegg
 Ian Campbell Galbraith
 John Macleod Gooch
 Frank John Grant
 Kevin John Harrison
 David John Hewat
 Miriam Anne Johnston
 Howard Alfred Marks
 Edward Joseph McDonald
 Malcolm Andrew McKenzie
 Kevin Lorne Merrett
 Joy Barton Nelson
 Gwenneth Mancell Pinner
 Harold Wesley Rouch
 John David Searby
 Val Travers Stephen
 Thomas Victor Walpole
 Patricia Frances Wellington
 Redford John Wright-Smith

WHAT'S ON IN 1999

DEAN'S LECTURE SERIES

1 JUNE

Twisted necks and crooked faces:
 facial asymmetry from a developmental
 and surgical perspective

Professor John Ferguson, Director of Oral and
 Maxillofacial Surgery,
 The Royal Dental Hospital of Melbourne

15 JUNE

Who is pushing our kids into the river?
 The critical function of the first 12
 months of life

Professor Jeanette Milgrom, Director of Clinical
 Psychology, Austin and Repatriation Medical Centre

29 JUNE

**The pathogenesis of Type 2 Diabetes in
 Polynesians:**
 is this fuel mediated tetraetogenesis?

Professor David Simmons,
 Foundation Professor of Rural Health

13 JULY

Drugs: health politicised?
 Drug policy in Australia and its impact
 on our current and future health

Professor Margaret Hamilton,
 Director, Turning Point Alcohol and Drug Centre

30 JULY

Debates in Human Genetics:
 the brave new world of genetic testing
 Seminar convened by Professor Richard Smallwood

ALUMNI ASSOCIATION

The Legendary Lee Miller:

Photographs 1929-1964

Public Talk and Exhibition Tour

Ian Potter Museum of Art

2.00 pm Saturday 7 August

Bookings: \$10, through the Ian Potter Museum of
 Art, phone: 9344 5148

BEQUESTS

BEQUESTS ASSIST RESEARCH INTO EYE DISEASE

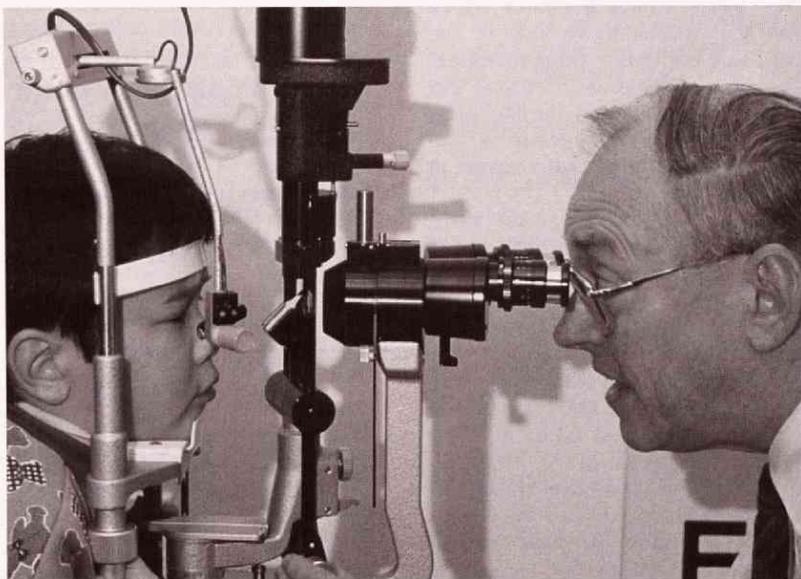
THE DEPARTMENT of Ophthalmology, established in 1963, was the first specialist surgical department in an Australian medical school. Now headed by Hugh Taylor, Ringland Anderson Professor, the Department is also the first World Health Organization Collaborating Centre for the Prevention of Blindness operating in Australia, one of only sixteen in the world. In 1996 the work of the Department expanded into the newly created Centre for Eye Research Australia. These features, combined with the Department's outstanding research profile and the community's recognition of the priceless value of eyesight, are some of the reasons which inspire benefactors to support the Department through bequests.

A number of these benefactors are graduates of the University, motivated by a first-hand knowledge of the teaching and research of the Department. Others do not have an association with the University, their interest in supporting the Department kindled when they learn of the potential for research to prevent or treat eye disease, sometimes through personal experience. Such a benefactor was Mr Larry Zelkin who died last year. A retired lawyer, Mr Zelkin was an American citizen who resided permanently in Melbourne. He and his wife, Anne Marie Mankiewicz, were greatly impressed by the calibre of the Department's research and together they made very generous provision in their wills for bequests which will benefit the Department in perpetuity.

Another substantial bequest is that of Louisa Jean de Bretteville. Mrs de Bretteville was born in Melbourne in 1903, the daughter of Alice and Duncan Gilchrist. Her first husband, Thorald Fink, was killed in a jeep accident while on active service during the Second World War. She later married Alec de Bretteville and lived in San Francisco until her death in 1994.

Interest generated by the de Bretteville Bequest has been applied to two of the Department's research areas: the McComas Family Laboratory and the Epidemiology Research Unit. Under the direction of Dr Robyn Guymer, the McComas Family Laboratory is studying genetic eye disease, in particular age-related macular degeneration (AMD), the main cause of blindness in the elderly. Anecdotal evidence suggests that AMD may run in families and DNA is extracted from patients' blood samples to assist with the identification of the genes responsible for this disease. It is likely that it is a complex genetic disorder with multiple genes influencing an individual's susceptibility to environmental factors. Rare inherited eye diseases similar to AMD are also being studied as the genes responsible for these may also be implicated in AMD.

The major focus of the Epidemiology Research Unit, headed by Dr Cathy McCarty, is the Visual Impairment Project (VIP). From 1992-96, a total of 5147 randomly selected Victorians has been tested for eye disease. The data obtained are analysed to



Associate Professor Hector Maclean with one of his young patients.

define the types, frequency, and risk factors of eye disease in urban and rural areas. This public health project will assist in the establishment of programs for the prevention and treatment of eye disease before visual loss and disability occur. VIP studies have shown that uncorrected refractive errors account for one third of visual impairment in our community. The four other major causes of blindness and vision loss among Victorians are cataract, diabetic retinopathy, glaucoma, and age-related macular degeneration.

Several other bequests, including those of

Miss Dorothy Edols, Mr Norman L Mayer, Miss Winifred Monds, and Mrs Louise G Ross, have also provided invaluable assistance to the VIP and the McComas Family Laboratory.

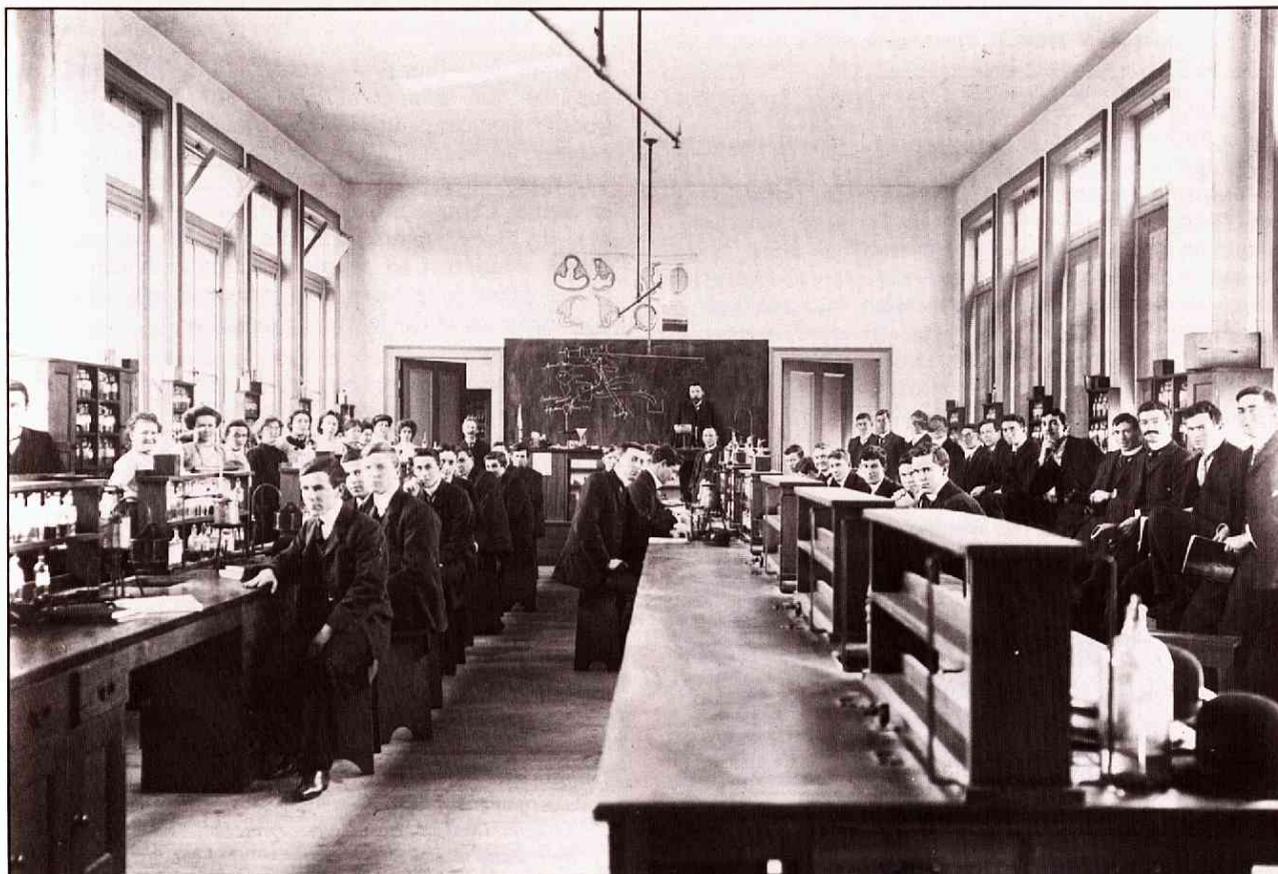
In addition to the VIP, the Epidemiology Research Unit is involved in a collaborative research program with Monash University's Department of Social and Preventive Medicine on the effectiveness of Vitamin E in the prevention of cataract and AMD. Funds from the bequest given by Mrs Hazel Eastham in 1985 are applied to this project which is based at Caulfield General Medical Centre.

