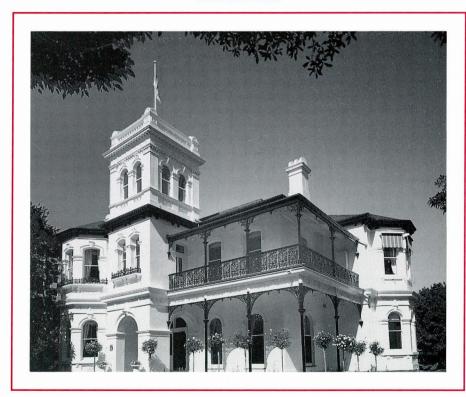


# AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

A.C.N. 055 042 852



'ULIMAROA' 630 ST KILDA ROAD, MELBOURNE, VICTORIA 3004

# BULLETIN

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#### **EDITORIAL**

Mrs J.M. Sheales, *Editor* Prof. J.M. Gibbs Dr I. Rechtman

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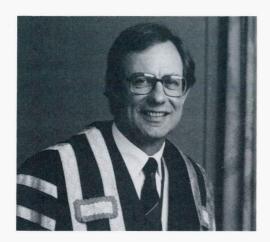
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## President's Message



The June Council Meeting was the first to be held at Ulimaroa. Perhaps it was this great environment or the inspiration of working in our own building that resulted in considerable productivity by the Council. A number of major initiatives were finalised.

Firstly, our Maintenance of Standards Programme was approved. This Programme was completed after extensive consultation with the Fellowship and many interested organisations. It was a long and exhaustive process but has resulted in one of the better programmes of this type to become available in our specialty. Congratulations to Professor Garry Phillips for his persistence and hard work. Fellows will be able to commence this process in 1995 and I hope that it will prove to be effective. Professor Phillips was also able to complete two other major initiatives. The Guidelines on providing information about Anaesthesia were approved. The Fellows should find this document very useful to assist them in ensuring that their patients have a better understanding of our specialty. Council also supported the publication of One Grand Chain (History of Anaesthesia 1847-1934) which is currently being completed by Dr Gwen Wilson.

Professor John Gibbs was also able to complete some significant initiatives, the In-Training Assessment of Anaesthetic Trainees was completed, and Council agreed to the further development of a Post-Fellowship Certification in Chronic Pain. The Trainee Assessment should improve the dialogue between supervisory staff and the Trainee in order to ensure that problems can be addressed earlier in the Training Scheme.

Council also agreed to a number of initiatives to improve our public relations. We have appointed a Media Consultant to advise the College in this area and the first initiative is to assess our communication with Fellows. A Questionnaire is included with this *Bulletin* which I would ask you to consider carefully, complete and return it as soon as possible.

The College has been involved with considerable exposure in the media recently. Our ASM in Launceston generated the most media exposure in our history and was generally very positive. Recently our spokesmen have had to comment in the press and on television about awareness and Hepatitis C transmission. These problems were handled in the most professional way by Brian Horan and Dennis Kerr. It is hoped that by improving our public relations, we can develop a more positive image within the community.

The recent cases of alleged transmission of Hepatitis C via the anaesthetic circuit has raised a lot of concern about appropriate practice for sterility of anaesthetic equipment. The Council resolved to develop a policy on Infection Control in Anaesthesia, however this may take several months, though it is hoped to be completed by October. Meanwhile, it would be prudent for all Anaesthetists to review their practice in this area.

Finally, I would like to congratulate Dr Geoff Clarke on his election as the first Dean of the Faculty of Intensive Care. The new Board has already been very active in a reappraisal of the role of the Faculty in the specialty of Intensive Care.

> MICHAEL DAVIES President

Bulletin

### Homily delivered by Father David Johnson during the Ecumenical Service held in St Paul's Chapel, Launceston General Hospital, during the Annual Scientific Meeting

"Give me somewhere to stand and I will move the earth", said Archimedes.

In today's world of bewildering court judgements, incredible compensation awards, kangaroo court tribunals, lunatic clamouring for "rights", and a host of dubious health practitioners claiming professional status, physicians might well echo Archimedes and ask just where they can stand with some kind of certainty in this chaos.

"Honour the physician with the honour due him, according to your need of him, for the Lord created him".

Here is the Archimedean point for physicians, their profession is of divine institution. Sirach states this in the most matter-of-fact way and gives it further emphasis by saying "Give the physician his place, for the Lord created him".

Physicians then have no need to stand on the shifting sands of public opinion, nor the arrogant pronouncements of governmental and media gurus, nor the weird dictums of the ragbag of humanist philosophers who make such ponderous statements on matters of medical ethics.

They can stand with confidence upon the rock of Divine institution. Here indeed is ground upon which to stand. The right place to begin is with God, not people.

Luther, debating with Erasmus over a matter, suddenly realised that Erasmus, child of the Renaissance that he was, was arguing from man to God. He was beginning with man, not God.

The brilliant but impetuous Luther snapped, "You are not religious!" And in this instance he was right. "In the beginning God . . ." is a sound first principle.

So the physicians can feel confident in the ultimate origin of their profession. This is a necessity in today's world of knockers and tall poppy loppers. But to stand on the Divine rock is to incur a heavy responsibility. The responsibility is to promote and support good health care practice and policy, and to oppose fearlessly all that is contrary to it.

One side of this is in one's own method and practice, the private side if you like.

There will always be eccentrics and difficult people of one sort or another in every profession, and I certainly include my own in this! But my observations over the last 20 years in this hospital lead me to believe that physicians are among the most responsible of the professions in the exercise of their duties.

It is the public side of the responsibility which needs looking at today.

"If the trumpet gives an uncertain sound, who shall prepare himself to the battle?"

The general public needs the guidance of physicians in this confusing world where all kinds of dubious practitioners make claims to being health professionals.

There is a need for clear, authoritative and well publicised guidance from your professional bodies on these matters. A few days ago, the ABC ran a programme on "alternative" health care. One staggering fact put forward was that in America more people go to such practitioners than go to doctors.

Now, I know it could be said that many of these patients have little or nothing wrong with them, but when one alternative practitioner being interviewed claimed to be able to cure cancer, cancer of the stomach as I remember, then we must realise that some very sick people are spending the little money they have on what is at best quackery, and at worst fraud. Surely this is cause for concern?

Think of the endless rigours in training and qualifying that you have to undergo before you are allowed to practise. This is to safeguard the public.

Yet anyone can hang out their shingle and practise as a counsellor, be known as a "therapist", and charge any fee they like. They can do incredible harm, for instance, when I discussed clinical depression with one of these therapists I was informed that such a condition did not exist, it was an invention of the psychiatrists. I was appalled at not only the manifest stupidity of such a statement, but also its callousness.

Dear old William James in his Gifford Lectures "The Varieties of Religious Experience" in 1901, cries out in anguish for those suffering from acute depression, "Help! Help! No prophet can claim to bring a final

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message unless he says things that will have a sound of reality in the ears of victims such as these". Pity alone should motivate us to deliver such unfortunates from the claws of mercenary wretches who want to give them totally inappropriate "counselling".

It is wrong that such utterly unqualified people should have neither registration nor regulation in their access to the public. Their latest and most lucrative pastime is helping people bring repressed memories to consciousness for damages cases. Courts which accept such manipulation as evidence can neither command nor expect respect and confidence.

A few years ago I had a stone in the kidney and took a script for Pethidine to a pharmacist who has a huge display of herbal remedies. He reacted with pious horror to the script, said he did not stock such terrible drugs on his premises and offered a much better herbal remedy.

I reacted rather coldly to this nonsense, suggested that he had never suffered renal colic, and proposed to take my custom elsewhere. Not willing to lose a fee, he sent the girl out to the wholesaler and passed away the waiting time by regaling me with stories of herbal cures of almost every complaint in the book. I saw the same gentleman very ill in hospital some months later. His bed was surrounded with drips and drugs, with not a single herbal remedy in sight!

Truly these people are the witchdoctors of our time! It is the responsibility of those called by God to be physicians to protect innocent people from the ravages of the whole gang of charlatans who seek to prey upon them. I have touched on only a few of these people, there are of course many others.

The way governments spend taxpayers' money is another issue which needs to be addressed fearlessly.

Five years ago, in a far North Queensland town, I became a victim of late onset asthma. I shall always be grateful to the young doctor who treated me over a few days, and sent me on my way recovered and with good advice for the future.

In casual conversation I remarked "I suppose you get lots of Aboriginal patients?"

He replied that he did not; a special service flew in to take care of their needs.

When I suggested that as he was on the job, he was surely best fitted to help them, he answered wryly that while this was true, bureaucracies had little regard for truth, but a healthy regard for the increase of their own empires.

How on earth can doctors be encouraged to work in remote places when half their living is taken away in this manner by expensive and often questionable government agencies?

And is apartheid any more desirable in health care than it is in a political system?

These are matters which must be faced if an honest attempt is made to provide better medical services for the people.

The late, great Fred Hollows is an interesting and tragic example of what happens to those who challenge special interest groups. His vilification at the hands of the homosexual lobby was horrible, but his courage in challenging them despite his mortal illness was an inspiration. We need more Freds.

It is up to physicians through their professional bodies and in fulfilment of their divine commission to minister to the sick, to ensure that masses of health dollars are not creamed off by special interest group mafias.

Such groups must be kept to reasonable budgets and accountable expenditure. Their controlling bodies need to be more representative of the general public whose taxes fund them, than confined to a particular lobby.

There is a crying need to reduce hospital waiting lists in the public sphere, and to divert more patients to our under-utilised private system.

Entrenched ideologies such as "Everyone is entitled to use public hospitals", and on the other side, "User pays" are meaningless shibboleths shouted by mindless morons.

Ideology comes from the Greek word *Idios* which means "one's own". It is surely no accident that the word idiot has the same derivation. No brain is required to shout slogans. The good of patients is the prime consideration, and the strain must be taken off the public hospitals.

If physicians speak up on these issues, the question will inevitably rise as to what right they have to do this, they should leave it to the politicians and the various mafias. It is not a question of right, but of duty, duty in obedience to a divine commission.

Solzhenitsyn, in his famous Harvard speech, deplored the West's concentration on an ethic of rights rather than responsibilities. Most ethical matters are better stated in terms of someone's responsibilities – this makes conclusions active rather than passive and places a duty on someone.

God has committed the care of the sick to the physician. Sirach tells us this solemn truth. But it is to the New

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Testament that we must go to find out the essentials of the doctor-patient relationship. This time the principle is more general, and applies to all who are in any way associated with sick or needy people.

Now I am sure that everyone has encountered patients who are the soul of kindness and consideration, not demanding and very grateful for any help you can give them, even when it is only minimal help.

But others can be rude, arrogant, demanding and even threaten to sue you in this litigious age.

What attitude should we have to this rather mixed bag of people? The second lesson gives us the clue.

Jesus says that whatever is done to such a person is done to Him. ". . . as you did it to one of the least of these my brethren, you did it to me."

Tolstoy's matchless story of Martin the cobbler makes this point perfectly.

Martin was tragically bereaved of his wife and small daughter and in consequence had become a bitter atheist. Then he had a dream in which Our Lord promised to visit him at his shop the next day. He rushed to his shop, swept it out, dusted off his Bible and set up a table with a nice lunch for Jesus. An atheist friend called and laughed at Martin's preparations, but Martin hustled him off and settled down to wait. He hoped for no interruptions, but they came.

The first was a man who asked for a glass of water. Martin gave him one, then realising that the man was starving, gave him some, then all of the meal he had prepared for Jesus.

The second was a poor woman with a pair of children's shoes to be repaired. He gave them back as hopeless for mending, but seeing her despair, told her to wait, went out to the back of the shop where he had kept his wife's and child's clothing and found a good pair of shoes for her child. She was overjoyed, and on impulse, he gave her all the clothing and shoes of his wife and child, and hustling her off as she wept tears of joy, he carried on waiting.

It was in vain, the sun slowly set behind the village square, but Jesus had not come. Angrily he began locking up.

Then came two rather unwelcome visitors, the priest and his atheist friend. He gave the priest his shoes while his friend laughingly told the story and asked did Jesus come.

Martin snapped that only a beggar had come and eaten the food, and he had been pestered by a poor woman and had been forced to give her shoes and clothing. Not even a paying customer had come. He was an atheist again. The priest urged him to open his Bible on the table to Matthew 25 but he would not, and walked off telling his friend, who out of curiosity, started looking up the Bible, to lock up the shop.

His friend found the place, and as he read was transformed. He rushed after Martin shouting that Jesus had come, forcing him to read. Martin read, and he too found faith and peace as he realised that Jesus had indeed come in the beggar and the poor woman. May we too find the Master in the sick as we minister to them, and find joy and peace through faith in Him.

There is a corollary to all this. Strange and wonderful are the subjects one can study at our universities today. But when I heard of someone doing a Master's degree in patient advocacy it did startle me somewhat. Perhaps such people are necessary, I have no idea.

One thing is certain, the primary advocate for the patient is surely the physician, who must see that he gets appropriate care and treatment in hospital, and defend him against difficult relatives and the bewildering, impersonal health and welfare system.

#### SIRACH - 41

O death, how bitter is the reminder of you to one who lives at peace among his possessions, to a man without distractions, who is prosperous in everything, and who still has the vigour to enjoy his food!

O death, how welcome is your sentence to one who is in need and is failing in strength, very old and distracted over everything; to one who is contrary, and has lost his patience!

Do not fear the sentence of death; remember your former days and the end of life; this is the decree from the Lord for all flesh, and how can you reject the good pleasure of the Most High? Whether life is for ten or a hundred or a thousand years, there is no inquiry about it in Hades.

One of the duties of the anaesthetist is to relieve pain in chronic and terminal patients. There is no doubt that for these patients the quality of life is vastly improved with proper pain relief. Pain clinics have done wonders for those who in earlier times had pain as a constant companion.

The principles behind the care of the terminally ill are constantly debated, and social workers, the new witch-doctors of the age, have had too much to say here.

King Solomon in his Proverbs says that there is a time for everything under the sun, and one of the things he lists is death. There is a time to die.

Poor old Winston Churchill towards the end of World War Two complained to his aides that he wanted to go to sleep for millions of years, aeons and aeons. His task was finished, and not many years later his time came. There does come a time when truly, as Solomon says, it is time to die. Frantic efforts at resuscitation are indecent, it is time to bow gracefully to the inevitable.

Death is like birth. It is to be reborn into another life. Just as physicians help the child into this life, so they must help the dying adult into the next life.

The anaesthetist has a vital part to play here with pain relief. Birth and death are both great mysteries, and to assist at either is an awesome business. Truly the physician can stand upon the solid ground of divine appointment, "Give the physician his place, for the Lord created him". But the terrible responsibilities of such appointment should stop any vain boasting. The issues of life and death are indeed in your hands.

May God bless you, and may you find a true sense of awe of Him as you discharge your responsibilities to His children.

And may you find in the face of His children the face of the Christ who said, ". . . as you did it to one of the least of these my brethren, you did it to me".

## EXAMINATION PRIZE WINNERS

The Renton Prize for the six months period ending 30 June, 1994, was awarded to Dr P.A. Watt (Queensland).

The Cecil Gray Prize for the May 1994 Examination was awarded to Dr P.A.K. Edwards (Queensland).

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 $Dr John \, Keneally, Editor \, Australasian \, Anaesthesia, \, with \, the \, President, \, Dr Michael \, Davies, \, Mr \, Ken \, Branighan, \, Director \, Hospital \, \& \, Nutrition \, and \, Dr \, Susan \, Alder, \, Managing \, Director \, of \, Abbot \, Australasia \, Pty \, Ltd, \, following \, presentation \, of \, a \, cheque \, for \, \$25,000 \, from \, Abbot \, towards \, the \, production \, of \, Australasian \, Anaesthesia.$ 



Dr A.L. (Sandy) Garden following presentation of his Gilbert Brown Prize in Launceston, May 1994, and Dr David McConnel.



Dr Gwen Wilson, Emeritus Historian with Mr David Theile, President RACS, following her Herbert Moran Lecture presentation.

## Post Graduate Training in Anaesthesia in the 1930s

Dr Margaret Smith
Presented at the 1994 Annual Scientific Meeting

Mr Chairman & Fellows,

I was born in Wellington, New Zealand in 1912 — 82 years ago.

For as long as I can remember I wanted to be a doctor, so I was delighted when I could enter the Medical School in Dunedin.

The first three years of study had no clinical content, so in the fourth year it was a pleasure to meet Dr Marion Whyte, who had been appointed to teach anaesthetics to medical students.

Marion was a charming lady, so eager to teach that some of her enthusiasm rubbed off on to me. Following lectures we went to the operating theatres where Marion demonstrated her skill in maintaining a smooth anaesthetic, insisting on a perfect airway and continuous physical contact with the patient.

After giving six anaesthetics under supervision I felt that here at last was some practical work that would benefit patients, and so the first seeds of interest in Anaesthesia were sown.

I qualified MB.ChB (NZ) in 1936, and was a Resident House Surgeon at Wellington Hospital in 1937 and 1938. Here I was fortunate to work with Dr Eric Anson, who was the Senior Anaesthetist and the first New Zealand Specialist, having a private practice entirely in Anaesthetics. He was an excellent teacher, especially in the use of the laryngoscope and the passage of nasoendotracheal tubes and soon I decided that Anaesthesia was my chief interest in medicine. Dr Alf Slater, who was also on the staff as a part-time anaesthetist, encouraged me to do as many anaesthetics as possible.

I soon realised that if Anaesthesia was to be my specialty I would need training. In 1937 there was no post-graduate training in New Zealand or Australia, so Dr Anson suggested that I should write to the Royal College of Surgeons of England and enquire about training in the U.K. The reply stated that a post graduate course in Anaesthesia was to be held at Guy's Hospital in April and September and that the examination for the Diploma in Anaesthetics, the Royal College of Physicians London and the Royal College of Surgeons England, which was instituted in November 1935, would take place in May and November each year.

The requirements to sit this exam were as follows:

- 1. To have been a resident house surgeon in a major hospital for two years.
- 2. To have given one thousand anaesthetics, five hundred of which were to be for major operations. The majors had to be documented as follows:
  - The initials of the patient
  - The anaesthetic used
  - The method of administration
  - The operation performed

and signed by the Medical Superintendent of the Hospital.

In a very busy hospital with the routine commitments to surgery and medicine, it was not easy to do 1000 anaesthetics, so I often did extra cases at night to make up the numbers.

Early in 1939 I went to London by sea, taking my precious certificate of 1000 anaesthetics with me, and also a letter of introduction from my senior surgeon, Mr David White, to Dr Ivan Magill — a personal friend, asking him to look after me and point me in the right direction.

When I presented this letter to Dr Magill I don't think I realised how fortunate I was to have it, as Dr Magill was the prime mover in having Anaesthesia recognized as a Specialty with a Diploma — the world's first qualification in Anaesthesia.

I was received very kindly by this charming Irishman, who advised me to do the course at Guy's Hospital, sit the exam and come back and see him. He gave me a letter to Dr Blomfield, the Chairman of the Anaesthetic Committee of the Medical Research Council, and who, with Dr Magill and Dr Challis of the London Hospital, had a large input into the pre-examination requirements and also into the actual exam.

Dr Blomfield gave me a textbook, 'Modern Anaesthetic Practice', which had just been published, and advised me to read it before the Course. It contained chapters by well-known anaesthetists with an introduction by Dr Blomfield. It was a wonderful gift and an absolute mine of information.

The Course at Guy's Hospital was excellently coordinated by Dr Sheldon, with Dr Marston and Dr Rink as the main lecturers. For three weeks the ten people on the Course attended lectures morning and afternoon, interspersed with co-ordinated visits to the operating theatres of Guy's and other London hospitals, for example, after the lecture on local anaesthesia we went to see the famous surgeon, Sir Heneage Ogilvie doing partial gastrectomies under local, anaesthetising the lower six thoracic nerves, with local infiltration of the incision and a Coeliac Plexus Block. He always used this method to give complete relaxation of the muscles of the abdominal wall and to diminish the risk of post-operative vomiting and chest complications.

As well as Pharmacology, Anatomy and Physiology, the areas studied were: The History of Anaesthesia, the Theoretical Aspects of Anaesthesia and Analgesia; Every anaesthetic agent and technique in general use, Post-operative care, Hazards of Anaesthesia, e.g. risks of explosions, Early and current Anaesthetic equipment.

We were given typed notes and a list of recommended reading to study for the next few weeks before the exam.

I sat the Diploma in Anaesthetics in May 1939. I quite enjoyed the exam as we had been well prepared. Eight weeks later all candidates had to attend the examination room in alphabetical order to be told the results. I had passed and was handed my certificate — the first New Zealand woman doctor to obtain the Diploma.

Dr Magill then advised me to apply for the position of Resident Anaesthetist at Leicester Royal Infirmary, which he said was the best training position in England. He also invited me to go with him to his lists in the Westminster Hospital and "The Clinic" in Baker Street. This was a great learning experience.

I was fortunate to be chosen for the position of Resident Anaesthetist at the Leicester Royal Infirmary. All the Resident Surgeons, Physicians and Anaesthetists had their post-graduate degrees so the standard was high. We worked long hours in the operating theatres, and the main lesson learned was the value of intravenous fluids in the very badly shocked air raid casualties, and the very small amounts of hexobarbitone needed to anaesthetise them.

The rest of the war years were spent in Britain anaesthetising armed service personnel and at the Hospital for Sick Children, Great Ormond Street, London. Here I worked with that great Australian, Denis Browne, who was an expert in repairing harelips and cleft palates in babies.

After the war I returned home to New Zealand and took up a post as Specialist Anaesthetist to the North Canterbury Hospital Board in Christchurch.

In conclusion, high praise is due to my mentors who helped me reach my goal. Today, as in the 1930s, experienced and trusted advisors are invaluable to young anaesthetists, who also have the advantage of quality post-graduate training in all the main centres of Australia and New Zealand.

I have been privileged over the years to see Anaesthesia develop from an "art and skill" through various phases. Modern equipment, new anaesthetic techniques and agents, especially the relaxants, have caused it to blossomintothe great scientific specialty it is today, now endowed with our own College.

### **Use of Mobile Phones**

Council resolved:

- 1. That the College supports the continued use of mobile phones in hospitals, especially for doctors on close call to the hospital.
- 2. That the College considers that the level of risk to patients posed by mobile phones interfering with the function of biomedical equipment is extremely low.
- 3. That sensible precautions such as warning signs, staff education and equipment review should be considered if interference by mobile phones ever proves troublesome in a particular area of the hospital.

August 1994

# AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS MAINTENANCE OF STANDARDS PROGRAMME GUIDELINES

#### A. INTRODUCTION

The College programme has been designed to enable Fellows to demonstrate that they are participating in a programme aimed at maintaining clinical standards.

Participation by Fellows is voluntary and there is no threat to Fellowship by non-participation. The programme is flexible, to allow Fellows to tailor it to their particular practice.

In order to receive a Certificate of Participation each five years, Fellows participating will be required to complete and return annually to the College a form which records their acivities in the areas of CME, teaching, research and quality assurance, as well as stating that over the year a minimum of 30% of their professional life has been spent in clinical anaesthesia. Prior to the issue of the Certificate, evidence of credentialling will be required.

#### B. COMPONENTS

There are three components:

- 1. Provision of a declaration that a minimum of 30% of professional life has been spent in clinical anaesthesia.
- 2. **Credentialling,** consisting of provision to the College of a copy of the current registration or practising certificate from the relevant Medical Board or Council, and evidence of accreditation at an institution of practice. This information is required each five years, prior to the College issuing a Certificate.
- Provision of evidence of regular involvement in some or all of the activities outlined below, achieving a total of 500 points or more each five years. An annual return is required.

#### C. CREDIT POINTS ALLOCATION

#### 1. Quality Assurance Activities

(Minimum 100, maximum 300 points/5 years).

Activities outlined in Policy Document E9. Evidence kept by Fellow.

Examples: Audits relating to pre-operative assessment, anaesthesia, post-operative care, reviews of patient outcome as assessed by clinical indicators,

critical incident reporting, morbidity and mortality reviews.

1.1 To be awarded points in this category the Fellow must design, institute and analyse results relevant to clinical practice.

60 points per project.

1.2 Participation in hospital morbidity and mortality meetings. Log book required for >100 points per five years.

1 point/hour

#### 2. Continuing Medical Education

(Minimum 100, maximum 300 points/5 years) Evidence kept by Fellow.

#### 2.1 Accredited Meetings

Regional, National, International. College, ASA, CANZ, ANZICS Meetings automatically accredited. Others require prospective accreditation.

20 points/day

#### 2.2 Accredited Workshops/Seminars

EMST automatically accredited. Others to be accredited must have focused education with small groups, registrant participation and evaluation. Prospective accreditation required.

30 points/day

#### 2.3 Accredited Self-Assessment

HELP automatically accredited if answer sheet returned for marking.

20 points/package

#### 2.4 Practice Related CME

five years.

Journal reading, journal clubs, clinical meetings, use of tapes and videos, participation in morbidity and mortality meetings.

Log book required for >100 points per

1 point/hour

2.5 Participation in ANZCA examinations, EMST Course as an instructor. Prospective accreditation of other examinations required.

30 points/day

#### 11

#### 3. Teaching and Research

(Maximum 150 points/5 years) Evidence kept by Fellow for >100 points/5 years.

#### 3.1 Teaching of Health Professionals

5 points per hour

3.2 **Presentation** at an accredited Meeting (as in 2.1), (presenter only).

20 points per presentation

3.3 **Publication** in refereed journals (all authors) 20 points per publication

#### 4. Other Activities

4.1 Completion of a one week period of structured, hands-on clinical practice at a teaching hospital. A satisfactory report by the Supervisor of Training will be required, using a modified InTraining Assessment form.

250 points

4.2 Completion of a one week period of observation in a teaching hospital.

100 points

4.3 Completion of a one week period of on-site review of practice by a peer approved by the MOS Officer. A satisfactory report will be required of all aspects of practice reviewed.

300 points

4.4 Other activities require a detailed submission which will be evaluated by the MOS Officer. An example might be participation in tests of crisis response using an anaesthesia simulator.

#### D. RETURNS

The annual return and five yearly return of evidence of credentialling are all that are routinely required by the College. However, evidence of involvement in all activities should be filed by Fellows until the Certificate has been issued, in case clarification of activities is required by the College. Auditing may be carried out from time to time.

#### E. INTRODUCTION

Fellows should consider collecting data from 1995 so that they may request a Certificate in 2000.

#### F. CONCESSIONS

The MOS Officer will receive applications for concessions in the following categories:

- Fellows retired from clinical practice MOS not required.
- 2. Fellows in special categories such as temporary retirement, engagement in full-time research, illness, other special circumstances extension of time may be arranged.
- 3. Fellows practising clinically in non-anaesthetic fields

   e.g. Intensive Care in general terms, Fellows
  should participate in programmes for relevant bodies
  which represent their professional practice. The
  programmes for anaesthesia via the College, and for
  Intensive Care via the Faculty, will have major overlap.
- 4. In the event of a dispute regarding MOS, a Fellow will have the right to appeal to the College.

#### G. CONFIDENTIALITY

Each Fellow's MOS data sheets will be treated as confidential documents and kept secure at the College Headquarters. Records will only be available to the MOS Officer, the MOS Administrative Assistant, the Registrar and the Council, where this is considered necessary by the MOS Officer.