Another principal research area of the Centre which receives support from bequests is the Glaucoma Research Unit, led by Associate Professor David Mackey. Maurice Cantlon, Head of the Art Department at the former Swinburne Institute of Technology, left half of his residuary estate for this purpose when he died in 1980. The Unit focuses on the Glaucoma Inheritance Study (GIST) and clinical research. To date, the team has examined more than 200 glaucoma families in Tasmania and 100 in Victoria and other states. The GIST Project has reported the identification of the first gene to cause primary angle glaucoma and bequest funds help to support the continuing search for other glaucoma genes. Data obtained from these studies will assist with the early detection and modification of risk factors associated with this disease.

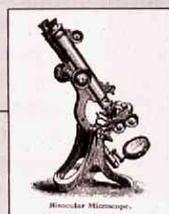
The clinical research area of the Unit, headed by Dr Julian Rait, is working on the development and testing of new drug therapies for the treatment of glaucoma. Dr Yury Stanislavsky's psychophysical study of visual loss in glaucoma may enable the development of a clinical test for the early diagnosis of glaucoma and other eye diseases.

A bequest to the University is a permanent gift which enables benefactors and the University to become partners in life-enhancing research projects such as these. If you would like further information about making a bequest to the University, please contact Miss Elizabeth Douglas, Bequests Manager, Alumni Relations Unit, University of Melbourne, Parkville, Victoria 3052. Telephone (+61 3) 9344 7804, facsimile (+61 3) 9344 6895. All enquiries are treated in strict confidence.

M A G A Z I N E



First Year Physiology Class, 1902.
Note the women grouped on the left, separate from the male students.
From the Medical History Museum collection.



THE MAKING OF DOCTORS

THE ROYAL WOMEN'S HOSPITAL EXTERN CASE BOOKS 1921-1935

DR JANET MCCALMAN, BA (HONS), PHD (ANU), FAHA

Senior Lecturer, Centre for the Study of Health and Society, University of Melbourne

'Are you the doctor?' from a drunk old man standing in the middle of the tram track.

'God, yair too late - she's bad - yair too late!'

Thus greeted I very tremulously hurried down back lanes and passages to be let into the back parlour of a Bootmaker's Shop - crowded with very mournful looking individuals.

Seated on the pillow of a very large bed in a very small room lighted by two flickering candles, was a red-faced, smiling old Jane - clad in high-heeled suede shoes, blue silk stockings, pink bloomers pulled down over her knees, corsets slightly loosened and a brown dress turned up over her abdo:- between her legs was the new born young Australian.¹

It was November 1927, the place - Rathdowne Street Carlton, just around the corner from the Women's Hospital. And while the mother looked like an 'old Jane' she was merely thirty-seven and this was her seventh child. The attending medical student, William Stephens, felt almost superfluous: a neighbour came in with a bowl of freshly boiled swabs and had already wiped out the baby's mouth 'with a handkerchief!'

This narrative is one of the thousands preserved in the archives of the Royal Women's Hospital from the extern midwifery service conducted by the hospital in collaboration with the District Nursing Society between 1905 and the early 1950s. Medical students had to undertake a week or ten day shift of extern midwifery once they had completed their intern deliveries. They had to prove themselves capable of delivering women in their homes as well as in the labour ward: because, for those destined to be general practitioners, obstetricians would be at the centre of their practice and they had to be trained to cope with the direst emergencies, far from the support of

hospitals and other professionals. In the bush and even in the suburbs, the competent doctor still needed to practise a frontier medicine - improvising equipment, enlisting untrained helpers, intervening where only specialists normally dared. At 4.15 am on Christmas Eve 1930, Norman Harry and Sister Tobias arrived at a house in Glass Street, Burnley to find an 'LOA head held up by oedematous anterior lip'. He pushed it back, but events continued to progress slowly with the head on the perineum for three quarters of an hour. Finally, a large child was born normally in the left lateral position:

Then followed a profuse haemorrhage. Two kidney dishes rapidly filled. Placenta came away in five minutes. The bleeding continued and profusely tho' the placenta appeared intact. [Uterus massaged, pit. and ergot given.] Now four dishes gone and the blood pouring out in a jet. Plunged hand into uterus - no retained placenta felt but oedematous ant lip hanging like a tongue. Grabbed this and compressed against the pubic arch, simultaneously the uterus was massaged and pressed against fist. We heaved a sigh of relief as haem suddenly stopped for she was now filling her fifth dish. The sweat dried on our brows as we waited for the doctor to arrive. End of bed put on chairs, pulse 120. Doctor arrived-two quarter doses of pituitrin given. Hand which was just about paralysed by now, removed fr. uterus and the bleeding did not start again.

Bathed babe and took pulse every 5 minutes, it still hung on 120 and there was no respiratory distress. Meanwhile Sister left and rang ambulance. Arrived at Women's Hospital 7.12. Condition unchanged - no further bleeding.²

The student recorded that his hair had turned grey in the night.

The midwife from the District Nursing Society was legally in charge of the extern cases, and the student was in training under her qualified eye, just as normal deliveries in labour ward were under the supervision of the midwives. In the case of emergency, the midwife first rang her matron at the District Nursing Society's headquarters in Victoria Parade, and if a doctor had to be called, a local general practitioner was sought. That was easier said than done, especially at night. The matron might advise that the patient be brought by ambulance into the Women's Hospital, or she might order them not to move her and cope on the spot. The student and the midwife started from different places and often their arrival at the patient's home did not coincide. Students frequently found themselves alone with a patient whose history they knew nothing of, with no support, no phone - just their very recently acquired labour ward experience. In May 1927 Norman Solomon arrived in Cromwell Street, Collingwood, to find a thirty-five year old para 3 with her waters ruptured and the head showing. There was no-one to 'hold the leg' or the baby. The double bed, like most in the inner suburbs, sagged into a deep valley in the middle:



Little Napier Street, Fitzroy, c.1905 Fitzroy Historical Collection

Got mother to the edge of bed, donned gloves and apron and proceeded to deliver infant with mother's right leg slung around my neck and trying to push my face into the bed. Delivered infant with difficulty as in the process mother slid into the centre of the bed and almost disappeared from view. Then cut cord and pitched infant into a clothes basket ready for its reception and proceeded to wait for the placenta.

The cord lengthened after about 20 minutes.

However before I got properly to work, the placenta shot out of the vagina and with it a deluge of blood with a continuous stream of blood behind it. My heart stopped for about 10 minutes, but finally picked up courage and expressed the rest of the placenta as quickly as possible, although this did not stop the bleeding. By this time I had the wind up properly and began to think of funerals and murder trials. Kept rubbing the fundus and injected Icc pit and Icc ergot but did not seem to act very quickly. Was on the point of sending for a doctor when Sister arrived and whether it was her presence or my good management I don't know, but the bleeding stopped and the uterus contracted up. Pulse around 120. My own 450 or thereabouts.³

He found 'great difficulty in eating' his tea back at the hospital.

Such experiences were unfortunately far from uncommon and while some found them exhilarating in retrospect and were relieved by their own competence in the face of danger, some students were almost put off obstetrics for life. For all the trials of student life in the clinical years, nothing could compare with the experience of finding oneself alone somewhere in the suburbs with a labouring woman in danger. And the Extern Case Books were for many an essential outlet for their unprofessional rather than their professional feelings. The Case Books, especially from 1921 to 1935 were a literary genre rather than a proper medical record. Clinical details of the patient and her delivery were recorded, but often in a desultory manner – the official record was made by the midwife for the District Nursing Society. The Matron signed off on the students' Case Books, but the narratives were not constructed for medical purposes at all: the character at the centre of the story was not the patient but the student him or herself. And thus they are a unique record of the experience of giving medical care rather than of the process of giving it. Here is the person behind the clinical mask; here we see the fear, the self-doubt, the disgust, the despair – all of which must be hidden from the patient and from colleagues. Students have a dispensation however: they are meant to be inexperienced, mere tyros, hence they can admit to ignorance, inexperience and sheer terror. For some, it was possibly the only time in their professional lives that they could be openly fallible. In October 1922 Beatrice Sharwood arrived at 2.15 am for her first case 'on extern' 'to be greeted with a prolapsed cord and a breech presentation':

Felt rather jelly-like about the spine but wished to deliver it. Sister however, who was relieving and had not her certificate, got the wind up vertically and dashed for a telephone. Mother made very little progress, but by the time Dr Merrilees arrived, one leg was born.