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## HIGHLIGHTS OF THE JUNE 1994 ANZCA COUNCIL MEETINGS

#### **EDUCATION**

#### Supervisors of Training

Council resolved that except in exceptional circumstances, the Supervisor of Training must be a Fellow of the College, should have held the Diploma of FANZCA for at least three years and will be the most appropriate member of the full-time, part-time or sessional specialist staff.

#### In-Training Assessment

Council approved a Policy Document "Guidelines for In-Training Assessment of Training in Anaesthesia" which is published in this Bulletin.

#### Diploma in Chronic Pain Management

Council resolved:

- 1. That the College establish a Post-Fellowship certification in Chronic Pain Management with the intention that this eventually evolves to a Diploma. The multi-disciplinary nature of such a training programme should be noted.
- 2. That the training programme should be structured primarily for anaesthetists. However, exploratory discussions should be held with other Colleges to see if it is possible to offer a suitable Diploma to the Fellows of those Colleges.
- 3. That the Certificate be awarded partly on the basis of a one year's attachment in a unit recognised for training purposes under the requirements of College Policy Document P25.
- 4. That the Certificate be awarded partly on the basis of a process of assessment yet to be established. Assessment might include one or more of the following:
  - a. A dissertation on an approved topic.
  - b. An assessment based on review of a case-book maintained by the trainee.
  - c. A multiple-choice assessment based on that offered by the American Board of Anesthesiology.
  - d. A viva assessment.

Participation in a teaching programme in Chronic Pain Management such as that to be offered by the University of Sydney.

- 5. That the Working Party continues with the following tasks:
  - a. provide recommendations concerning the establishment of a Certificate in Chronic Pain Management and to establish a timetable for its evolution into a Diploma
  - b. establish detailed criteria and processes for the recognition of approved pain management units so that (subject to the approval of Council) these units can be inspected and accredited in time to take approved trainees from the commencement of the 1996 Hospital year.

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- c. provide an accurate assessment of the likely number of training units and the number of potential training posts.
- d. provides detailed proposals for "the grandfathering" of Fellows who would be responsible for training in initially approved units.

CONTINUING EDUCATION AND QUALITY ASSURANCE

#### Australasian Anaesthesia

Council resolved to continue the publication of Australasian Anaesthesia with occasional reviews of this initiative.

#### Anaesthetic Simulators

Council approved the establishment of a Working Party to consider the various simulators and their role within the College and profession.

#### Maintenance of Standards Programme

The College resolved:

- 1. That the programme for Maintenance of Standards be endorsed. This Programme is published elsewhere in the *Bulletin*.
- 2. That the Maintenance of Standards Programme be instituted from January, 1995.
- 3. That a programme be made available to all Fellows.
- 4. That the programme be made available to non-Fellows at a fee to be set by the Executive.
- 5. That extension of the programme to involve non-Fellows be discussed with the Australian Society of Anaesthetists and the New Zealand Society of Anaesthetists.
- 6. That Professor Garry Phillips be appointed the Maintenance of Standards Officer.
- 7. That the Continuing Education and Quality Assurance Committee provide support to the Maintenance of Standards Officer.

#### Clinical Indicators

Council approved Clinical Indicators for Anaesthesia published on page 25 of this *Bulletin* and agreed on the following as desirable features of Clinical Indicators:

- a. Objective.
- b. Derived from readily available data.
- c. Will flag samples for detailed review within an institution.
- d. Will allow longitudinal follow-up with an institution.
- e. Will enhance reporting of critical incidents and morbidity.
- f. Data do not stand alone for comparison across institutions.

#### INTERNAL AFFAIRS

Council resolved to name the Meeting Room at the College Headquarters "The Douglas Joseph Room".

#### Foundation Lecture

Council resolved to name the Foundation Lecture delivered at the Annual Scientific Meeting "The Mary Burnell Lecture".

#### History of Anaesthesia

Council endorsed the publication of One Grand Chain, Volume 1 (1846-1934). It is anticipated that this Volume will be published early in 1995.

#### **Development Officer**

Council resolved:

- 1. That Council supports the employment of a part time Public Relations Consultant.
- 2. That an appropriate survey of Fellows be carried out.
- 3. That a Media and Community Relations Programme be developed.
- 4. That the PR Consultant be retained when media liaison is necessary.
- 5. That the PR Consultant be employed to obtain maximum publicity for ASMs.
- 6. That fundraising for the College be addressed.

#### PROFESSIONAL

#### **Policy Documents**

Council approved the following documents which are published in this *Bulletin*:

"Guidelines on Providing Information about Anaesthesia"

"Guidelines for the In-Training Assessment in Anaesthesia"

#### Infection Control in Anaesthesia

Council agreed to develop a policy on Infection Control in Anaesthesia.

## DEATH

Council noted with regret the death of **Dr Winifred L. Fowles,** Queensland,
Foundation Fellow, FFARACS,
1952 FANZCA 1994.

## Honours

**Dr Aldo Victor Dreosti, SA** – Member of the Order of Australia

**Dr Michael J Davies, Vic** – Fellow, Academy of Medicine, Singapore

**Dr David Jones, NZ** – President, New Zealand Society of Anaesthetists

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## RALPH WATERS AWARD



Ralph Waters is credited with being the first anesthesiologist in the USA to set up a well organised department of anesthesia within a major hospital, as long ago as 1931. Waters was already an accomplished clinical anesthetist when he was invited to set up a department of anesthesiology in Madison, Wisconsin and to provide a comprehensive service for the surgery in that hospital. He agreed only on the condition that he would be able to establish a service which strongly emphasised the integration of clinical service, teaching and research. So successful was he in this endeavour that a high percentage of the chairmen of academic departments of anesthesiology in the USA and Canada today can be traced back to Ralph Waters.

A "Waters Tree" has been constructed to show the pervasive influence of this quite remarkable man. His personal research achievements were extraordinary, considering his resources at that time. An example of his impact was his report in 1924 of his first use in 1923 of carbon dioxide absorption during anesthesia in man. This was based upon his astute analysis of basic research from two Brazilian brothers who were physiologists.2 In 1935 Waters and Associates reported on the clinical use of cyclopropane from Madison, Wisconsin, where they had first begun to use the agent in 1930. Of even wider importance, his influence in fostering research of young members of his Department sowed the seeds for many generations of academic anesthesiologists in the USA.

The Illinois Society of Anesthesiologists decided in the early 1960's to appoint a distinguished international group of anesthesiologists ("The Ralph Waters Commission") to make an annual award "for outstanding contributions to the development of anesthesiology as a medical discipline in the

tradition of Ralph M. Waters". The Commission decided that the Award would be on the basis of scientific and academic contributions to the specialty. The first award was presented in 1966 to Sir Ivan McGill and the subsequent awardees make interesting reading, since they represent a broad crosssection of individuals from throughout the world who have contributed to the development of the specialty of anesthesia:

#### Previous Ralph M. Waters Award recipients:

Sir Ivan McGill, KCVO, DSC, MB, FRCS, FFARCS

1967 Sir Harold Griffith, MD

1968 John Adriani, MD

Sir Robert Macintosh, MD, FRCS, FFARCS 1969

1970 Henry K. Beecher, MD

1971 Julius Comroe, MD

1972 John Bonica, MD

1973 Virginia Apgar, MD

1974 Stuart C. Cullen, MD 1975

George J. Thomas, MD

1976 Francis F. Foldes, MD

1977 John W. Severinghaus, MD

1978 T. Cecil Gray, MD

1979 Leroy D. Vandam, MD

1980 Daniel C. Moore, MD

1981 Edmond I. Eger, II, MD

1982 Thorsten Gordh, MD

1983 John Nunn, MD

James E. Eckenhoff, MD 1984

1985 Henrich Bendixen, MD

1986 William Hamilton, MD

1987 Nicholas M. Greene, MD

1988 Pepper Jenkins, MD

1989 E.M. Papper, MD, ScD

1990 Robert W. Virtue, MD

1991 B. Raymond Fink, MD, FFARCS

1992 Arthur Keats, MD

1993 Philip Bromage, MD

The 1994 Award was presented to Professor Michael J. Cousins "in recognition of the outstanding contribution to the development of anesthesia as a medical discipline in the tradition of Ralph M. Waters". The Award was presented at the Annual Meeting of the Illinois Society of Anesthesiologists ("The Midwest Anesthesia Conference") on May 14, 1994. Professor Cousins received a substantial medallion with a profile of Ralph Waters, together with a citation. Professor Cousins' lecture was entitled "Neural Blockade in the Year 2000" and his address considered the future of medicine in the year 2000 and beyond, the implications of these changes for the practice of neural blockade in the operating room, and in other settings of acute, chronic and cancer pain management.

#### Notes

- 1. Waters RM, Clinical scope and utility of carbon dioxide filtration in inhalation anesthesia. Curr. Res. Anesth. Analg. 1924, 3:20-22.
- 2. Osorio de Almeida A, Osorio de Almeida M. The nature of surgical shock and Henderson's theory of aeopnia. JAMA 1918, 71: 1710-11.

### REPORT FROM THE PRESIDENT TO FELLOWS OF THE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS AS AT THE 10TH JUNE, 1994

It is my pleasure to report on behalf of Council on the affairs of the College since the last Annual General Meeting.

#### AWARDS, HONOURS AND APPOINTMENTS

During the past year many of our Fellows have been recipients of Awards, Honours and Appointments.

At the recent Annual Scientific Meeting in Launceston, Honorary Fellowship was conferred upon **Professor Michael Denborough** recognising his contributions to Anaesthesia, and in particular, his research into various aspects of malignant hyperpyrexia-genetics, biochemistry and the evaluation of risk factors.

Professor Barry Baker, a past Dean of the Faculty of Anaesthetists, Royal Australasian College of Surgeons and the Nuffield Professor of Anaesthetics at the University of Sydney, was awarded the Robert Orton Medal in recognition of his distinguished service to Anaesthesia, both as a Member of the Board of Faculty and a contributor to four University Departments of Anaesthesia and the wider acceptance of anaesthesia as an independent medical specialty in Australia and in New Zealand.

Associate Professor Peter Livingstone, the Inaugural President of the College and last Dean of the Faculty of Anaesthetists, RACS, was admitted to the Royal Australasian College of Surgeons' Court of Honour, recognising his contribution and counsel to the Faculty of Anaesthetists, our new College and Council of the Royal Australasian College of Surgeons whilst an Office Bearer of the Faculty.

**Professor Laurie Mather,** Professor of Anaesthesia and Analgesia (Research), University of Sydney was awarded the John J. Bonica Medal.

**Professor Michael J. Cousins,** Professor of Anaesthesia and Pain Management, University of Sydney at the Royal North Shore Hospital received the Ralph Waters Award.

**Professor Teik Oh**, Dean, Faculty of Medicine, The Chinese University of Hong Kong was elected to Fellowship of the Royal Australasian College of Physicians.

**Professor Lucien Morris,** an Honorary Fellow of this College, was awarded an Honorary Doctorate of Science from the Medical College of Ohio.

**Professor Gai Harrison**, an Honorary Fellow of this College, was awarded a Doctorate of Science (Medicine), University of Cape Town.

Emeritus Professor Tess Cramond, Qld, was elected to the Roll of Honour, Australian Resuscitation Council.

**Dr J.E. Gilligan,** SA, was presented with the National AMA Award for Significant Advances in Health Care.

#### Appointments

Associate Professor V.I. Callanan, Qld – Chairman, Australian Resuscitation Council

**Professor G.R. Cutfield,** NSW – Professor of Anaesthesia and Intensive Care, University of Newcastle, Director of Education and Research

**Professor G.A. Harrison,** NSW – Professor of Anaesthesia, University of New South Wales, St Vincent's Hospital

**Dr R. Lo,** Hong Kong – President, Hong Kong College of Anaesthesiologists

**Professor G.D. Phillips,** SA – Chairman Medical Advisory Committee, St John's Ambulance, SA; Member Medical Standards Committee, St John's Ambulance, Australia.

#### **DEATHS**

It is with regret that I report the following deaths:

W.L. Fowles, Qld

R.J. Killalea, NSW
D.J. Molomby, Qld
W. Mushin, Hon. Fellow
A.L. Nathan, Vic

V.E. Rees, SA
M.A.E. Rex, Qld
M. Spence, NZ
R. Williams, NSW

#### RESEARCH GRANTS FOR 1994

In the past year the College received applications for Research Scholarships and Grants totalling \$90,727. College funds available for distribution in 1994 were \$133,875 for Research.

Scholarships were awarded to:

**Dr Harry Owen,** Department of Anaesthesia and Intensive Care, Flinders Medical Centre — Comparison of Variable Dose Patient Controlled Analgesia to Fixed Dose PCA — \$57,367.

Perth Hospital — A Comparison of the Effects of Fixed and Tailored Cardiopulmonary Bypass Flow Rates and Dopamine on the Gastrointestinal Tract — \$6,630.

The Harry Daly Research Fellowship was awarded to **Dr Harry Owen** from South Australia.

#### **THE COUNCIL 1994-1995**

Membership of the Council to take office after the Annual General Meeting, its Office Bearers and Committees will be published as an addendum to this report.

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#### PRIMARY EXAMINATION

The Renton Prize was awarded to **Dr Shane C. Townsend** of Queensland for the period ending 31 December 1993, and to **Dr Peter A. Watt** of Queensland for the period ending 30 June 1994.

Examinations were held in Melbourne and Hong Kong.

#### July/September 1993

o mij / September 1000				
	Total No. Candidates	Invited to Oral	Approved	
	Candidates	Orai		
Melbourne	141	106	78	
March/April	1994			
Melbourne	110	96	73	
Hong Kong	13	7	5	
Total	123	103	78	

#### FINAL EXAMINATION (ANAESTHESIA)

#### August/September 1993

Examinations were held in Melbourne.

Seventy-eight candidates presented in Melbourne and fifty-three were approved.

## Successful Candidate who had completed training: M. Williams, SA

#### Successful Candidates who had not completed training:

Successiui Candidates wno	o naa not compietea trainin
D.L. Allen, Vic	J.A. Lucas, Vic
R.J. Bougher, WA	J.C. Lynch, NSW
D.H. Bowring, NSW	P.N. Mayne, NSW
P.D. Brown, Vic	J.G. Milross, NSW
R.H. Burrell, NZ	S.R. Montano, NSW
R. Chan, SA	A.D. Muir, Vic
Chen Phoon Ping, HK	M.R. Mulligan, NSW
Cheng Hung Kai, HK	L.J. McEwin, SA
J.R. Chenoweth, Vic	Ng Siu Keung, HK
Cheung Po Wa, HK	C.L. Noonan, Vic
Chow Yu Fat, HK	D.C. Pescod, Vic
Choy Yin Choy, MAL	J.C. Quoyle, NSW
J.R. Clarke, Vic	R. Patel, WA
C.R. Collum, Vic	P.J. Peyton, Vic
G.O. Downey, Vic	N.C. Robson, NSW
C.M. Duffy, Qld	J.B. Sartain, SA
M.E. Finnis, SA	A. Schimmelfeder, NSW
A.J. Fitzpatrick, NSW	T.I. Shum, NZ
A. Flabouris, SA	R.A. Smith, NZ
C. Hayes, NSW	J.A. Strachan, Qld
L.P. Lacy, NSW	D.M. Thomas, NSW
M.S. Lavender, NZ	M.P. Vialle, SA
S.E. Lawrence, Qld	H.M. Weir, NZ
Lee Kai Wai, HK	M.S. Whitehead, SA
P. Lloyd, NZ	Wong Siu Man, HK
A.E. Loewenthal, Qld	R.J. Youngson, NZ

The Cecil Gray Prize was not awarded for the half year ended 31 December 1993.

#### **Geographical Distribution**

	No. Presenting	No. Approved
New South Wales	24	13
Queensland	5	4
South Australia	11	8
Western Australia	2	2
Victoria	12	11
Hong Kong	12	7
Malaysia	3	1
New Zealand	9	7
Total	78	53

#### **Analysis of Number of Attempts**

No. of	No.	No.
Attempts	Presenting	Approved
1	43	27
2	25	20
3	5	2
4	1	1
5	1	1
6	1	1
7	1	1
8	1	
Total	78	53

#### March/May 1994

The Oral Examination in Anaesthesia was held at Westmead Hospital, Sydney.

Seventy-nine candidates presented in Sydney and forty-eight were approved.

## Successful Candidates who had not completed training were:

M.J. Amos, NSW	A.T. Lye, NSW
E.J. Avraamides, WA	P.A. MacDonald, NSW
R.J. Burstal, NSW	P.A. Mainland, HK
C.R. Chilvers, Vic	F.K. Merritt, Vic
A.J. Cousins, Qld	J.P. Monagle, Vic
J.C. De Lima, NSW	B.H. Negus, NSW
S.J. Delfos, WA	K.F.J. Ng, HK
P.A.K. Edwards, Qld	A.P. Nussey, Qld
W.J. Falloon, Qld	A.D. Paix, SA
P. Fiorentino, NSW	J. Patel, NZ
G.P. Frawley, Vic	J.L. Prowse, NSW
C.F. I Fung, HK	C.F. Royse, Vic
M.R. Hurley, Vic	K.L. Schwager, NSW
R.J. Laing, SA	M.R. Seay, NZ
C.T. Lamond, NSW	D.C. Simes, WA
G.F. Libreri, Vic	C.G. Slaven, NZ
R. Lin, NSW	R.J. Smith, Qld
L.C. Ling, MAL	M.F. Solly, Vic
S.J. Llewellyn, NSW	K.S.I. Tan, HK
J.A. Loadsman, NSW	T.M. Tay, NSW

S.L. Tivey, NSW	A.D.J. Watts, WA
H.R. Venema, Vic	S.J. Wharton, NSW
V. Viliunas, NSW	K.H. Wong, MAL
J.Y.Y. Wang, NZ	Su-Jen Yap, NSW

The Cecil Gray Prize for the half year ended 30 June 1994 was awarded to Dr Pamela A.K. Edwards of Queensland.

#### Geographical Distribution

	No.	No.
	Presenting	Approved
New South Wales	26	18
Queensland	7	4
South Australia	6	2
Tasmania	1	1
Victoria	11	9
Western Australia	5	4
New Zealand	9	4
Hong Kong	8	4
Malaysia	2	2
Singapore	4	
Total	79	48

#### **Analysis of Number of Attempts**

No. of Attempts	No. Presenting	No. Approved
Attempts	rresenting	Approved
1	58	39
2	12	4
3	6	4
4	3	1
Total	79	48

#### ENDORSED IN INTENSIVE CARE

#### August/September 1993

An Examination was held in Melbourne. Ten candidates presented and six were approved.

#### Successful Candidates who had not completed training:

C.M. Anstey, Qld	G.M. Shaw, SA
N.A. Barnes, NSW	K.S.I. Tan, HK
J.E.A. Gallagher, SA	R.J. Young, SA

#### ADMISSION TO FELLOWSHIP BY ELECTION

The Council was pleased to elect to Fellowship the following:

#### **Under Regulation 6.2 pursuant to Article 22**

Dr J.C.A. Carvalho, Brazil Professor C.C. Hug Jnr, USA

#### Under Regulation 6.3 pursuant to Article 23

Dr S.S. Dhara, Singapore Professor C.S. Goodchild, Vic Dr A. Kumar, Singapore

#### **Endorsement in Intensive Care**

Dr P.D. Cook, NSW Dr D.A. Galler, NZ Dr R.J. MacRae, Vic

#### ANNUAL SCIENTIFIC MEETING

The Inaugural independent Annual Scientific Meeting of the College was held at the Launceston Country Club Casino from 30 April to 5 May 1994.

This historic Meeting attracted more than 400 registrants and has been acclaimed an outstanding success from a scientific, social and trade aspect. This exceptional registration certainly tested the facilities available, however, in view of the careful planning, did not create too many problems.

The College Ceremony was held in the Albert Hall. Many representatives of sister Colleges and organisations, both locally and internationally, participated in the College Ceremony together with two Honorary Fellows (Sir Anthony Jephcott Bt, and Professor Lucien Morris), and two Foundation Fellows (Dr Margaret Smith and Dr Reg Lewis).

At the commencement of the Ceremony, Mr David Theile on behalf of the Royal Australasian College of Surgeons, presented the most generous gift of our College Mace.

The Meeting was formally opened by The Lieutenant-Governor of Tasmania, The Honourable Sir Guy Green, AC, KBE and Dr Bob Brown delivered a thought-provoking Oration "100 Years of Earth and Ether". At the conclusion of the formal part of the Ceremony a brief re-enactment of Pugh's first anaesthetic was played by members of the Gambit Theatre Company, which left the audience in high spirits to enjoy the Buffet Dinner.

During the College Ceremony it gave me great pleasure to confer Honorary Fellowship on Professor Michael Denborough, ACT, and present Professor Barry Baker, NSW, with the Robert Orton Medal and Professor Laurie Mather, NSW, with the Inaugural Douglas Joseph Professorship Plaque.

A most innovative and varied social programme was enjoyed by all and provided many opportuities for old friends to renew acquaintances.

The Accompanying Persons Programme was innovative and varied and I thank Mrs Elaine Blaxland and Mrs Caroline Fraser and the Committee for their hard work and organisation.

In excess of 100 scientific papers of an excellent quality were presented during the Meeting. The inclusion of Special Interest Group Sessions in the programme provided many Fellows with the opportunity to update their knowledge in specific areas.

Our two Foundation Visitors were Professor Carl Hug from Atlanta and Dr Jose Carvalho from Sao Paulo.

Professor Hug delivered a stimulating Ellis Gillespie Lecture, "Opioids and Anaesthesia — 150 Years Experience" whilst Dr Carvalho for his Foundation Lecture spoke impressively on "Haemodynamic Repercussions of Central Neural Blockade".

The Australasian Visitor, Professor Laurie Mather, concluded the Scientific Programme with the Australasian Visitor's Lecture, "Chirality is in Your Hands".

All three Visitors contributed significantly to the Meeting both in quantity and quality, delivering many excellent papers and participating in discussions.

The Gilbert Brown Prize was awarded to Dr Alexander L. Garden from New Zealand for his presentation "Anaesthesia Information — What Patients Want to Know: A Pilot Study".

This Meeting attracted a large local media coverage, some of which filtered through to the mainland.

In congratulating the Meeting organisers, I wish to record my sincere thanks to Dr Mike Martyn and his Organising Committee for their dedication and hard work which resulted in a most successful Meeting; Dr John Madden for his exceptional organisation of the Scientific Programme; Dr Rob Paton for the excellent social occasions, and Dr Dick Willis for his guidance and assistance to the Organising Committee.

#### **COLLEGE AFFAIRS**

The highlight of the year has been the settlement and refurbishment of Ulimaroa which was officially opened as the College Headquarters by The Honourable Bill Hayden, AC, Governor-General of the Commonwealth of Australia on 19 February 1994. This occasion was formalised on the front verandah of Ulimaroa in the presence of dignitaries, representatives of sister Colleges and organisations and Fellows and friends on a sunny afternoon.

The Opening was preceded by a Symposium convened by Dr Ian Rechtman and held at the Victorian Arts Centre where nine Australasian Professors of Anaesthesia delivered a wide variety of interesting and stimulating presentations.

In the evening a Dinner at the Victorian Arts Centre was enjoyed by 213 Fellows, spouses and friends.

Following the deliberations of a Working Party chaired by Professor Garry Phillips, the Faculty of Intensive Care was established by Council at its October 1993 Meeting, appointing Dr G.M. Clarke, Dr A.W. Duncan, Dr F.H. Hawker, Prof. W.G. Parkin, Prof. G.D. Phillips, Dr R.V. Trubuhovich, and Dr R.F. Whiting as the Interim Board.

Following the establishment, the Faculty was empowered to carry out the activities relating to Intensive Care previously conducted by the College.

At the September 1993 Final Examination (Anaesthesia) the examination format was significantly changed with the introduction of Short Answer Questions and an increased number of structured vivas. These changes followed a full review of the examination by the Final Examination

Committee chaired by Dr Barrie McCann. This review resulted in the most extensive change in our examination format for forty years and was introduced with minimal problems thanks to the hard working Examiners and College staff.

In February 1994 Council approved the replacement of essay papers with Short Answer Questions to be introduced at the March 1995 Primary Examination and the introduction of Multiple Choice Questions in the March 1996 Primary Examination.

The College Policy Documents continue to be a valuable initiative setting the standards for practice of anaesthesia and intensive care in Australia and in New Zealand.

This year Council has published two new documents: one on "Minimum Standards for Pain Management Units" and the other a statement on "AIDS and Hepatitis". The extensive revision of the existing document on "Assistance for Anaesthesia" has stimulated considerable debate between our Fellowship, hospitals and our nursing colleagues. It should, however, contribute to a significant improvement in the safety and efficiency of our practice of anaesthesia.

In the area of Continuing Education, the progressive development of Special Interest Groups has continued to occur. The existing Special Interest Groups of Day Care Anaesthesia, Cardio-vascular and Thoracic Anaesthesia, and Acute Pain have had very successful, independent meetings during the year.

The new Special Interest Groups of Rural Anaesthesia, Neurosurgical Anaesthesia and Anaesthetic Research made their first contributions to this Annual Scientific Meeting and should blossom from this initiative. The development of Special Interest Groups has produced a significant improvement in the continuing education for those Fellows who tend to specialise in these areas.

All Colleges are introducing programmes to ensure that their Fellowship maintains high standards of practice. Our College has been involved with the process for some time and will finalise its programme for Maintenance of Standards at this Meeting of Council. The Fellowship and other anaesthetic and intensive care organisations have been consulted and they have shown considerable support offering many constructive suggestions about the process.

The College has continued to frequently meet with other medical organisations. The Committee of Presidents of Medical Colleges is a body where I have the opportunity to exchange ideas with other Presidents. This is a very important forum and adds significantly to the profession's ability to influence government on health issues.

In the past year the College maintained its position as the largest supporter of anaesthetic research by providing almost \$250,000 for this purpose. The Council continues to

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view this support to be extremely important, particularly in view of Fellows' difficulty in obtaining such funds from other supporting bodies.

I wish to record our physical separation from the Royal Australasian College of Surgeons on the 24th February 1994. Whilst this ended a strong and mutually beneficial association over forty-two years, a strong commitment exists between our Colleges to continue our close interacting relationship.

In accordance with the Memorandum and Articles of Association, nominations were called for two vacancies on the College Council. Three nominations were received. The following is the result of the Ballot:

Votes Cast	767	
Less Invalid	16	
	$\overline{751}$	
	x 2	1502
J.M. Gibbs		632
G.D. Phillips		612
J.F. Murray		258
		1502

#### **College Administration**

Subsequent to our occupation of Ulimaroa there have been some staff changes.

Miss Mal Lynch resigned her position as Administrative Assistant (Examinations) in August 1993. Mal had occupied this position for six years during which time this area has greatly expanded with the increase in trainees and examination candidates. She had carried out the administration of the examinations and training areas most efficiently with her enormous capacity for work and energy. Mal remained as a staff member until April this year, following the appointment of Miss Cherie Wilkinson and assisted Cherie with College procedures and policies.

Following a period of work experience, Miss Kylie Miller was appointed as a junior Secretary with the College. During the transition from the Royal Australasian College of Surgeons, Kylie has also performed the role of Receptionist.

Miss Jennifer Pearce has now been appointed Receptionist and her duties include the general housekeeping at Ulimaroa.

Mr Ross Blain retired from the College staff at the end of April. Ross was engaged in 1990 to establish the Faculty's independent finance area. Mr Julian Miller is the new College Accountant.

Mr Wally Katz, formerly employed by the two previous owners of Ulimaroa agreed to join the College staff following the purchase. Wally is responsible for the impeccably maintained surroundings and cleaning of the Headquarters.