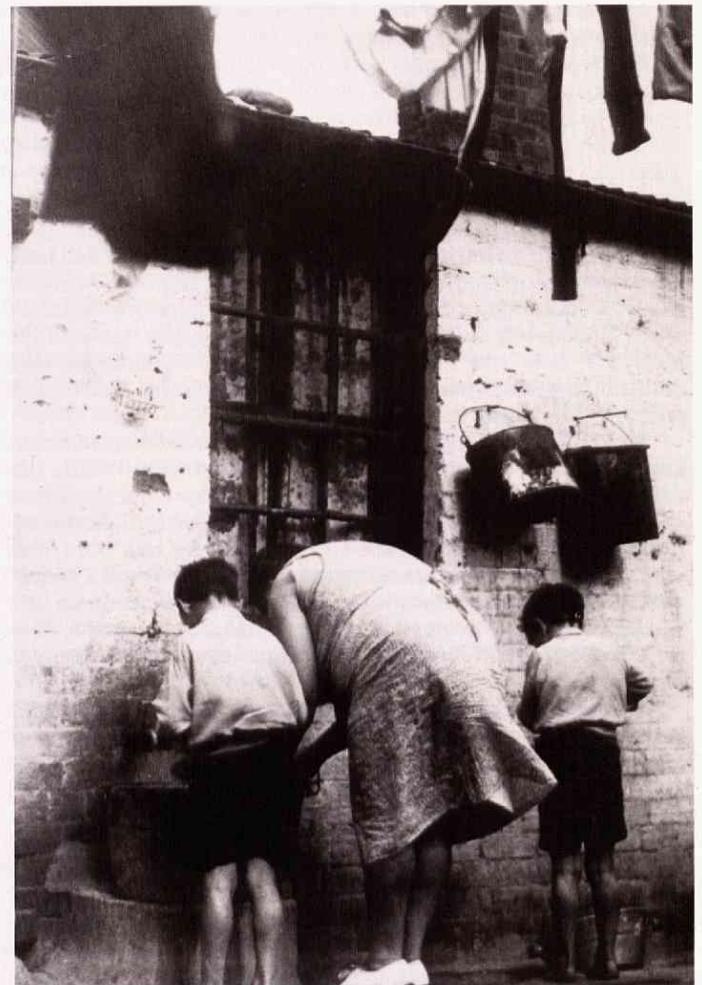
At 3.20 he produced the baby after experiencing considerable difficulty with an extended leg and arms. Third stage was very delayed, but on giving chlo. preparatory to a manual removal, the placenta and membranes immediately came away. Baby was a nice child and quite intact in spite of his rough spin.⁴

Even when the midwife was present, her expertise was not always to be relied upon. When R J Farnbach and Sister Grey attended a case in January 1928, each was on their first case: the

mother, however, was very experienced, this being her sixteenth confinement. A 'very hefty' woman, she delivered an 11 lb baby with no problems: 'Sister quite a good sort' noted Mr Farnbach.⁵

Just over two thousand case histories from the extern case books have survived from 1921 to 1936, and about a third of them contain vivid narratives. And of those 2361 deliveries, no mother died although there were a number of close calls from haemorrhage; there were 39 stillbirths, a rate of 1.65 per cent; 43 cases required that a doctor be called to use instruments – a forceps rate of 1.82 per cent; there were 33 cases of uterine inertia; there were not surprisingly 211 cases of post-partum haemorrhage – an incidence of nearly 9 per cent; there were 21 ante-partum haemorrhages, including 13 placenta praevia; 12.6 per cent of the deliveries were BBA and born without expert care; just under 9 per cent of the mothers suffered a perineal tear and a quarter of those had to be sutured – tears were more common in BBAs; there were 31 pairs of twins and 21 premature babies; only three women had threatened eclampsia; twelve women had syphilis and five advanced tuberculosis.

The students did very well. The Medical School and the Women's Hospital medical staff were greatly concerned in the 1920s at the general standard of obstetric practice in the community. The maternal death rate remained stubbornly high, although it was being bolstered by the rising mortality from septic abortion. The hospital took great care with its obstetrical training and a high level of competence was expected. The campaigning of senior doctors like Dunbar Hooper, whose professional courage as a young resident surgeon had shocked the hospital into adopting antiseptic midwifery in the late 1880s, resulted in a grant from the Edward Wilson Trust in 1925 which financed first Marshall Allan's investigation into maternal mortality in Victoria and soon after, the establishment of a chair of obstetrics at this University. In their lectures, students were being taught by Arthur Wilson to develop an 'obstetrical



A Family's washing facilities. Herald and Weekly Times

conscienc' and that the first, second and third rule of obstetrics is care. The good obstetrician treated each patient as though she were a member of his or her family: that was the absolute measure of practice. Of course not all could measure up, but for all its short-comings, crudities and insensitivities, the Women's Hospital had been founded by a man who believed that the true measure of a society's civilisation was its care of women, especially in childbirth.

For many, experiences such as those recorded in the extern case books of the 1920s and early 1930s, were key events in the shaping of their medical consciences. Few had their politics changed, but few were left unaffected by poverty and the burden that it placed on mothers. Dr Kelvin Churches in his Tracy-Maund lecture of 1976 where he exposed Melbourne's long history of back-yard abortions, testified to the effect his extern experience had had on him as a medical student in the 1930s. Most were to take with them into later life a trope of poverty and suffering – the family with only one cup, the house with no food at all in the cupboards, the father washing the newborn baby under the solitary tap in the back-yard, the women whose husbands drank all the money so they had to leave hospital before pay day, the single girls having babies at fifteen, the struggling women with their proclivita, varicose ulcers and crippling 'hot tubes' – all the simply unnecessary pain and suffering that poverty brought and brings. Some students do disappooint: they see the poor as another, inferior species; they

sneer at their religious or ethnic differences; they deplore their ignorance and intellectual inferiority; they compose cheap verse and nasty jokes; they appear oblivious of the mother's pain and difficulty. Thankfully, many of the larrikins and 'Hooray Harrys' of the Extern Books are the very ones whose names do not appear finally in the list of graduates of this medical school.

The full text of this lecture appears in the founding issue of Health and History, 1.1.1999, published for the Australian Society for the History of Medicine by the Centre for the Study of Health and Society, University of Melbourne.

Janet McCalman's book Sex and Suffering, Women's Health and a Woman's Hospital, The Royal Women's Hospital, Melbourne, 1856–1996 is reviewed in the 'Book Reviews' section of this issue of Chiron

- 1 Extern Midwifery Case Books, Royal Women's Hospital, Melbourne, Archives 25 November 1927, 170 Rathdowne Street, Carlton, aged 37, para 6; W.B. Stephens and Sister Taylor
- 2 *ibid.* 24 December 1930, Glass Street, Burnley, Norman Harry and Sister Tobias.
- 3 *ibid.* 31 May 1927, Cromwell Street, Collingwood, aged 35, para 3; Norman J. Solomon and Sister Burgess.
- 4 *ibid.* 22 October 1922, 17 Moir Street, Hawthorn, para 5; Beatrice Sharwood and Sister Berthelsen.
- 5 *ibid.* 15 January 1928; R. J. Farnbach, Sister Grey.

NOT JUST DOCTORS

CAPE HORN WINERY

SUE HARRISON MB BS 1981

In 1984, two years after graduation, my husband, Ian, and I were ready to leave Melbourne for the country. We had both grown up outside the city and were keen to leave, so we let the Education Department decide where in country Victoria we went. Fortunately we were sent to Echuca, on the banks of the Murray – only two and a half hours from Melbourne, with endless blue skies and plenty of water for water sports, golf courses and irrigation.

Ian settled happily into Echuca Tech teaching business studies and our first daughter, Annie, was born shortly after our arrival. Within weeks I was approached by a local general practice to start work. I was fortunate to be able to choose my hours to fit in with childcare and when Emily was born, two years later, I gradually increased my workload. At this stage I realised that my postgraduate training was inadequate if I wanted to be fully involved in rural general practice and in 1988 we travelled to the UK where I spent eighteen months training in anaesthesia.

By October 1989 we were ready to return to Echuca. Initially we were both able to work part-time, which suited our needs as far as childcare and time at home was concerned. In 1992 I joined the Nish Street Medical Practice as a full-time partner and Ian continued to work part-time and look after our home. Unfortunately, Mr Kennett had other plans and his overhaul of the education system saw Ian placed in excess. We began to consider other plans for the future.

We were aware of a property for sale in the midst of the State Forest to the east of Echuca, near our favourite camping site. The property had river frontage, good water rights and a sand hill which was well above flood levels. A decision was made – Ian



Sue Harrison

would take a redundancy package and we would buy 'Cape Horn' and establish a vineyard. We later discovered, from local historians, that the property had been a vineyard from the 1860s until the Second World War: 'Cape Horn' had provided wine for the riverboat trade and had been a popular afternoon tea spot for the locals.

By December 1993 we were the owners of 130 acres of freehold and 350 acres pastoral lease. A very steep learning curve followed. We have planted fifteen acres of grapes – chardonnay, shiraz, cabernet sauvignon and durif, with help from family and friends. Ian has established irrigation systems, sown pasture and repaired fences, and we have renovated the farmhouse to make it suitable for holiday accommodation. We have made some mistakes along the way and I shudder to think how much money we have spent on our farm. We certainly

exhausted our friends and ourselves hand-picking twenty tonne of grapes in 1998!

The rewards are now starting to appear. Ian has qualifications in viticulture and chemical handling and our 1997 'Cape Horn' chardonnay was sold out in the local area, with its booming restaurant and tourist trade. Our 1998 chardonnay and 1997 cabernet sauvignon were released in December 1998. We enjoyed our involvement in Echuca's 'Jazz, Wine and Food' festival in February 1999 and in the 'Longest Lunch' in Echuca in March.

It is an exciting and vibrant industry to be involved in. Grape growers, wine makers and restaurateurs are an interesting and diverse group of people we now work with.

And of course, everybody knows a glass of wine is very good for you!

OVERSEAS SERVICE

COMING OF MIDDLE AGE IN SAMOA

KATRINA WATSON MB BS 1977

WORKING IN THE DEVELOPING WORLD was something my husband Gary and I had always wanted to do, but there were always more apparently pressing priorities. One day we woke up and realised that our older children were about to enter secondary school, and we really needed to get on with it. So the Australian Volunteers' Abroad (AVA) recruiting office suddenly found itself in receipt of an application from two hopelessly over-qualified mid-career professionals with no skills apparently useful in any way to the developing world. A gastroenterologist working without an endoscope? Well, can't you at least deliver babies? Surely you could do something useful like eye surgery? What about Gary...a tax consultant? Going to a country without any regulated financial system? And you have four, you did say four children? And you only want to go away for one year instead of the usual two? Hmmm...we'll try our best.