In welcoming these new members to the staff I can advise that they are already proving valuable members of our hard working team.

I wish to record my thanks and appreciation to Mr David Theile, President of the Royal Australasian College of Surgeons for his assistance and co-operation during the time of separation.

I wish to express my sincere thanks to all Fellows and their families who continually devote so much time and energy to the welfare of our College by their involvement in so many activities.

Finally, to the Councillors and administrative staff in Melbourne and in the regions who contribute so willingly and tirelessly towards the efficient running of the organisation, my sincere thanks. The increased activities and relocation of the Headquarters in the past year have been an added burden to their heavy workload and I am most grateful to them for ensuring such a smooth and efficient transfer and establishment to our new Headquarters.

M.J. DAVIES
President

Bulletin August 1994

## REGIONAL COMMITTEES 1994/1995

#### WESTERN AUSTRALIA

Dr L Coombs

Dr N Gibbs

Dr M Hellings

Dr T McAuliffe

Dr G Mullins

Dr P Smith

Dr H Spiers

Dr G Turner

Dr W Weightman

#### **QUEENSLAND**

Dr J Bradley

Dr M Cobcroft

Dr D Khursandi

Dr E McArdle

Dr P Moran

Dr J Murray

Dr J O'Callaghan

Dr J Parslow

Dr R Pascoe

Dr R Whiting

#### VICTORIA

Dr M Buckland

Dr S Chester

Dr G Donnan

Dr M Fajgman

Dr C Joseph

Dr P McCall

Dr D McCuaig

Dr R Molnar

Dr M Radnor

Dr P Ragg

Di i itagg

Dr P Roessler

Dr A Weeks

#### **TASMANIA**

Dr J Blaxland

Dr S Fraser

Dr M Lorimer

Dr R Matters

Dr M Walker

#### NEW SOUTH WALES

Dr J Beckett-Wood

Dr M Crawford

Dr D Gibb

Dr M Jones

Dr M Joseph

Dr R Kerridge

Dr P Klineberg

Dr E Loughman

Dr W McMeniman

Dr F Moloney

Dr A Quail

Dr C Sparks

#### **NEW ZEALAND**

Dr F Bennett

Dr M Futter

Dr J Havill

Dr D Jones

Dr S King

Dr A Merry

Dr C Pottinger

Dr I Ross

Dr H Spencer

Dr L Wilson

#### SOUTH AUSTRALIA

Dr M Cowling

Dr B Duffy

Dr P Franklyn

Dr S Germann

Dr N Matthews

Dr A Laver

Dr T Semple

Dr M Weise

#### AUSTRALIAN CAPITAL

#### **TERRITORY**

Dr P Burt

Dr R Cook

Dr N Gemmell-Smith

Dr B Kwan

Dr L Weber

## SUMMARY RESULTS OF 1993 ANAESTHESIA STUDY BY ICI PHARMACEUTICALS

#### INTRODUCTION

In July 1993 a total of 502 anaesthetists in Australia and New Zealand completed a mail out record form of all procedures undertaken for one day only during a one week period.

On a single day, 2686 procedures were undertaken, in private and public hospitals, by 429 anaesthetists in Australia and 424 procedures by 73 anaesthetists in New Zealand.

The results presented in this summary highlight the main differences identified between Australia and New Zealand. Comparisons with anaesthesia trends in the United Kingdom are not possible to accurately present in this article, due to lack of access to a common database.

Results are documented in a format that reflects the terminology employed in the one day diary study.

The terminology that relates to anaesthesia procedure details was relatively simplistic, in order to minimise the time needed for anaesthetists to record the agent(s) used in the pre, intra, and post-operative stages for each procedure undertaken.

The intra-operative and post-operative agent(s) used, including hypnotics (gas/IV), narcotics, and muscle relaxants, were recorded for induction and maintenance/ sedation. Anti-emetic agents, if used for recovery, were listed in the post-operative section of the record form. The total duration of anaesthesia for the intra-operative stage was also recorded.

#### RESULTS

${\it Table 1: Average  Duration  of  Procedures  and  Average  Number  of  Agents}$	Used

	Average Duration	Average No. Agents Used
Australia	61 minutes	6.2
New Zealand	63 minutes	5.8

Table 2: (	Class of Agent	Used by	Stage of	Anaesthesia
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	Australia (n = 2686)	New Zealand (n = 424)
Induction	%	%
Gas	16	18
Intravenous	84	78
Narcotic	51	56
Muscle Relaxants	42	39
Maintenance		
Gas	78	77
Intravenous	16	11
Narcotic	22	25
Muscle Relaxants	20	18
Recovery		
Gas	14	15
Intravenous	2	2
Narcotic	31	31
Muscle Relaxants	4	1
Anti-emetic	24	14

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	NZ	AUS	NZ	AUS
	Spont	aneous	Vent	ilated
	% Av	erage	% Av	erage
Orthopaedic	69	76	31	24
E.N.T.	61	47	39	53
Urology	73	85	27	15
Ophthalmic	59	78	41	22
Skin	92	65	8	35
Gynaecological	52	48	48	52
Obstetric	83	75	17	25
Dental	100	30	0	70

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Operation	NZ No. Ope	AUS erations	NZ Avera Age	AUS ge No. ents		AUS rage on (mins)
Orthopaedic	106	433	5.4	6.1	83	64
E.N.T.	67	269	6.4	7.2	28	38
Urology	34	292	5.6	4.9	50	49
Ophthalmic	37	168	4.6	4.0	59	62
Cardiac	*	59	*	9.7	*	221
Skin	*	102	*	6.0	*	54
Neurology	*	60	*	6.8	*	103
Gynaecology	64	343	6.4	6.5	45	41
Obstetrics	*	60	*	3.0	*	52
Dental	15	160	5.8	6.6	39	45
Gastro-intestinal	27	309	6.1	7.0	67	63
Other	49	431	5.8	6.6	91	74

	Table 5: Incidence	of Use of Diprivan in Various S	ituations
		Incidence of Us	e of Diprivan
Si	ituation of Use	New Zealand %	Australia %
P	ublic Hospitals	28	18
P	rivate Hospitals	27	30

Around 50% of patients in the Australian and New Zealand samples, were prescribed pre-operative medication, most usually for procedures over one hour in duration. The main pre-operative differences occur in the types of drugs used.

Pethidine was used in 26% of these patients in Australia compared with 1% in New Zealand. Total use of temazepam and maxolon was similar, with differences evident for the latter drug by type of procedure undertaken. Midazolam was used for 25% of New Zealand procedures and 5% of Australian procedures where pre-operative medication was prescribed.

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Gastro-intestinal

## CLINICAL INDICATORS FOR ANAESTHESIA

- 1. The percentage of patients undergoing a procedure with an anaesthetist in attendance having a documented pre-anaesthetic assessment. Refer to College Policy Document P7 (The Pre-Anaesthetic Consultation).
- 2. The percentage of patients undergoing a procedure with an anaesthetist in attendance whose anaesthesia records comply with College Policy Document P6 (Minimum Requirements for the Anaesthetic Record, Section 3: Intra-anaesthetic Information).
- 3. The percentage of patients undergoing a procedure with an anaesthetist in attendance who have documented evidence of defined clinical events in the recovery period. Defined events will vary between institutions and might include [(i)-(v)]:
  - (i) Intervention by an anaesthetist to relieve respiratory distress.

- (ii) Any respiratory or cardiac arrest.
- (iii) A core temperature recorded in recovery of <35°C.</p>
- (iv) Review by the anaesthetist to manage severe pain in the recovery room.
- (v) A recovery room stay of longer than two hours.
- 4. The percentage of patients having an unplanned admission to an intensive care unit within 24 hours of a procedure with an anaesthetist in attendance. (The definition of an intensive care unit will vary between institutions).
- 5. The percentage of patients having undergone a procedure with an anaesthetist in attendance for whom there is documented evidence of a post-anaesthetic visit. Refer to College Policy Document P20 (Responsibilities of Anaesthetists in the Post Operative Period).

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## CHIRALITY IS IN YOUR HANDS

### AUSTRALASIAN VISITOR'S LECTURE

#### ANNUAL SCIENTIFIC MEETING - LAUNCESTON 1994

Delivered by
Laurence E Mather PhD, FANZCA
Inaugural Douglas Joseph Professor of Anaesthetics
Professor of Anaesthesia and Analgesia (Research)
University of Sydney at Royal North Shore Hospital

#### **GLOSSARY**

*Isomers* — molecules with the same atoms but arranged differently: these are different chemical entities.

Constitutional isomers — molecules with the same set of atoms but connected in different positions: these are different chemical entities.

Geometric isomers — molecules having a rigid planar bond so that the atoms are unable to rotate freely: these have different physical properties.

Stereoisomers — the general term for molecules with identical groups arranged differently spatially.

Enantiomers (or enantiomorphs) — stereoisomers that lack a plane of symmetry and exist in a mirror image relationship: these were known as optical isomers, their only difference being the rotation of plane polarized light (equally but in opposite directions).

Racemate — a substance consisting of equal amounts of enantiomers and being optically neutral.

*Diastereomers* (or diastereoisomers) — stereoisomers having multiple centres of chirality that do not bear mirror image relationships: these are different chemical entities.

Mr President, Fellows and colleagues, I am delighted that the Australian and New Zealand College of Anaesthetists has chosen a scientist to deliver the Australasian Visitor's Lecture to this, the Inaugural Scientific Meeting of the College. I am also honoured that the College has chosen me to be both that scientist and the inaugural holder of the honoured name of Australia's first Professor of Anaesthetics in the award of the Douglas Joseph Professorship of Anaesthetics.

May I ask you, the reader, a question — look at your hands, is chirality in your hands? I trust that your answer will be "yes".

The title of this paper is, of course, an attempt at non-trivial whimsy. Chirality (from the Greek *cheir* for hand) means handedness. The word is applied in chemistry to refer to the property of particular molecules to exist in stereoisomeric forms related by non-superimposable

mirror image configurations — analogous to an individual's hands (see Glossary). This property is distributed in many forms throughout nature. Over recent years the study of the pharmacological consequences of chirality has become sufficiently prominent to support a journal in its own right (*Chirality*, John Wiley-Liss, Publishers, New York; Volume 1, 1989).

Although there has been little specific recognition, as yet, in the literature of anaesthesia, chirality and its underlying stereochemistry are not new topics in themselves. They can, essentially, be ascribed to Louis Pasteur. Despite this fine pedigree, in 1984, Professor Everhardus Ariens<sup>2</sup> admonished medical researchers when he referred to their lack of attention to the stereochemistry as being the basis for producing "sophisticated nonsense in pharmacokinetics and clinical pharmacology". Why was this so?

To answer this question requires a brief diversion into structural chemistry. Although this discourse is directed towards drug molecules, it is clear that it is a generality of structural chemistry (rather than pharmacology). It is first necessary to look back at the natural science of the 19th Century and to note three crucial discoveries.

First, natural scientists of this era were fascinated by geometric optics: early in the 19th C the linear polarization of light was described. Jean-Baptiste Biot, working at the College de France in Paris, in 1815 described the property of optical activity — the ability of a substance to rotate the plane of polarization of plane polarized light. Second, Louis Pasteur, working at the Ecole Normal also in Paris, in 1847 discovered that the optical activity of organic solutions was determined by molecular asymmetry. Third, in 1874, Jacobus van't Hof from Holland and Joseph Le Bel from France, each determined that the four valencies of the carbon atom were arranged three dimensionally in a tetrahedral manner and that this was related to the cause of molecular asymmetry.

At the centre of discovery was the structure of tartaric acid — a substance that had been well known to scientists since the 18th C from its precipitation in wine containers. This substance had been found to be an optically active substance, i.e. it rotated the plane of polarized light. In the early 1820s, a synthetic substance was discovered that had the same chemical composition as tartaric acid: it was thus an isomer of tartaric acid and became known as paratartaric acid. However, paratartaric acid did not alter the plane of rotation of plane polarized light whereas naturally occurring tartaric rotated plane polarized light to the right. Pasteur, who in the 1840s was working on projects connected with the production of wine, made a remarkable observation. He observed that the sodium ammonium salt of paratartaric acid, which crystallized into hemihedral crystals, formed two types of crystals. One crystal type had facets facing left and the other had facets facing right: these were not physically superimposable and Pasteur was able to hand pick them into two piles. He found these two types of crystals to be identical chemically and physically, except that those with left facets rotated plane polarized light to the left and the other to the right. Pasteur had resolved the racemic substance paratartaric acid into its enantiomers, of which one was the naturally occurring tartaric acid which is now designated dextro-tartaric acid.

Further studies by Pasteur showed that the two types of tartaric acids reacted with other chemicals that were also known to rotate plane polarized light. This gave products that had different physical properties: these now different chemicals were diastereomers. In subsequent studies, Pasteur showed that fermentation produced one form of paratartaric acid exclusively. He had uncovered the concept that optical activity was connected to molecular asymmetry but still didn't know its basis: that remained for the revelations of van't Hof and Le Bel some 30 years later that the carbon atom had its 4 valencies directed into tetrahedral bonds. Four dissimilar substitutions of the carbon atom caused asymmetry, non-mirror image superimposability and the basis of optical activity.

By the middle of the last century, Pasteur had provided conclusive resolution of stereoisomers by three means — hand-picking manually, by formation of diastereomers and biologically in finding that microorganisms can metabolize enantioselectively. In doing so, he had laid down far reaching principles of chemistry that are current today. In 1860, Pasteur reflected upon his findings and wrote: "All artificial bodies and all minerals have superposable images. Opposed to these are nearly all organic substances which play an important role in plant and animal life. These are asymmetric, and indeed

have the kind of asymmetry in which the image is not superposable with the object . . ." and ". . . molecular asymmetry . . . opens to physiology new horizons, distant, but sure . . .".