To the enormous credit of AVA, they did find us a position – we only wanted one job, but we didn't mind where in the world it was. Gary had secret hopes for China, I had not-so-secret hopes for Africa. When the AVA program officer called and said that Samoa needed a gastroenterologist I couldn't have been more surprised...they need a WHAT? How could they possibly need a gastroenterologist? Do they know what one is? And, excuse my ignorance, but where is Samoa?

Our next task was to explain to our incredulous children that we were taking them away from an extremely comfortable, well-padded existence to a life of what sounded to them suspiciously like abject poverty – no TV, no video, no icecream – for no sensible reason at all, as far as they could fathom. Our son decided he would go as long as there was a reef around the whole island and absolutely no possibility of sharks.

Their attitudes changed considerably after our AVA briefing, where we met other volunteers and children also about to leave for some of the most remote places on earth. Without realising it we were transformed into resourceful, flexible, culturally sensitive, yet tough Non-Government Organisation volunteers, ready to grasp any challenges ahead. The only problem was they didn't mention things like rats on our bed, ferocious dogs in the village and centipedes in the toilet. However, we did become acclimatised to all these things and developed strategies – traps for the rats, sticks for the dogs and a shovel to bisect the centipedes.

Samoa did in fact need some help with gastroenterological problems, as peptic ulcer is one of their top ten causes of morbidity and mortality. When I arrived, the concept of helicobacter had not hit the country's doctors (who have virtually no access to continuing education, not even drug company literature!). All abdominal pain was investigated by poor quality barium meal, and any ulcers were treated with long term ranitidine (made in India) and antacid, at relatively enormous cost to the country. The hospital in Apia had been donated an endoscope several years previously by the British government, in commemoration of the death in Samoa of Robert Louis Stevenson, but it had never been used. So we set up an endoscopy service, including a disinfection procedure based on Australian standards. We then proved what one might suspect – that almost all chronic abdominal pain is due to peptic ulcer, and that all ulcers are due to H Pylori. There is a very high incidence of H Pylori-associated gastric cancer (carcinoma and lymphoma), but almost all can be suspected clinically by weight loss or anemia (hemoglobin below the population mean of about ten). It was harder to find a regimen to treat the H Pylori, until we could persuade the pharmacy to buy in bismuth and combined that with Indian amoxicillin and metronidazole. Unfortunately the country cannot afford a proton pump inhibitor, but our regimen was cheap and effective. We began to treat all abdominal pain without warning symptoms with a one week course of triple therapy, and would only 'scope if symptoms didn't resolve. This has saved Samoa a great deal of money, and will continue to do so in the future. When I left I had trained two doctors in endoscopy and a team of nurses in disinfection. The service continues to be busy, and one of the Samoan endoscopists has visited our unit in Melbourne for a 'finishing course'.

I also spent time helping with general medicine. Within two or three weeks I felt reasonably confident diagnosing local diseases. Treatment was easy as we had so few drugs available, and most were ones I used when I was a medical registrar fifteen years ago (remember Aldomet and Moduretic?). My fears about not knowing about every latest ACE inhibitor were unnecessary – we only had captopril. TB was easy too – start Category 1, and if that didn't work use Category 2. I must say I missed quite a few unfamiliar diagnoses initially – e.g. ciguatera and other



Katrina Watson (left) and nurse Tiomai in Emergency department

varieties of fish poisoning, or the protean presentations of typhoid fever. I managed to learn some Samoan, which was invaluable as most poor people speak no English. However I missed out on some idioms e.g. when a patient told me he had stopped smoking on 'le tolu mai' (the third of May), I congratulated him, only to hear the nurses laughing . . . the 'third of May' is idiomatic for 'never'. If you did something on the third of May, you never did it.

Of course I took some time to get used to the local hospital culture. The doctors' choir was a very important part of hospital life – not only was it compulsory to be in the choir, but all hospital meetings and ward rounds were cancelled when an important performance was coming up. The main fear was that the nurses' choir would take over if we didn't perform to standard. As in most third world hospitals, families sleep in the hospital under the patient's bed. It initially gave me a start to feel someone stroking my ankles encouragingly when I was putting in an IV at 2 am! In an arrest situation in the ward, the whole extended family surrounds the bed, falling over the patient, wailing and kissing them as you are trying to attempt resuscitation, and insisting that you continue for hours after the pupils are fixed and dilated. I never quite got the hang of being able to start suggesting that we might stop. At other times, serious illness, even if treatable, is seen as the will of God, and so children with meningitis or pneumonia may be taken home without treatment. This was extremely distressing to me at times. It was also hard to come to terms with some of the more literal aspects of hospital 'culture', often due to the lack of soap, towels or even, in some wards, running water.

In Polynesian culture belongings are shared rather than possessed by individuals. This, of course, acts as a form of social welfare. It is a laudable concept, but I felt differently after I had had a T-shirt taken from my day pack at a beach one weekend. Some weeks later a patient came to see me with what looked like my T-shirt on. I even examined her chest so that I could check the label on the T-shirt! It transpired that she came from the village where my shirt was stolen, so perhaps one of her cousins had taken it from me and then shared it with her. I didn't reclaim it as she had scabies, and this was early in my

time there when I thought I could avoid scabies. As it turned out, our family experienced first-hand a pot-pourri of infestations, including not only scabies, but also lice and a variety of worms. Our low was when we all had Dengue.

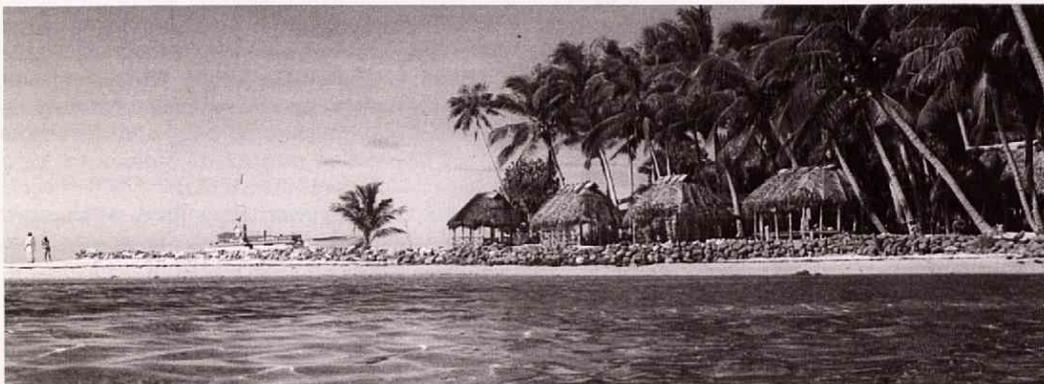
Our children found that there are alternatives to TV and video – like playing rugby with coconuts, or weaving plates from coconut branches, or fishing in a lagoon. They certainly had their complaints and their times when they 'lost it'. One of the hardest things for them to come to terms with was our place in society there. We weren't part of Samoan culture – after all who was our aiga (family)? Nor were we part of the wealthy expat. set. No, we were just poor volunteers, a sort of a no-man's land. But I think they have realised, now they are back in Melbourne, that they have lived in another culture and learned to value it, and to accept what seems quite foreign or even wrong – and that this is a skill which some of their friends don't have. We hope, perhaps in vain, that they learned from some of the wonderful Samoan attributes: the sharing of resources, their confidence and faith, their pride in family and culture, their ability to laugh in situations of great hardship.

Much of this now seems in the distant past, although we have only been back in Australia for nine months. We have survived, as have our children. There is only one major negative to the whole experience, and that is that going away does NOT 'get it out of your system'. I think we both felt, naively, that we would come home and be able to cross it off life's little list and get on with a more traditional version of 'middle age'. But no, it's not like that . . . this sort of experience sows a little seed which starts to grow . . . and don't tell our children, but we do want to do it again.

We would highly recommend the Australian Volunteers' Abroad organisation as a way to volunteer for work overseas. The placement opportunities, and support and training given to individuals and families, are most impressive. Those interested can contact the Overseas Service Bureau at: 71 Argyle St (PO Box 350), Fitzroy, Vic, 3065 Email: HYPERLINKmailto:osb@osb.org.au osb@osb.org.au. Tel: 03 9279 1788, Fax: 03 9419 4280.



The colourful and well ventilated hospital wards



Samoan beach sales



Millie, after a night in a beach sale

THE BROWNLESS BIOMEDICAL LIBRARY

Dorothea Rowse



THE BROWNLESS MEDICAL LIBRARY, successor to the Medical School Library, took on a new identity in 1998, when a number of small life sciences branch libraries closed down and were amalgamated into one library within the Brownless building. In 1991 University Council approved the recommendations of the Sheehan Review which proposed that a range of small single school-based libraries be amalgamated into two clusters – the life sciences and physical sciences satellite libraries. It has taken a while for the funding for the new or extended buildings to become available. However, in 1998 funds were provided for phase one of the extensions to the Brownless.

The branches which amalgamated with the Brownless in this phase included Botany, Zoology, Genetics and Dental Science. The integration of the collections has been received with a mixture of horror and delight. Researchers and students in areas such as genetics, cell biology, and reproduction to name but a few have been very pleased that *'their'* collections are finally in one place instead of three or four. Researchers in more discrete areas of botany or zoology are finding the scattering of their collections in a larger library less congenial.

Some of the advantages of the amalgamation include:

- the integration of like collections
- the reduction in duplication of stock
- much better opening hours access than was provided in the small branches
- potential for a better provision of information technology equipment than was possible in the various small sites
- potential for better study and discussion space.

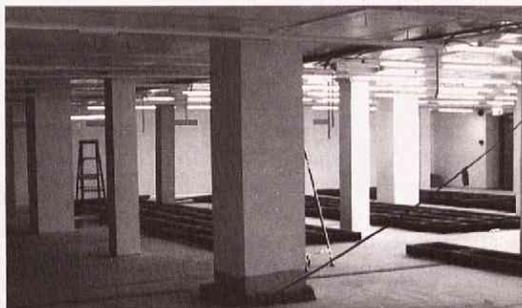
The building extensions funded in phase one include a new basement level, a fire rated wall enclosing the staircase, and enlarged and renovated toilet facilities on the first floor. The basement level occupies a space that was formerly a mass of building rubble, shadows, cabling and feral cats, strangely lit by a couple of lights. About a quarter of the total area had always been accessible and housed the air

conditioning plant. I was amazed at the waste in the rest of the space when I arrived in 1990.

Creating the attractive, bright, high-density storage area which has emerged from the gloom after eight months of labour was not easy. A portion of the front wall was removed and the excavation under the building commenced. Memorable crises included the discovery of 'rock' in one area which required the application of jackhammers for about three weeks to remove it; the accidental severing of a major power cable which took out a third of the power supply and sent water pouring out through power conduits; and the actual move of the books and journals.

It will take a while until the library has recovered from this disruption and everything is finally in place and easily accessible. Users have settled into the new spaces with a good grace and are using the collections with immense enthusiasm, the longer opening hours being a particular attraction for botany and zoology students. Phase two of the project is listed for 2002, funds being available. The two additional floors on top of the building will provide vital space for study areas, carrels for individual study, areas for group discussion/instruction etc. The ground floor will be remodelled at the same time, and we hope to bring the Medical History Museum down to the ground floor where it will be much more accessible.

Alumni wishing to have a tour of the new facility are most welcome to contact me on (+61 3) 9344 5717.



Building work in the basement of the Brownless Biomedical Library

Music' Medicine Conference

THE SEVENTH International Music Medicine Conference and twenty-fourth Annual Conference of the Australian Music Therapy Association was jointly hosted by the Faculty of Music and the Faculty of Medicine, Dentistry and Health Sciences in July 1998. This event followed the 1997 Beethoven collaborative lecture and performance by the two faculties, and was the first event in the Pacific region to address the interface of music in medical settings. It attracted 270 delegates.

The International Society for Music Medicine was formed in 1982 and has held previous conferences in Europe and the USA. This conference in Melbourne provided a forum for the presentation of Australian papers from the fields of medicine, psychology and music therapy.

The conference program comprised several areas of specialised research: music and neonatal care; music adjunctive to medical treatment (in Parkinson's disease, coronary conditions and stress related disorders); music therapy in psychiatry, in palliative care, and with children and adolescents with intellectual disabilities and emotional disorders.

Keynote addresses were provided by Professor Tess Cramond (Royal Brisbane Hospital Anaesthesiology department), Dr Lorna Lloyd-Green (Melbourne), Dr Rosalie Rebollo Pratt (Brigham Young University, Utah, USA) and Professor Anthony Wigram (University of Aalborg, Denmark). Of the forty presentations, half were from Australians and half from speakers representing eleven other countries.

One of the emerging themes from the conference papers was the need for researchers to specify the parameters of the music used in their studies, so that future research may better replicate test conditions. One area of research in which the music parameters are clearly defined is in neonatal care. The data indicate that music provides an auditory environment in which stress is reduced for the neonate, thereby conserving the energy needed for growth. Neonates in a music environment gain weight faster than those in a non-music environment. In one study, singing voices of either male or female were found more effective in weight gain than male or female speaking voices, suggesting

that the old-fashioned lullaby has a place in the care of babies at risk.

A study of music in the treatment of Parkinson's disease in Japan showed significant gains in the rehabilitation of gait rhythm and range of mobility, and research at the Sportkrankenhaus in Leudenschied Germany, showed that the adjunctive use of music before and after surgery contributed to shorter hospital stay (n=1060).

In the neurocognitive field, one paper reported high levels of reliability in the qEEG responses of trained musicians and revealed widely distributed functional cooperation between many cortical regions during a music task. Another study reported psychophysiological correlations between the EEG, imagery and changing intensity of musical events, and a workshop examined current neuropsychological modelling of amusias and introduced a new and precise quantitative model.

Music therapy in palliative care was shown to benefit patients in managing the emotional and physical components of pain, and music which is meaningful to the patient may enhance the family's ability to cope with the impending death.

Songs created and performed live at the Conference by people with psychiatric disorders illustrated and described the process of living with a psychiatric disability. A central theme of these songs was the support of peers.

In the area of music therapy and intellectual disability, music was shown to be a significant mode of assessment for non-verbal communication and responsiveness. Children with severe intellectual and physical disabilities were shown (via video presentations) to be activated by music so that a more comprehensive assessment of response could be made.

The book of abstracts is available for purchase, and a publication of the conference papers will be produced by the Faculty of Music. Further information about the conference, the International Society for Music Medicine and research in the area can be provided by Denise Erdonmez Grocke, Senior Lecturer in Music Therapy, Faculty of Music, The University of Melbourne, Parkville, Vic, 3052, telephone +61 3 9344 5259.

Denise Erdonmez Grocke

A VENOMOUS LIFE

by **Struan Sutherland**

Hyland House, 1998 Sbk pp 368, illustrated, appendix, index rrp \$29.95

Take a Bendigo boy, a University of Melbourne medical graduate (MB BS 1960), expose him to four years service on the *HMAS Voyager* and *HMAS Melbourne*, then give him a job at the Commonwealth Serum Laboratories (CSL), and in 1967, founding the Immunology Research Department. These events are covered in the highly readable first half of the book that sets the scene for Struan Sutherland's remarkable struggle to develop the first effective antivenom towards the deadly Sydney Funnel-Web spider. This discovery, together with the novel pressure immobilisation technique for snake and spider bites, and his snake venom detection kit, are three outstanding contributions Struan made before 1980.

While the former director of CSL, Bill Lane, called Struan 'a talented amateur', this entertaining autobiography is jam-packed with facts, anecdotes, short stories and self-effacing comment from a truly remarkable man. The second half of the book covers his last thirty years as a research scientist with, as Jock Frew volunteered, 'a certain prima donna quality'. The section dealing with his famous discoveries starts with a growing list of cases of the funnel-web victims in the 1970s where they died with violent muscle spasms. These events brought much political pressure on CSL to find a cure for the deadly male Sydney funnel-web spider. The remarkable events surrounding the development of the first antivenom, batch 002 – the loss of venom binding to glassware; the fact that laboratory rabbits, rats and mice were insensitive to the venom and finally, the only test that really counts – saving the life of Gordon Wheatley, bitten by a Sydney funnel-web spider on 1 February 1981, are compelling reading. In typical Struan 'matter-of-fact' style he recalls the Royal North Shore attending physician Malcolm Fisher ringing Struan to say 'I've given him three ampoules of antivenom, it hasn't killed him but it hasn't done him any bloody good either' to which Struan replied 'give him another dose'. Thirty minutes later Fisher telephoned again and said 'Struan, you've just ruined a beautiful bloody syndrome'. From the start, in 1967, Struan had to seek permission to spend a month or so investigating the Sydney funnel-web spider against sceptical 'colleagues' who had invested considerable but fruitless

effort over many years.

There are many important lessons for young scientists in the book – making do with obsolete equipment, having a go, hard work, safety issues, the strength in collaboration (especially the talent Struan found in the 'Parkville strip' such as Jim Tibballs at the Royal Children's Hospital), the importance of communicating his work and advice not only to practising physicians but to the wider community, and recognising his foibles and his fame with humility.

In his book, Struan deals at great length with his clashes with bureaucracy at CSL. This says much about his 'healthy' distaste for directors when he believed his venom research was not being supported. The last section of the book relates to his leaving CSL to set up the Australian Venom Research Unit (AVRU) in the Department of Pharmacology at the University of Melbourne in mid 1994. He is immensely proud of his new venture and of training the next generation of doctors to ensure his legacy endures.

This autobiography is extraordinary in its detail, possible only because of Struan's meticulous note-taking (like Sir John Monash) over a lifetime. Some readers may be startled by the writer's directness and, by necessity, his version of the many personal clashes he recalls, but I believe Struan also presents us with a personal account of medical research in Melbourne over the 1960s-1980s and a remarkable series of achievements in venom research. Australia claims thirteen out of the top thirty most venomous snakes in the world, thus, Struan's pioneering contributions and resolute focus on venom research have ensured that he is the unsung hero of Australians who owe their lives to his and others' work at CSL.

This book is also a challenge to all research directors who have a responsibility to manage scarce resources, foster a creative environment for discovery and development, and who must apply a fair dose of 'generous spirit' to manage creative minds in a collegiate atmosphere. Scientists are naturally suspicious of 'administrators' and one wonders at the end of this book what 'might have been' if Struan had not expended so much angst defending his work. On balance, this work is a triumph for setting the record of modern venom research in Australia and the reader is indeed privileged to share the personal highs and lows of the life and work of this pioneer who has made Australia a safer place to enjoy.

*James A Angus
Head of Department
Department of Pharmacology*

CABRINI – A HOSPITAL'S JOURNEY, 1948-1998

by **Gwynedd Hunter-Payne**

The Helicon Press Pty Ltd, Sydney, 1998 Sbk, pp 222, appendices, abbreviations, notes, bibliography, index Available for \$20 plus \$4.60 postage and handling from Cabrini Hospital-History, 183 Wattleree Road, Malvern, Vic, 3144.

This is a fine history of the first half century of the St Frances Xavier Cabrini Hospital in Malvern. It will give great pleasure to those who have worked in the hospital or who have been close to its community. Certainly it is written primarily for the 'Cabrini family', but Gwynedd Hunter-Payne is too good an historian to limit its scope and relevance to such a small constituency.