The nomenclature found in the literature for describing stereoisomers is still not uniform. A chiral centre or a centre of asymmetry is most frequently a carbon atom but other atoms (phosphorus, sulphur or nitrogen) also may be involved. A chiral carbon is most readily recognized as one having four different atoms or groups attached. Three notations are used to describe chirality and associated optical activity. First, the pairs (+) and (-), dextro (or d) and laevo (or l) are respectively associated with right and left (plane polarized light) rotatory molecules. However, the direction of rotation is a phenomenological feature only: there is no structural feature of the molecule that steers the direction. A molecule may rotate plane polarized light in one direction when dissolved in one solvent but the other direction in another solvent.

Second, a systematic method of associating the stereochemistry with direction of optical rotation was developed in 1919 by Emile Fischer. He described a convention for nomenclature based upon a molecule's configuration relative to (+)-glyceraldehyde which was arbitrarily assigned a "D-configuration" (note upper case D, compared with lower case d for *dextro*). The configuration of the molecule would be assigned this configuration after it (or a chemical degradation product that retained the chiral centre) would be found to have the same direction of rotation as the model substance (+)-glyceraldehyde and the L-configuration if the direction of rotation was the reverse. The direction of rotation, e.g. D(-)-drug name, also may be added if known.

Third, in 1955, the "sequence rules" of Cahn, Ingold and Prelog introduced a method for unequivocal designation of molecular configuration by giving a sequence of priority to the four atoms or groups attached to a tetrahedral chiral centre. With the smallest atom or group extending away from the viewer, the arrangement of the largest to smallest groups proceeding clockwise was to be designated as R- (or rectus): the antipode was to be designated S- (or sinister) (see Figure 1).

Again, the direction of rotation may be added if known. Contemporary literature contains all three notations, depending upon the amount of information available (and the interest of the authors). Remember, however, that only the Cahn-Ingold-Prelog notation indicates the absolute configuration and that the optical rotation can vary with experimental conditions.

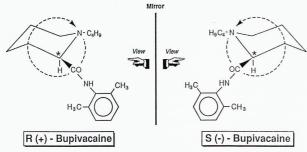


Figure 1: Application of the Sequence Rules of Cahn-Ingold and Prelog to bupivacaine. Note that the smallest group attached to the chiral carbon is hydrogen: it therefore is projected away from the viewer and the other groups, nitrogen (N-butyl group) > carbon of carbonyl (C=O) > carbon of methylene (CH<sub>2</sub>), are arranged in clockwise progression of decreasing size to give R-bupivacaine which is dextro-rotatory; the antipode gives S-bupivacaine which is laevo-rotatory.

TABLE 1
Applications of stereochemical nomenclature to two homologous local anaesthetic agents mepivacaine and bupivacaine

Fischer	Cahn-Ingold-Prelog	$[\alpha]_{25}$ D
D(-)-mepivacaine	R(-)-mepivacaine	-18.6
L(+)-mepivacaine	S(+)-mepivacaine	+18.9
DL(±)-mepivacaine*	RS or rac-mepivacaine	0
D(+)-bupivacaine	R(+)-bupivacaine	+12.7
L(-)-bupivacaine	S(-)-bupivacaine	-12.0
DL(±)-bupivacaine*	RS or rac-bupivacaine	0

 $[\alpha]_{25}$ D = rotation of sodium spectrum D-line at 25°C.<sup>4</sup>

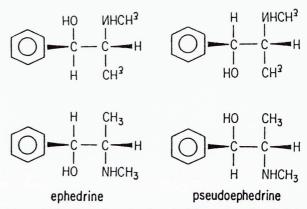


Figure 2: The planar formulae for ephedrine and pseudoephedrine show their relationship to be diastereomers: each drug has two chiral centres. Note the four different groups attached to each of the chiral carbon atoms. The thickened bonds indicate that they occupy the third dimension out of the plane of the paper. The mirror images of each drug is also shown and these give the (+) and (-)— enantiomeric forms of each diastereomer.

Examples of application of the nomenclature are shown in Figures 1 and 2. The latter shows two closely related drugs, ephedrine and pseudoephedrine. These are diastereomers and are thus clearly recognized as different substances chemically, physically and pharmacologically: both, however, have a pair of (+) and (-) enantiomers that differ physically by their direction of rotation of plane polarized light and pharmacologically. The two homologous drugs, mepivacaine and bupivacaine which differ only in carbon chain length on the amino group are also described in Table 1. Remember that a racemate is a mixture of two enantiomers (in equal amounts). In crystalline form, each crystal is a pure

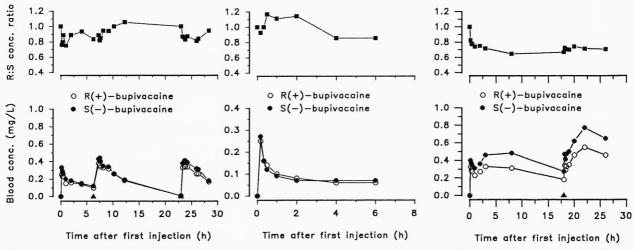


Figure 3: Arterial blood contration — time curves for 3 patients receiving intercostal block with RS-bupivacaine for pain relief after liver transplantation surgery.<sup>21</sup> The arrows indicate top-up injections. Note the differences between patients in the bupivacaine concentration enantiomeric ratio and the time dependence of this ratio.

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<sup>\*</sup> denotes a racemate, i.e. an equal mixture of enantiomers (also sometimes called a racemic mixture) and is rotatory neutral because of cancelling rotations of the enantiomers. Both of these racemates are the clinically used forms of these agents.

enantiomer but the crystals are mixed; as liquids or in solution, each molecule is a pure enantiomer but the molar concentrations of each enantiomer are equal. In the body (or other chiral solvent environment), the enantiomers, being independent, are subject to the influences of the chiral environment with respect to passage across membranes and metabolizing enzymes which both incorporate enantiospecific amino acids, etc.

Approximately 25% of drugs are manufactured and used as racemates (equal mixtures of enantiomers). The component enantiomers, however, behave pharmacologically as a mixture of independent drugs. The pharmacological and therapeutic significance of this depends on the therapeutic index of each enantiomer and its pharmacokinetics. There are five instances in which the pharmacological relevance of stereoisomerism can be framed.

- (i) The enantiomers exert similar actions. This, the least complicated situation, is to be expected if the mode of action is structurally-nonspecific and derives more from the drug's physical properties than a "lock-and-key" mechanism. It has been taught traditionally that volatile anaesthetics provide a model example of structural non-specificity<sup>5</sup> but now we are not so sure! A recent study of the enantiomers of isoflurane has found about a two-fold difference in potency in nerve ion channel blocking ability of the (+)-enantiomer over the (-)-enantiomer in a mollusc preparation and in duration of sleep time in the mouse<sup>6</sup>.
- (ii) The activity resides essentially in one enantiomer while the other is pharmacologically inert. This case is indicative of a high degree of structural specificity for drugs with particular receptor or enzyme binding, e.g. by opioids, NSAIDs, pressor agents. However, for the cases where such drugs have chiral centres, the notion that one enantiomer is the "active" one while the other is "inactive" is sometimes oversimplified. More to the point is that the enantiomers might differ so markedly in their potencies required for particular effects, or the therapeutic index may be so much in favour of one enantiomer that one enantiomer is conveniently regarded as being the "pharmacologically active" one. Non-steroidal antiinflammatory drugs (NSAIDs) provide some relevant examples. Many NSAIDs have a chiral centre and are used as racemates e.g. ketorolac and ibuprofen. The Senantiomers have far greater potency towards inhibiting the synthesis of prostaglandins than the R-enantiomers. The majority, e.g. diclofenac and indomethacin, do not have a chiral centre. Naproxen as yet remains unique among NSAIDs by having a chiral centre but is made and used as the S-enantiomer. Some NSAIDs e.g. ibuprofen and phenoprofen, for which the R-enantiomer is

essentially "inactive" as an inhibitor of prostaglandin synthetase are metabolically inverted to the "active Senantiomer". In such a case it would be semantically incorrect to refer to the R-enantiomer as being pharmacologically inert.

- (iii) The enantiomers have qualitatively similar but quantitatively different actions. This is the expected outcome where there is some degree of structural specificity; where there are interactions of drugs with differing receptor classes or where enantiomers exert competitive actions. The terms, "eutomer" and "distomer", were coined for the respectively more and less potent enantiomers and the "eudismic ratio" was coined for the ratio of their activities. Again, this should not be thought of in absolute terms because the eudismic ratio is very much a system dependent term. For example, the eudismic ratio of many beta-adrenoceptor blocking agents would depend on the source of smooth muscle being used to define the potency of the agents.
- (iv) The enantiomers may have qualitatively different actions. This, too, is a relatively common case. It is known that among the barbiturates, both non-specific and specific actions exist. However, it is sometimes found that the S(-)-enantiomer of a chiral barbiturate is CNS depressant, while the other is a CNS excitant.
- (v) The enantiomers have different pharmacokinetic properties. This seems to be more the rule than the exception<sup>10</sup>. If this is so, then blood drug concentrations after administration of a racemate will be a timedependent mixture of enantiomers, but this will not be known unless enantioselective assays are performed. It is clear that this can lead to misinterpretation of pharmacokinetic and pharmacodynamic data and totally spurious models being constructed. The decay curve of undifferentiated "drug racemate" blood concentrations will be the sum of the decay curves of each component, thereby producing a fictitious concentration-time curve that never really existed. The clinical implications depend on the relative pharmacodynamics of each component: hence, blood drug concentration-effect curves can be hazardous to interpret. All of this can be further complicated if different metabolic pathways of the components produce metabolites with pharmacological activity. The metabolites may or may not retain the centre of asymmetry of the parent drug or may even have introduced a centre of asymmetry.

It is thus easy to see that Ariens was right. It is no longer scientifically defensible to treat mixtures of drugs as single drugs just because they have been prepared and packaged that way. Although many key drugs used in anaesthesia and pain management are racemates, most,

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if not all of the pharmacological data on them, does not differentiate between stereoisomers — the effect is of "drug". The dimensions of the relevance of stereochemistry specifically to anaesthesiology is unknown at present but a partial list includes many key drugs, e.g. halothane, enflurane, isoflurane, thiopentone, bupivacaine, ketorolac and methadone, so that relevance is highly likely. A brief overview of the pharmacology of bupivacaine can be used to highlight many of the issues raised in general terms above.

In the 1960s and 70s bupivacaine enantiomers (Table 1) were studied as to their relative toxicity in laboratory animals and nerve blocking ability in a variety of circumstances. It was found that R(+)-bupivacaine was about 50% more lethal than S(-)-bupivacaine after injection in rats and mice<sup>11</sup> <sup>12</sup>. R(+)-bupivacaine was more potent in producing blockade of frog sciatic nerve  $in\ vitro$  but produced shorter duration of anaesthesia in skin wheals  $in\ vivo$  in guinea pigs and humans<sup>13</sup> <sup>14</sup>.

For several years, my colleagues and I have been studying bupivacaine pharmacokinetics in sheep and in humans and have made the following findings.

First, we made confirmatory observations that there were significant differences in the toxicity of the enantiomers: R(+)-bupivacaine consistently caused convulsions in sheep after intravenous doses that were without apparent effect for S(-)-bupivacaine<sup>14</sup>.

Second, we found that blood concentrations per unit dose of R(+)-bupivacaine in sheep were consistently lower than those of S(-)-bupivacaine corresponding to the higher clearance (by the liver) of R(+)-bupivacaine than S(-)-bupivacaine<sup>14</sup> <sup>15</sup>. This was seen to be fortuitous in that the more toxic enantiomer was also the more highly cleared enantiomer.

Third, we found that there was higher plasma protein binding and higher tissue:blood distribution coefficients of R(+)-bupivacaine than S(-)-bupivacaine in sheep for most organs including heart, brain, kidneys, and gut but not muscle and liver<sup>16</sup> <sup>17</sup>. These data were thought to connect with those reported by other researchers that R(+)-bupivacaine was more deleterious to cardiac physiology than S(-)-bupivacaine. R(+)-bupivacaine was reported to decrease the rate of depolarisation of guinea pig isolated papillary muscle cardiac muscle cells, as well as decrease the duration of the cardiac cell action potentials<sup>18</sup> and other cardio-toxic potential and sequelae<sup>19</sup> <sup>20</sup>. Thus R(+)-bupivacaine was found to have both a higher uptake into heart as well as a more deleterious effect on heart.

Studies in human patients have confirmed that systemic blood concentrations of R(+)-bupivacaine were less than

those of S(-)-bupivacaine in patients having intercostal nerve blocks for pain control after orthotopic liver transplantation<sup>21</sup>. A similar range of average ratios of R(+): S(-)-bupivacaine blood concentrations (Figure 3) was found in humans as in sheep (0.6 to 1.1) strongly suggesting that the underlying principles of drug disposition were the same across species. However these studies also pointed out the time dependent nature of the ratio of concentrations of the enantiomers and the variability of this ratio between patients. Thus the proposition recurs that it is neither possible to guess the probable ratio for any individual patient, nor to assume the composition of the blood enantiomer at any point in time.

However, another patient from a different hospital who had ventricular arrhythmias after bupivacaine administration was found not only to have a total bupivacaine blood concentration in excess of 4 mg/L (the threshold often associated with toxicity) but also a ratio of R(+):S(-)-bupivacaine blood concentrations at that time of 1.7, i.e. considerably greater proportion of R(+)-bupivacaine than usually found. Thus there is circumstantial evidence that bupivacaine toxicity is due more to the R(+)-bupivacaine enantiomer than the S(-)-bupivacaine enantiomer.

The enantiomers of bupivacaine thereby demonstrate differences at several levels. In differences in potency in nerve block in vitro the enantiomers have qualitatively similar but quantitatively different actions, presumably by a stereo-selective (not stereo-specific) receptor mediated effect<sup>22</sup>. Similarly, in differences in duration of cutaneous nerve endings in skin wheals13, the mechanism is presumed to be mediated by the effect on the microvasculature where R(+)-bupivacaine is more likely to vasodilate and S(-)-bupivacaine is more likely to vasoconstrict, again presumably by a stereo-selective effect. Indeed it is this type of logic that influenced the introduction of ropivacaine which is the single Senantiomer of the propyl analogue of bupivacaine and mepiyacaine<sup>23</sup>. It is not yet known whether there are any actions exclusively associated with one of the bupivacaine enantiomers.

It is clear that there are consistent (although not large) differences in the pharmacokinetics of distribution and elimination. It is not known whether there are clear differences in the rate of systemic absorption after neural blockade as the studies do not appear to have been done; enantiomeric studies on the regional kinetics and effects are in progress.

My colleagues and I are also working on additional enantiomeric studies with other classes of racemic drugs of interest to anaesthetists.

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We have been carrying out a set of studies on the disposition of ketorolac in sheep and found that the clearance of S-ketorolac exceeded R-ketorolac and that the clearance of both enantiomers was inhibited by general anaesthesia with halothane.

We have also begun studies to investigate the blood-brain transfer of the enantiomers of thiopentone in relation to the EEG signal (a continuous measure of drug uptake into brain). As noted above, it has been known for decades that for some chiral barbiturates <sup>9</sup> <sup>24</sup>, the effects on the brain of the enantiomers differ — one enantiomer is CNS depressant (as expected!) but the other is CNS excitant! This study, we believe, should shed some light on the well-known observation of barbiturate activation of the EEG before inactivation, and help sort out the relative components of pharmacokinetics from pharmacodynamics.

Last but not least, we have begun studies to investigate the metabolic pathways of halothane. Although there has been much research of halothane metabolism and some of this in relation to halothane hepatitis, a connection between halothane enantiomers, halothane metabolism and halothane hepatitis has never been sought.

This series of studies were established or advanced with funding from the Douglas Joseph Professorship: this has now led to a NH&MRC grant to continue the work.

The synthesis and presentation of drugs as racemates now presents interesting areas for pharmacological investigation and for regulatory affairs departments of pharmaceutical companies, as the various Federal drug licensing bodies become interested in this example of unintentional fixed dose ratio drug combinations. The future, in fact, looks fairly bleak for the introduction of racemic new drugs. Proof of "no penalty of the racemate over single enantiomer drugs" already rests with the companies that wish to licence a new racemic substance.

Bear in mind that most naturally occurring chiral drugs are single enantiomers because of stereo-selective biosynthetic pathways. Synthetic chiral drugs occur because most chemical reactions have a 50:50 probability of producing either enantiomer — unless chiral starting products are used and synthetic reactions are chosen to preserve the chirality in the desired form. Either way, it becomes a costly business to redevelop old drugs even if there is found to be a therapeutic advantage in producing a single enantiomer. Although, however, it must be added, that new, often small, specialist companies are now beginning to fill this role.

Both a risk-benefit analysis of using racemate and a costbenefit analysis of using single enantiomer is required. Although it may be more elegant pharmacologically, sometimes there is no (recognized) penalty of using a racemate over a single enantiomer, even when it is known that one enantiomer has essentially all of the wanted activity. However, the side effect profile of the other enantiomer becomes of vital importance and it has to be shown that there is no penalty. This applies, as a recent example of drug approval to ketorolac — as far as we know at present the racemate used clinically is not more hazardous than the "active" S-enantiomer. Some of the issues to be evaluated are shown in Table 2. The "bottom line" almost certainly is that the "user pays".

## TABLE 2 Some issues in moving from racemic to single enantiomeric drugs

Risk-benefit	Cost-benefit		
Toxicity	Manufacturing costs		
Potency	Development costs		
Pharmacology	Regulatory burden		
Pharmacokinetics	Customer pays		

Mr Chairman, Fellows and other colleagues, in this presentation I have reviewed the principles of chirality with some applications to the discipline of anaesthesia. These principles are not new, being largely attributable to Louis Pasteur. However, I would like you to think about them occasionally and suggest a time to remind you. When next you don your surgical attire of gloves and "booties", note that only one pair is mirror imaged and remember that **chirality is in your hands.** 

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## ULIMAROA — EXCELLENCE AWARD

At a luncheon held at the Grand Hyatt, Melbourne, in the presence of 550 guests from all walks of life, John March & Co. Pty Ltd, the Electrical Contractors to Ulimaroa received the NECA Excellence Award.

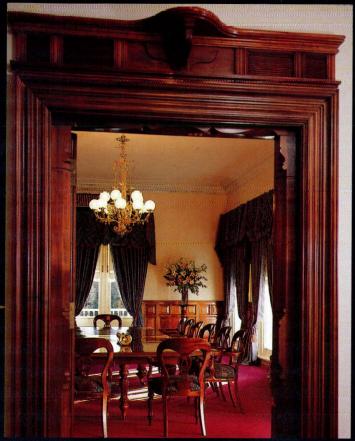
The National Electrical Contractors' Association (NECA) Award is the pinnacle achievement for electrical contractors and winners of such award are recognised for their commitment to providing outstanding services and products to the community.

There are five sections of the Award and John March & Co. received the Small General Contracting Award for their work in upgrading the electrical wiring and installation to provide state-of-the-art facilities at Ulimaroa. Such improvements include the ability to beam via a video, activities in several venues within Ulimaroa, special circuit wiring for heating, earthing of light fittings and outdoor garden lighting.

A video of the interior and exterior of Ulimaroa and illuminated in the evening was presented during the luncheon promoting the College to the community.

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## ULIMAROA - COLLEGE HEADQUARTERS



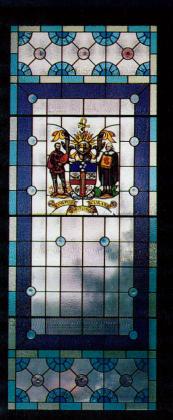
Council Room



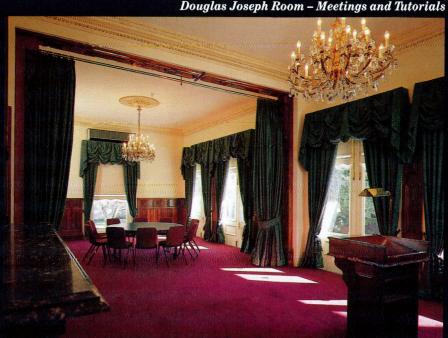
Front Entrance



Library



Stained glass window above rear stairway.



Douglas Joseph Room - Meetings and Tutorials

## ULIMAROA - COLLEGE HEADQUARTERS



Stained glass skylight above front staircase.



Geoffrey Kaye Museum of Anaesthetic History.

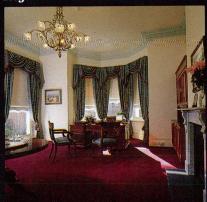


President's Office

Front foyer including staircase.



Registrar's Office



### FACULTY OF INTENSIVE CARE

## DEAN'S MESSAGE

Professor G.A. (Don) Harrison is a man who has freely given his time, energy, knowledge and skills in the education of people involved in patient care. Most importantly, he has shaped attitudes and constructively influenced many individuals into helping and teaching others. Happily for the Australian and New Zealand College of Anaesthetists and the Faculty of Intensive Care, much of his effort has involved the education of anaesthetists and intensivists.

In teaching, training schemes, preparation of the Objectives of Training documents and the examination system, Don's involvement has been enormous. With respect to all of these areas in intensive care, especially during the most important early formative stages, Don was our highly respected and much admired leader. He was a true pioneer in guiding the establishment of the world's first training and examination system for primary specialists in intensive care. He continues to positively influence our system by participation in Examiners' Workshops and in many other ways.

Because of Don Harrison's unique contribution to all of these aspects of intensive care within ANZCA, the Board of Faculty of Intensive Care unanimously decided to honour him in a most appropriate way. The Intensivist's Prize, to be awarded annually to the most outstanding candidate in the Final Examination in Intensive Care, is to be named the "G.A. (Don) Harrison Medal".

All Fellows of the Faculty of Intensive Care extend their congratulations to you Don. The prestigious value of this prize will be greatly enhanced by having your name associated with it. We all thank you for your outstanding service to the College and Intensive Care generally.

2.61-

GEOFFREY M. CLARKE

August 1994 Bulletin

# DEAN'S REPORT TO FELLOWS OF THE FACULTY OF INTENSIVE CARE, ANZCA, AS AT 7TH JUNE 1994

It is my pleasure to report on behalf of the Interim Board of Faculty on the affairs of the Faculty to date.

#### **ESTABLISHMENT**

Just one year after a Working Party chaired by Professor Garry Phillips met in November 1992, and with the goodwill of Fellows of the Australian and New Zealand College of Anaesthetists and the support of Council, the Interim Board of Faculty was appointed and held its first meeting in November 1993. A great deal of preparatory work has been achieved over the past six months, with thanks to the dedication and enthusiasm of the members of the Interim Board. The membership of the Interim Board is as follows:

Dean	G.M. Clarke
Vice-Dean	R.V. Trubuhovich
Censor	W.G. Parkin
Treasurer	R.F. Whiting
Education Officer	G.D. Phillips
Chairman of Examinations	A.W. Duncan
Member	F.H. Hawker

The Interim Board has held four separate meetings, one being by teleconference.

The Board nominated Regional Education Officers in Intensive Care as its regional representatives, and requested Training Officers to act on behalf of the Faculty in Hong Kong, Malaysia and Singapore.

Supervisors of Training in Intensive Care were ratified as Supervisors of Training for the Faculty.

A Fellowship Admissions Sub-Committee was created by the Board, to allow for efficient processing of applications for admission to Fellowship. The Committee is comprised of the Dean, the Censor and the Chairman of the Fellowship Examination Committee.

#### **FELLOWSHIP**

The Interim Board admitted 155 Foundation Fellows to the Faculty on 4 November 1994. The following four Fellows have since been admitted by Examination, with two Fellows admitted by election.

#### By Examination:

Peter van Heerden, WA Christopher Anstey, QLD Ian Jenkins, WA John Gallagher, SA

#### By Election:

Lindsay Worthley, SA Geoffrey Barker, Canada

#### POLICY

The Interim Board identified a number of policy issues appropriate to the Faculty and commenced preparation of statements for an appeals mechanism, a maintenance of standards programme for Fellows, a revision of the Objectives of Training and definition of clinical indicators for intensive care.

The Board has reviewed the following policy documents:

- IC-1 Minimum Standards for Intensive Care Units
- IC-2 The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts
- IC-3 Guidelines for Hospitals Seeking Faculty Approval of Training Posts in Intensive Care
- IC-4 The Supervision of Vocational Trainees in Intensive Care
- IC-5 Duties of Regional Education Officers
- IC-6 Supervisors of Training in Intensive Care
- IC-7 Secretarial Services to Intensive Care Units

#### SECTION OF INTENSIVE CARE

The Section of Intensive Care and the Education Committee (Intensive Care) have been disbanded by the College. All matters pertaining to intensive care were formally handed over to the Faculty by the College.

#### RECOGNITION OF DIPLOMA

The National Specialist Advisory Committee has advised that the Diploma of Fellowship of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists (FFICANZCA) has been accepted and Fellows were advised that they may register this qualification through the various State medical boards or council.

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## REGULATIONS AND ADMINISTRATIVE INSTRUCTIONS

Regulations and Administrative Instructions relating to training and examinations have been established for the Faculty. The Administrative Instructions incorporate important changes which affect training requirements for trainees commencing training in approved posts on or after the beginning of the 1994 Hospital Year. Compulsory time in anaesthesia has been reduced to one year. The training period involving various options is now 18 months.

The five year training period now comprises two years of compulsory intensive care, one year of compulsory anaesthesia, six months of compulsory medicine and 18 months in any combination of general medicine, specialist medicine, emergency medicine, surgery, research (limited to one year), intensive care, clinical anaesthesia or other discipline related to intensive care. This would allow a person seeking a double-endorsement to count  $2\frac{1}{2}$  years of anaesthesia from approved training posts.

### **EXAMINATIONS**

### Fellowship Examination, May 1994

An examination was held in Sydney. Six candidates presented and two were successful.

The successful candidates who have not completed training are:

Dr D Buckley, Vic

Dr J Cockings, SA

### Panel of Examiners

The Australian and New Zealand College of Anaesthetists' Panel of Examiners was adopted as the Faculty Panel of Examiners.

### Intensivist's Prize

The Interim Board established an 'Intensivist's Prize' for the top annual candidate in the Fellowship Examination and approved guidelines for its award.

### ANNUAL SCIENTIFIC MEETINGS

The Faculty participated in the College's Inaugural Annual Scientific Meeting in Launceston. The Board has arranged for its first Faculty Foundation Visitor to contribute to the 1995 Annual Scientific Meeting in Townsville.

### LIAISON

Through a meeting with the Royal Australasian College of Physicians and the Australian and New Zealand Intensive Care Society, two liaison committees have been established. The first will be a liaison committee of ANZICS, the Faculty and the Specialist Advisory Committee in Intensive Care (RACP) to consider matters of policy and standards affecting the practice of intensive care. A second committee of the Faculty and RACP members, with ANZICS representation, is to investigate common issues relating to training and assessment of intensive care trainees.

### ELECTION OF THE BOARD

As a result of the call for nominations, the following Fellows have been elected to the Board of Faculty:

Dr Geoffrey Clarke (WA) Dr Neil Matthews (SA)
Dr Jamie Cooper (VIC) Dr Peter Thomas (SA)
Dr Alan Duncan (WA) Dr Ron Trubuhovich (NZ)
Dr Felicity Hawker (NSW) Dr Rob Whiting (QLD)

Professor Garry Phillips and Professor Geoff Parkin did not seek nomination to the Board. On behalf of all Fellows I would like to thank them for their term as Board members, and also for their tremendous contribution to intensive care in the past.