Cabrini is significant on a number of grounds. It is Australia's largest private hospital, but it is also the private hospital that most approximates in focus and expertise to a public teaching hospital. The prospect of its becoming a teaching hospital for the planned new medical school at Monash University was mooted first in 1960, and realised finally in 1977 when the Professor Rod Andrew became Director of Medical Education at Cabrini, the first such position in a private hospital.

Cabrini is also distinctive because it was the first hospital run by an order of non-English-speaking Catholic nuns, and the cultural differences between the founding sisters and their Irish-Australian hosts are sensitively handled. But if the Sisters' mission was to be to the new generation of European migrants, they soon discovered that they were on the wrong side of the Yarra to be a migrants' hospital. The Italian community, however, provided funds and moral support, and if the nuns found that many of their patients were well-heeled Protestants from the Eastern suburbs, that original mission was never forgotten.

Perhaps the most impressive part of this history is the story it tells of the revolutions in clinical medicine and hospital care that have taken place in the past mere fifty years. Half a century is not a long piece of historical time, but the surgery and techniques and technologies of 1998 seem light years away from the 1940s. With those advances came an exponential rise in costs and institutional complexity and Hunter-Payne, who has a health professional's understanding of how clinical medicine and hospitals work, has

produced a classic account of a crucial epoch in the history of medicine as seen in a particular setting. It is an outstanding administrative history.

This has not been an easy history to write. Nuns and doctors are notorious for being too busy to keep the records historians want, but Hunter-Payne's skill as an interviewer and general historian have combined to triumph despite scarcity.

Janet McCalman
Centre for the Study of Health
and Society

IMAGES OF PANCH

The Life of a Hospital

by Kenneth Brearley

Published by K Brearley, 1997
Hbk, pp 190, illustrated
Available by forwarding a cheque for \$25 made payable to 'The Northern Hospital Publicity Office' to The Northern Hospital, 185 Cooper Street, Epping, Vic, 3076.

This history of the short, but busy, life of the Preston and Northcote Community Hospital (PANCH) has been written by Ken Brearley, one of the three surgeons appointed to the staff of the newly opened Hospital in 1960. Ken Brearley was actively involved with the Hospital's affairs until its closure in February of 1998 and this 190 page volume is 'chock-a-block' with photographs that really capture the essence of the people who made PANCH what it was.

In some ways the first four chapters are the most fascinating, as it is these which document the trials, tribulations and anguish that preceded the Hospital being opened by the then Premier of Victoria, Mr Henry Bolte. It is sadly ironic that PANCH, which in so many ways reflected the endeavours of the people of Preston and Northcote, should be closed at the very time that this group was ageing and in increasing need of the very hospital they had dreamed of, raising the funds necessary for its construction by rattling cans, knitting baby clothes and holding raffles.

There is a wonderful anecdote regarding the decision to design a coat-of-arms for the Hospital: an approach was made to the College of Heralds in London to research and design such a coat-of-arms. Progress was evidently very slow so that one of the Hospital board members visited the College of Heralds in London to encourage them in their endeavours, only to be informed that 'the design they were producing for PANCH would still be in use in some 500 years time'. Sadly the way of the world in the nineties has seen the disappearance of PANCH a mere thirty-nine years after its completion.

Needless to say, in the fifty-five years that have elapsed since PANCH was conceived, many people indeed have been involved in its short, and oftentimes colourful, history. The many groups of people who made up the PANCH family – medical, nursing, allied health, administration, support services and the never to be forgotten fundraising auxiliaries – are all generously dealt with through the eighteen chapters of this splendid volume. Ken Brearley, having been a foundation surgeon, obviously knew personally a very high percentage of the people whose stories have been recounted. It is for this reason that I am sure the book will be attractive to many graduates of the University of Melbourne Medical School. Not only did PANCH employ its own medical staff but it also had visits from students of the St Vincent's Hospital Clinical School and many young doctors from the Royal Melbourne, St Vincent's, Austin, Repatriation and Royal Children's hospitals were rotated through PANCH over the years. It is fascinating to read of some of the nation's high flyers who spent early days at this community hospital in the northern suburbs.

This book contains a number of humorous anecdotes and is full of the personalities who made up health delivery to the northern suburbs in the second half of this century. It is a terrific buy for alumni of many year groups who will have had contact with this hospital that has now, sadly, 'deceased'.

No PANCH alumnus should be without a copy!

Trivia question: What is so special about the cream bricks that were used in the construction of parts of PANCH? Answer: they are Glen Iris bricks marked with '1956' and the 'Olympic Rings'.

Hamish Ewing
Associate Professor of Surgery
The Northern Hospital (formerly of
PANCH)

JAMES PARKINSON, 1755-1824

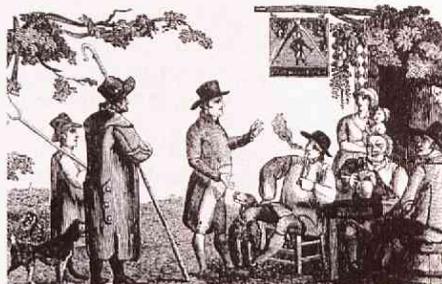
From Apothecary to General
Practitioner
edited by Shirley Roberts

Royal Society of Medicine Press, 1997
Hbk, pp 128, table of events, illustrated,
index, bibliography, references
The Eponymists in Medicine Series
Available from Hoddle, Doyle & Meadows,
Station Road, Linton, Cambs, CB1 8PG. Tel:
(+44 0) 1223 893 855. Fax: (+44 0) 1223
893 852. £19.95

This is the fourth biography which Shirley Roberts has published. Her first, a biography of Charles Hotham was

published by Melbourne University Press in 1985. Her second, *Sir James Paget – The Rise of Clinical Surgery* was published by the RSM in 1989 and her third, a life of Sophia Jex Blake was published by Routledge in 1993. The last two have been reviewed in *Chiron*. This book is again one of the RSM series 'Eponymists in Medicine'.

This book is immediately attractive because of the dust wrapper which depicts 'The Villagers' Friend and Physician'. The analogy is particularly appropriate because it attempts to portray Parkinson as he might have been known by his patients. No known portrait of James Parkinson has been found.



Frontispiece of *The Villagers' Friend and Physician*
(Archives Centre, Royal London Hospital)

The writing is crisp and the nine chapters cover Parkinson's life in a chronological fashion, but the book starts with a Table of Events which sets his life in sequence linked with social and political events.

James Parkinson was the son of a doctor and his own son also followed in his father's footsteps. Much of his life was spent as a family doctor or as Parish Medical Officer. However, he was a political reformer because in his practice he saw the dire effects of the industrial revolution on many of his poverty stricken patients, who had no say in the election of those who governed them.

He was also a keen oryctologist – he took a special interest in fossils – to us a palaeontologist or geologist. Many medical men of that time had similar interests, but Parkinson excelled in his studies and wrote two successful books: *Organic Remains of a Former World* and *Outlines of Oryctology*.

He was proficient in shorthand and in this way recorded verbatim John Hunter's lectures of 1785 which he later transcribed. These have been printed, but the handwritten copy is in the Archive Centre of the Royal London Hospital. Part of this is printed on page 19 and includes John Hunter's preliminary remarks which are usually omitted. John Hunter, as usual, was bluntly honest:

It is usual at the beginning of a course of lectures to give an introductory one, as it is termed, & this often with a view to shew the Oratory of the lecturer, but this is not my plan. I do not give lectures to make

myself known nor for the sake of money, as I am certain I could gain more by attending to my Business. However as I conceive myself in some measure indebted to the Public I am willing to make what return I can & therefore shall communicate what I know.

In 1817 Parkinson published *An Essay on the Shaking Palsy* and fascinating excerpts from this are included on pages 102-106. This classic description certainly deserves eponymous fame, but it was not until 1887 that Charcot named it Parkinson's Disease.

In 1802, the Royal College of Surgeons established its Honorary Gold Medal to be awarded for 'liberal acts or distinguished labours, researches or discoveries eminently conducive to the improvement of natural knowledge and of the healing art'. No award was made for twenty years. In 1822 the College decided to award the first gold medal to James Parkinson for his contributions to 'natural knowledge' for his work and publications on fossils. In his later years he was often mentioned as 'Mr Parkinson the oryctologist' instead of 'Mr Parkinson the surgeon apothecary'.

I enjoyed reading this biography of a likeable, useful man and congratulate Shirley Roberts on another fine biography.

Harold Attwood

LAW AND MEDICAL PRACTICE

Rights, Duties, Claims and Defences

by Loane Skene

Butterworths, 1998

Sbk, pp 299, appendices, bibliography
rrp \$54

Professor Loane Skene is currently an Associate Professor in Law at the University of Melbourne and teaches law to undergraduate medical students as well as medical practitioners undertaking postgraduate studies. This, her latest book, is stated as being intended for both lawyers and non-lawyers. As she notes in her introduction:

One of the aims of the book is to draw attention to the legal categorisation of the doctor-patient relationship and the effect that that may have on patients' rights and doctors' duties, especially when these come before the courts in litigation or prosecution.

The text is well structured and uses plain language for those without specialist knowledge in this area. It will be a useful general reference for lawyers advising medical practitioners and organisations, but, due to its general nature, it will be of most use to medical

practitioners themselves. The primary focus of the book is the civil and criminal law concerning medical professionals in day-to-day practice. In this respect, when compared to other health law reference materials, it is unique.

The text presents the law in a social, ethical and practical context as it applies to medical practitioners in their every day work, illustrating situations which may well arise through use of examples largely based on the Victorian State health system. It articulates, in a clear and well researched fashion, the key duties of doctors and how the law would view certain situations in light of these duties.

It is clear from her writing that Professor Skene is aware of the gulf that frequently exists between the medical and legal professions. This text should assist medical students in understanding the nature of the law as it relates to medical practice in an interesting and relevant fashion.

Craig Glenroy Patterson BA/LLB
Director of Policy
Royal Australasian College of
Physicians, Sydney

PANSY

A Life of Roy Douglas Wright by Peter McPhee

Melbourne University Press, July 1999
Hbk, pp 352, illustrated, index
rrp \$44.95

I am privileged to get a final draft of Peter McPhee's soon to be published biography of 'Pansy' Wright and encourage all who knew Pansy to buy a copy as soon as it becomes available. Peter McPhee has written a fascinating biography which, I believe, could become one of the great Australian medical biographies.

The list of Chapters gives a good summary:

1. A bright country boy, 1907-1924
2. The making of a scientist, 1925-1939
3. The making of a public intellectual, 1939-1945
4. Reconstructing the academy, 1945-1954
5. Orr and the politics of the personal, 1955-1964
6. Difficult transitions, 1964-1975
7. Epilogue

The narrative flows easily throughout and the reader, constantly interested, turns the pages eagerly. Not only are Pansy's academic and scientific careers covered, but his personal relationships and his poetry writing.

He was the ninth born in a family of ten in the small town of Ulverstone in

Tasmania. His mother, Emma, was a 'no nonsense' woman who raised ten children and worked on the farm. It is possible she preferred his elder brother, Reg, because he was always neat and tidy whereas Roy was a bit scruffy. Her comment to him 'you're not a very lovable sort, but you're pretty bright' – was a very shrewd assessment.

Roy's father, John, was a farmer and lay preacher who read the bible to his family at night. Roy retained a remarkable memory of these readings and later could send a cleric running to his concordance with just a quotation. Roy started in a bush school and ended as the senior executive of an electronically linked institution with 30 000 students and a budget of several hundred million dollars.

A good CV and a record of Roy's many prizes and awards is given. This gifted young lad took up medicine because of his early interest in biology – 'I knew every animal within a mile and how to handle them'. Roy won a residential scholarship to Queen's College, University of Melbourne, and introduced himself, in his already gravelly voice 'I'm Roy Wright from Tasmania'. Later he topped the medical graduands and started a residency at the Melbourne Hospital.

A detailed account of the Orr case is given in which Roy defended Orr and his brother Reg, was the advocate for the University of Tasmania. Sydney Sparkes Orr, Professor of Philosophy, had been accused of seducing one of his students. Orr offered to resign but the University did not accept and sacked him. The arguments on both sides are given: Roy Wright was influential in getting Orr a settlement on condition that he would drop legal action. Orr turned against Wright despite getting some £10 000 from him over eight years.

Roy's two marriages are dealt with sympathetically. It is certain that he found it difficult to relate to his children, Douglas and Judy, from his first marriage to Judy Bell, and that he became disparaging of her. They were later divorced which caused Judy much anguish.

In 1936, Roy went to Oxford on the invitation of Professor Howard Florey. From Oxford, he applied for the Chair of Physiology at Melbourne. Florey and other British referees were vital in the success of his application. He headed a tiny department with a small staff, but successfully applied for money to increase staff, laboratory space and scientific journals. His lectures puzzled and stimulated the students, but sent them chasing original articles: the students and librarians became busier.

In 1941, Roy employed a new secretary – nineteen year old Meriel

Wilmot – intelligent, bright and pretty. A long and successfully secret affair began which ended in marriage.

During the Second World War Roy became involved in many projects for the forces and was eventually given the rank of Lieutenant Colonel. He also built up long and cherished friendships with Alfred Conlon and Herbert Cole Coombs, 'Nugget' Coombs. After the War he was influential in establishing many institutions in Melbourne and Canberra. He remained a facilitator at the Howard Florey Institute in Melbourne until shortly before his death.

In January 1990, Meriel had a serious operation and Roy brought her home from hospital so that he could improve the standard of care. He cared for her for three weeks but on 28 February 1990, he died suddenly, at home, from a ruptured abdominal aneurysm.

Roy's brother Reg died two days later. They are buried alongside each other in Ulverstone Cemetery so, quipped a relative, that they can keep on arguing.

Harold Attwood

PRAGMATIC WOMEN AND BODY POLITICS

Edited by Margaret Lock and Patricia A Kaufert

Cambridge University Press, Cambridge, 1998

Sbk, pp 364

Cambridge Studies in Medical Anthropology Series
rrp \$39.95

This book is part of the Cambridge Studies in Medical Anthropology series and is edited by two renowned leaders in the field. However, it speaks to a much broader audience than just medical anthropologists and will appeal to those with an interest in women's health, the use of medical technologies and medical practices more generally.

The theme that links this collection of fourteen essays is women's pragmatic relationship with health technologies. Issues around women's health and technology have become the focus of increasing attention to many of us concerned with health care and practice. What this book offers is a discussion based on women's everyday responses and interactions with different health technologies. The book is not situated in abstract theory. Rather, it examines the circumstances of women's lives in countries all around the world and explores the complexity of women's responses to medical technologies.

Over the last two decades there has been considerable discussion of women's health and technology. This has

been a useful and necessary debate as we confront problems associated with the use of technologies such as IVF, breast cancer screening and hormone replacement therapy. However, much of this discussion has been positioned in one of two camps. The first of these assumes that in respect to health technology, women are passive victims of medical technologies and the processes of medicalisation. The second camp assumes the view of women as uniformly suspicious and resistant to technological interventions. Although these polar views have served to highlight important issues with respect to medicine and technology, they also limit the debate.

This book is a good resource for opening up the discussion on women's health and technology. Rather than occupying one or either of these opposing viewpoints, the essays argue that the dominant response of women to medicalisation is ambivalence coupled with pragmatism. The essays claim that women, particularly those living in difficult circumstances, have had to learn how to best use what is available to them. Women assess both benefits and costs with respect to medical technologies and base their decision in context of their individual social, economic and cultural circumstances.

The authors of the essays are predominantly medical anthropologists. Therefore the case studies are informed by ethnographic inquiries exploring local practices and local knowledge. This results in many rich and insightful stories. For example, through the writing of Janice Boddy, we are given the opportunity to witness childbirth in the Sudan. We are taken through the process of childbearing with an assisting midwife; the heat, the buzz of flies, and smell of carbolic soap are palpable. In contrast to this, Boddy leads us through the sterile and medicalised childbirth practices of Toronto. Despite obvious differences, Boddy questions the dualist versions of 'natural' childbirth in the Sudan and the medicalised process in Toronto. She argues that discussions around medicine and technology need to take into account local cultural and economic circumstances and the ways that these shape medical practices.

There is much attention devoted to the population 'crisis' in China and the establishment of the one-child quota by the Chinese Government. However, comparatively little attention is given to issues around infertility in China. Lisa Handwerker documents the complexities of being an infertile woman in China. In a culture where the Government attempts to control female reproduction, Handwerker argues that infertile women are often doubly or triply exiled within

their own culture; first as women, then as infertile women, and often as poor and ostracised women.

It would be misleading to suggest that this book only deals with issues of reproduction. Other dimensions of women's experience are included and provide a holistic portrait of women's health concerns. Other essays in the book explore what it means to be a mother of a child with Down's syndrome in Japan (Margaret Lock), the experiences of women with AIDS in Zaire are examined (Brooke Grundfest Schoepf) and Patricia Kaufert provides an interesting account of the various forms of resistance adopted by women in establishing the breast cancer movement in the United States.

In Australia and much of the western world, we have become accustomed to a discourse of choice in relation to health care and medical technology. This collection of essays serves as a useful reminder that the concept of choice is problematic. It forces us to ask what does choice mean when your reproduction is controlled by government intervention, or you live in grinding poverty in a country facing economic decline, or medical technology is your only hope of surviving breast cancer.

This book raises important issues about women's health and technology. Grounded in rich and contextualised case studies, it provides empirical resources on which we can debate issues of choice, power, and medicalisation of life processes. I recommend it to those interested in pursuing these topics as it provides an excellent starting point for further debate and discussion.

Marilys Guillemin

Centre for the Study of Health and Society

SEX AND SUFFERING

**Women's Health and a Women's Hospital
The Royal Women's Hospital,
Melbourne, 1856-1996**

by Janet McCalman

Melbourne University Press, 1998

*Hbk, pp 420, illustrated, appendices,
notes, bibliography, index*
rrp \$39.95

This is a well-written, well-crafted book that tells the history of a hospital which has served the women and children of this community for nearly 200 years. The author, Janet McCalman, is known for her books on social history and for her regular column in the *Age*. The meticulously researched material came from the rich archives of the Royal

Women's Hospital, including thousands of detailed case notes from 1850-1930. This may be the first time that a historian writing the history of a hospital has had access to clinical material. Janet has used the opportunity with tact and in consultation with Drs James Evans, James Smibert, the late Frank Forster and Mr A G Bond. Particularly graphic use has been made of fourteen case reports from Dr Hooper's Case Book, which are quoted in full.

The book has a striking dust wrapper giving the word 'Sex' in purple, broken letters. The harsh title is softened by a sub-title in white - 'Women's Health and a Women's Hospital'. The end papers show a delightful photograph of four new-born babes in 'swaddling clothes', which also appears on p266 with the caption 'Italy, Malta, Ceylon, Ireland, RWHA' - a good sample of the range of countries from which parents came. On every page a wide margin is used for relevant captions and notes relevant to that page so no footnotes are needed.



Italy, Malta, Ceylon, Ireland RWHA

The book is divided into seven sections: Tracy's Hospital 1856-1874; Sepsis and Antisepsis 1875-1902; Women and Doctors 1883-1913; Class Relations 1914-1931; 'Enormous Clinical Material' 1932-1960; Human Relations 1945-1970; and Transformations 1970-1996.

Instead of the usual hospital history, with much ado about management and budgets, this history is about the patients:

The hospital's history is also, therefore, the history of women-as mothers, as lovers, as citizens, as victims, as nurses and medical staff, even as prostitutes and drug addicts.

The tale starts on the first line of the Foreword:

On 22 January 1866 at two o'clock in the morning, Miss Bridget Kelly, aged twenty two and born in Ireland, delivered herself of a baby daughter in the Melbourne suburb of Prahran.

Bridget walked the four miles to the city and first went to the Melbourne Hospital, then eighteen years old and the wrong hospital for her. She had to go further up

the hill along Madeline Street to the Lying-in Hospital. When taken in she was found to have 'the infant in her hands with the *funis* - umbilical cord - and placenta attached'.

The first scene for the beginnings of the Women's Hospital set in this way, the story is summarised:

The hospital was born in 1856, in the dawn of anaesthesia, before the antiseptic and aseptic revolutions, and its story will conclude with AIDS and In-Vitro-Fertilisation . . .

The founders, Richard Tracy and John Maund believed that the special needs of women and children justified a different hospital: their belief has proved accurate. Admissions were to be based on medical and social needs and emergency cases always accepted. Melbourne's Lying-in Hospital was modelled more on the Rotunda Hospital in Dublin than on any local hospital.

The women were often dirty, drunken and diseased. At that time, only the exposed parts of their body were washed and for weeks on end they slept and worked in the same clothing. Underwear was rarely worn and some menstruated into their clothing.

Medical standards in the hospital were heavily influenced by the founders' training in Scotland and Simpson's legacy of *Obstetrical Science*. Their studies in Paris gave them an example of the use of statistical methods. In the *Australian Medical Journal* John Maund gave his analysis of the first hundred confinements in the hospital.

The mothers had comprised 52 Irish, 36 English and 12 born elsewhere. Only 16 were unmarried.

Sixty-five mothers were having their first babies, ninety-nine babies presented by the head and one a footling. The average labour was nine hours, the shortest one hour and the longest sixty-two hours. There was one set of twins and six babies were still-born. Of the live babies, forty-five were boys and forty were girls, and they averaged a weight of seven pounds, the smallest weighing five pounds and the largest eleven pounds. Forceps were applied three times with two live babies delivered. No deaths or severe injury to a mother were recorded. These recorded results started a clinical school.

Not surprisingly, within twenty-one years of its founding the Women's Hospital, with a university connection, was the leading specialist women's hospital in Australia.

I was particularly interested in Chapter 12, *Managing Differences 'Those Migrant Women'*. Janet describes the difficulties many migrants met and quotes a social historian 'much of the hostility aroused by New Australians in Old Australians came from finding themselves unable to cope with language

barriers and cultural differences'.

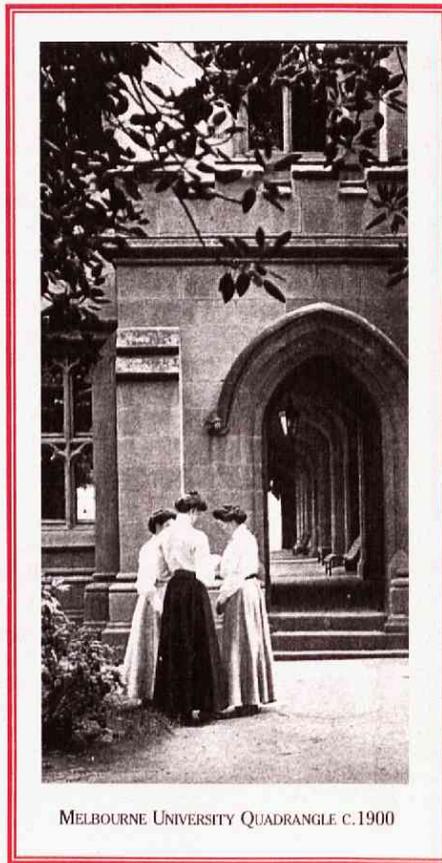
Many migrant women could not communicate with staff and lacked understanding of what was happening to them. Routine procedures on admission to have their baby were to be shaved, given an enema and a dose of castor oil. These hazards, difficult enough to take when their purpose could be explained, probably made some women think of a concentration camp. Moreover, in trying to get through to them, the staff would shout which only deepened their fear.

The food was not to their liking - no pasta, no oil, but many stews with soggy vegetables. Spouses helped by bringing in home-made meals when they visited. Understanding only developed when migrants joined the staff as cleaners or in the kitchen and the laundry.

Illustrations are many and memorable: p301, 'Proud mother with her fifteenth baby'; p360, the smiling IVF doctors holding the first IVF quadruplets and p367, a Hospital volunteer accompanied by a smiling antenatal patient striding out with 'all the pride of pregnancy'.

However, what readers of *Chiron* need is not my review, but a copy of this book. This is a wonderful history of an old and respected hospital. It is a good read and many medical students could find it useful before facing their examinations in O&G.

Harold Attwood



MELBOURNE UNIVERSITY QUADRANGLE C.1900

Exhibitions at the Medical History Museum

THE UNIVERSITY OF MELBOURNE MEDICAL HISTORY MUSEUM

2nd Floor, Brownless Biomedical Library (Gate 10 Grattan Street)

9am to 5pm, Monday to Friday 11 am to 5pm Saturdays during University semesters

LIVING OLD (THEN AND NOW)

An exhibition in conjunction with the UN International Year of Older Persons, 1999

Living Old (then and now) is an exhibition of photographs and artefacts which explores the changing historical experiences of ageing in Victoria over the last century. The exhibition is a collaborative effort between the Alma Unit for Women and Ageing, located at the Centre for the Study of Health and Society, and the Medical History Museum, to mark the UN International Year of Older Persons in 1999. The exhibition hopes to change community attitudes towards a positive outlook for older people and for all people as they contemplate ageing.

Living Old features the many different steps taken at different periods and in different places, to maintain health and activity in old age. These range from the local practices of particular groups and communities in relation to, for example, food and healing, through the development of government funded health and welfare services, to sophisticated technological devices such as those that assist with sight, hearing and mobility.

Living Old highlights advances in social policy and economic conditions, widespread home ownership, age pensions, universal health insurance, special housing and ethnic services as well as aids to assist deficiencies in

dentition and mobility, which have all contributed to the changing experiences of growing old.

The exhibition includes a virtual component and objects ranging from a representation of medical technologies assisting older people, to items that reflect their continuing social and cultural contribution to our society.

The exhibition will be launched on 31 May by the Minister for Health and Aged Care, The Hon Rob Knowles and a grant from VicHealth/Department of Human Services will make it possible to take the exhibition to metropolitan and regional venues. Living Old (then and now) is open to the public from 1 June 1999. For further details contact Lisl Bladin, on (+61 3) 9344 5719

*Susan Feldman
Director, Alma Unit
for Women and
Ageing*



Photograph courtesy
Department of Human
Services Victoria, Aged,
Community and Mental
Health Division

A CLOSED WORLD: THE ASYLUM SYSTEM IN VICTORIA, 1848 TO 1920

2 December 1998 to 7 May 1999

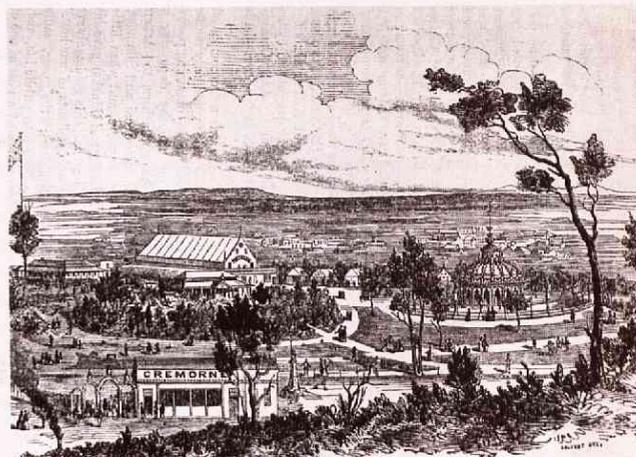
'A Closed World' explored the social history of the asylums for the 'insane' in Victoria from colonial times to the period following the First World War. It sought to comment on the range of historical documentary and material evidence available in the history of psychiatry, focusing on a number of themes, from the establishment of the asylum on the colonial landscape to daily life inside the institution, the 'watching' of patients and patient responses to the asylum, official inquiries and policies regarding the institution, 'new' kinds of patients (such as the intellectually disabled and returned servicemen) and the construction of patient populations. Some attention was given to medical treatments used in the asylums, such as restraint and physical therapies, and also to the 'moral' therapies made popular in both Britain and North America in the mid-nineteenth century.

With current policies and treatments regarding the mentally ill changing, efforts to represent the histories of the 'mad' are important. This exhibition focused on aspects of the patient experience, which is always fragmentary and elusive and visitors were encouraged to think about how this history, sometimes seen as dark and gloomy, has influenced contemporary debates about mental health care.

A key aspect of the exhibition was its attention to the documentary sources for this history of mental illness. Whilst not strictly 'objects', the (reproduction) documents showed that the inmate was captured in a web of writing from his or her apprehension until discharge from the

asylum (or death). This writing was the hallmark of a developing medical practice which continued into the twentieth century. In seeking to make these documents public, the exhibition revealed that this practice of writing about the patient (bodily detail, a life history amounting to a 'case history') can suggest much about the asylum and the lives of those within it.

*Cathy Coleborne
Department of History, La Trobe University*



CREMORNE GARDENS (SEE PRECEDING PAGE)

Cremorne was an early private asylum in Richmond. It catered for patients whose families could afford to pay for private care. Other private asylums opened after 1900 in Preston, Kew, Toorak, Frankston, Brighton and Camberwell. Photograph courtesy of Royal Park Mental Health Library Archival/Manuscript Collection



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