### THE FUTURE

I would like to congratulate all Fellows on the development of the Faculty, and again express my thanks to the College for the speed with which it was formed. It has been a great honour for me to serve as Dean of the Interim Board and I have been delighted at the progress made so far.

Once Regional Committees in Intensive Care are established the mechanism for two way communication between the Board and Fellows of the Faculty will be greatly facilitated. We have a fine training and examination system and are setting high standards for the practice of Intensive Care. What we have already can still be improved and must continue to move with the times. The participation of all Fellows in the affairs of the Faculty is urged if such aims are to be achieved.

The first elected Board will convene on 8 June 1994. I urge all Fellows to support the new Faculty and its new Board.

G M CLARKE

Dean

Interim Board of Faculty

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## FOUNDATION FELLOWS OF THE FACULTY OF INTENSIVE CARE ADMITTED 4TH NOVEMBER 1993

Neil ABRAHAMS, NSW Brian Joseph ANDERSON, NZ Arthur Barrington BAKER, NSW Robert James BARNETT, Canada John Campbell BARRETT, NZ Peter Graeme BENDIXEN, QLD Forbes Eadie BENNETT, NZ Ronald Ernest BENSON, NSW Andrew David BERSTEN, SA Gillian Frances BISHOP, NSW Christopher Leonard BORTON, NSW Francis Xavier BREHENY, WA Thomas Anthony BUCKLEY, HK Jonathan Neil BUCKMASTER, VIC Anthony Richard BURRELL, NSW Michael Paul BURT, ACT David John McGregor BUTCHERS, NSW Philip Leonard BYTH, NSW John Francis CADE, VIC Peter Donald CAMERON, WA Victor Ian CALLANAN, QLD Paul CHAMPION, VIC Marianne Jean CHAPMAN, SA Geoffrey Malcolm CLARKE, WA David George CLAYTON, SA Michael John CLEARY, QLD Peter Dalton COOK, NSW Leigh John COOMBS, WA David James COOPER, VIC Charles Frederick CORKE, VIC Nicholas John CORONEOS, NSW Peter Joseph CRANSWICK, VIC Matthew Ronald CRAWFORD, NSW Kieran CROWLEY, Ireland Philip Howard Vaughan CUMPSTON, NSW David Neil CUNNINGHAM, SA Helen Elizabeth CURROW, NSW Geoffrey Ronald CUTFIELD, NSW Alfred Charles DAY, NZ Geoffrey John DOBB, WA Trevor Lancelot DOBBINSON, ACT George DOWNWARD, NZ Graeme John DUKE, VIC Alan William DUNCAN, WA Stephen Arthur EDLIN, WA Grant Frederick ERUINI-BENNETT, NSW Malcolm McDougal FISHER, NSW John Jeffrey FLACHS, NSW Alistair Millar FORBES, WA William Rayner FULLER, SA David Alan GALLER, NZ

Leslie Henry GALLER, NZ Stephen Paul GATT, NSW Robert Charles GAZZARD, VIC Alastair James GIBSON, NZ John Eugene GILLIGAN, SA William Middleton GRIGGS, SA Geoffrey Alan GUTTERIDGE, VIC Stephen Roderick HAGLEY, SA Gordon Alfred HARRISON, NSW Graeme Keith HART, VIC Jack Hilton HAVILL, NZ Felicity Helen HAWKER, NSW Robert Darien HENNING, VIC Keith Graham HICKLING, NZ Geraldine HILL, NSW Kenneth Mark HILLMAN, NSW William Ralph HODGSON, NSW Andrew William HOLT, SA Robert Charles HUTCHINSON, VIC Philip Rowan HYDE, NZ Theresa Clair JACQUES, NSW Malig Pengeran Chunchie JAIMON, NSW Owen Francis JAMES, NSW James Arthur JUDSON, NZ James Patrick Dalton KEANEY, ACT Dennis Robert KERR, NSW Neil Gordon KILOH, NSW John Campbell LAWRENCE, NSW Peter John LAWRENCE, NSW Richard Priestley LEE, NSW Bruce Gregory LISTER, QLD Joy-Wah Ronald LO, HK James Beaumont LOVE, VIC Harold Michael MARSH, USA Vladimir MARTYN, WA Neil Thomas MATTHEWS, SA Colin James McARTHUR, NZ John Bernard McCARTHY, QLD David James McCLEAVE, SA Anthony John McDONOGH, NSW Angela McLUCKIE, UK Peter Jerome McQUILLAN, UK Roderick John McRAE, VIC Peter Gordon MOORE, USA David Gordon MORE, NSW Evan Brian MORGAN, VIC Thomas John MORGAN, QLD Peter Thomas MORLEY, VIC Anthony Park MORTON, QLD Muniswami Yuganathan MUDALIAR, NSW Geoffrey Charles MULLINS, WA

William JAMES MURTHA, Canada Johan Alexander MYBURGH, SA Anthony John O'CONNELL, NSW Miceal Seamus O'FATHARTAIGH, SA Teik Ewe OH, HK Paul Ormond OLDER, VIC Rosemary Anne O'MEEGHAN, USA John Herbert OVERTON, NSW William Geoffrey PARKIN, VIC Ranald Lochiel Stewart PASCOE, QLD Sandra Lois PEAKE, SA Ian Young PEARSON, NSW Aaron Ronny PEISACH, SA Dermot Michael O'Malley PHELAN, Ireland Garry David PHILLIPS, SA Mason Philip RAMSAY, NZ Alan Patrick Nigel RANKIN, NZ John Hamilton REEVES, VIC Howard Philip ROBY, NSW

Martin Peter ROWLEY, NSW

William Ben RUNCIMAN, SA William Peter SAUL, NSW

Edward Grant SIMMONS, SA

Mark SCHNEIDER, WA

Mark SKACEL, NSW

Margrid Brigitte SCHINDLER, NSW

Yahya Mah'd Saleh SHEHABI, NSW

Peter William SKIPPEN, QLD Frances Evelyn SMITH, NSW Hing-Yu SO, HK Neil Cranson SONI, UK Martin Kinman STREET, UK Anthony David SUTHERLAND, VIC Paul Kenneth SWAN, VIC Douglas Geoffrey TABRETT, NSW Bruce Lindsay TAYLOR, UK Geoffrey Terrence TAYLOR, UK Peter Dean THOMAS, SA Walter Ross THOMPSON, WA James TIBBALLS, VIC Thomas Andrew Gabriel TORDA, NSW Simon Charles Bruce TOWLER, WA Ronald Valentine TRUBUHOVICH, NZ David Byam ULYATT, NZ Alnis Ernst VEDIG, SA Edward WARD, NZ John Charles WARDEN, NSW Rupert Anthony WEAVER, VIC John William Nicholas WEEKES, WA Drew Cecil James WENCK, QLD Robert Frederick WHITING, QLD David Yong WILLIAMS, VIC

David Malcolm WRIGHT, ACT

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

## POLICY DOCUMENTS

IC-1 (1994)	Minimum Standards for Intensive Care Units
IC-2 (1994)	The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts
IC-3 (1994)	Guidelines for Hospitals Seeking Faculty Approval of Training Posts in Intensive Care
IC-4 (1994)	The Supervision of Vocational Trainees in Intensive Care
IC-5 (1994)	Duties of Regional Education Officers in Intensive Care
IC-6 (1994)	Supervisors of Training in Intensive Care
IC-7 (1994)	Secretarial Services to Intensive Care Units

July 1994

# ITEMS OF INTEREST FROM THE INAUGURAL MEETING OF THE ELECTED BOARD OF FACULTY OF INTENSIVE CARE HELD 8 JUNE 1994

### ELECTION OF OFFICE BEARERS

Dean Vice Dean Censor Education Officer Treasurer G.M. Clarke R.V. Trubuhovich A.W. Duncan F.H. Hawker N.T. Matthews

### HONOUR

The Board noted that Dr J.E. Gilligan, SA, was awarded the *AMA National Award for Significant Advances in Health Care* for his contribution to the field of transport of the critically ill.

### FELLOWSHIP EXAMINATION

Dr R.P. Lee was appointed Chairman of the Fellowship Examination as of 1995.

### Examination

The Examiners Report of the Final Examination held in March/May 1994 has been circulated. Six candidates presented for the Examination, and two were successful.

### LIAISON

A conjoint Committee on Training and Certification has been established with the Royal Australasian College of Physicians and the Australian and New Zealand Intensive Care Society. The Dean, Education Officer and Censor have been nominated to represent the Faculty on the Committee. They were also nominated to represent the Faculty on the ANZICS Liaison Committee.

## REGIONAL COMMITTEES

In an effort to promote communication with Fellows, the Board agreed that where sufficient numbers of Fellows exist, Regional Committees of the Faculty be established. It was agreed that where there are fewer than 10 Fellows in a given region, that region will be represented by a Board member, or by an elected representative or by the Regional Education Officer.

Board members or Regional Education Officers have been requested to call a meeting of Fellows in their region for the purpose of electing Regional Committees on or after 1st July 1994.

ADMISSION TO FELLOWSHIP BY EXAMINATION Dr W.J. O'Regan, NSW, was admitted to the Faculty of Intensive Care, on the 7th June. 1994.

## **POLICY DOCUMENTS**

IC-1 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

### MINIMUM STANDARDS FOR INTENSIVE CARE UNITS

#### INTRODUCTION

An Intensive Care Unit (ICU) is a specially staffed, specially equipped, separate section of a hospital dedicated to the observation, care and treatment of patients with life-threatening or potentially life-threatening illnesses, injuries or complications, from which recovery is possible. It provides special expertise and facilities for the support of vital functions, and utilises the skills of medical, nursing and other staff experienced in the management of these problems.

The concentration of staff and equipment to care for these critically ill patients in one area of the hospital encourages efficient use of expertise and limited resources. The concept of a general ICU, rather than separate specialised units such as medical, respiratory and surgical has developed in Australasia. This is because the skills and resources necessary to care for the critically ill are common, and most efficiently concentrated in one area. This does not preclude the division of one ICU into a higher level (e.g. for ventilated patients) and lower or "step-down" level (e.g. for postoperative patients), nor does it preclude the siting of specific high dependency areas elsewhere (e.g. neurosurgical, postoperative cardiothoracic area). Neonatal and Paediatric Intensive Care Units are preferably separate from general ICU's. Coronary care patients and children are sometimes managed in a general ICU.

Within each health region, policies should be available for the admission criteria of patients as well as protocols for transferring and retrieving patients.

### LEVELS OF INTENSIVE CARE UNITS

The level of intensive care available should support the delineated role of the particular hospital. The role of a particular ICU will vary, depending on staffing, facilities and support services as well as the type and number of patients it has to manage.

### 1. LEVEL I

A Level I ICU should be capable of providing immediate resuscitative management for the critically ill, short term cardio-respiratory support, and have a major role in monitoring and prevention of complications in "at risk" medical and surgical patients.

The patients most likely to benefit from Level I care include:

- patients with uncomplicated myocardial ischaemia;
- post-surgical patients requiring special observations and care;
- unstable medical patients requiring special observations and care beyond the scope of a conventional ward, and
- (d) patients requiring short term mechanical ventilation.

### A Level I ICU should have the following:

- a self-contained area with easy access to the emergency department, operating theatres and organ imaging;
- defined admission, discharge and referral policies;
- 1.3 overall control and supervision by an appropriately qualified medical practitioner;
- 1.4 consultant support always available;
- 1.5 priority for 24 hour Resident Medical Officer cover;
- 1.6 a nursing staff:patient ratio of 1:1 for all critically ill patients;
- 1.7 educational programmes for both medical and nursing staff;
- 1.8 an orientation programme for new staff;
- 1.9 audit of its activities and their outcome;
- 24 hour access to physiotherapy, laboratory and imaging services;
- 1.11 support services, e.g. technical, clerical, and
- 1.12 adequate office space.

### 2. LEVEL II

A Level II ICU should be capable of providing a high standard of general intensive care, which supports the hospital's other delineated roles, e.g. general

Bulletin

medicine, surgery, trauma management, neurosurgery, vascular surgery, etc. It should be capable of providing ventilatory support and have monitoring and support equipment to sustain the unit's delineated role, e.g. invasive haemodynamic monitoring and dialysis support.

### A Level II ICU should have the following:

- a self-contained area with easy access to the emergency department, operating theatres and organ imaging;
- 2.2 defined admission, discharge and referral policies;
- 2.3 a designated medical director with an appropriate intensive care qualification or other specialist qualification acceptable to the Board;
- 2.4 specialist cover available at all times; the unit needs sufficient specialist staff to provide reasonable working hours and leave of all types and to allow the duty specialist to be available exclusively to the unit;
- 2.5 medical staff with an appropriate level of experience present in the unit at all times;
- 2.6 nursing staff:patient ratio of 1:1 for critically ill patients;
- a significant number of nursing staff with intensive care certification and access to a nurse educator;
- 2.8 educational programmes for medical and nursing staff;
- 2.9 an orientation programme for new staff;
- 2.10 formal audit and review;
- 2.11 suitable isolation procedures;
- 2.12 24 hour access to physiotherapy, laboratory, imaging and other diagnostic facilities;
- 2.13 support staff as appropriate, e.g. biomedical engineer, clerical staff, and
- 2.14 adequate office space.

### 3. LEVEL III

A Level III ICU should provide the widest level of care, monitoring and therapy required by its referral role as well as that required by the delineated role of the hospital. Such a referral intensive care unit should be capable of managing all aspects of intensive care medicine and should be a tertiary referral unit.

A Level III ICU should be capable of all aspects of intensive care. It should have the following:

3.1 a self-contained area, with easy access to the emergency department, operating theatres and organ imaging;

- 3.2 defined admission, discharge and referral policies;
- 3.3 a medical director with specialist intensive care qualifications;
- 3.4 sufficient supporting specialist(s) so that consultant support is always available to the medical staff in the unit; there should be sufficient specialist staff to provide for reasonable working hours and leave of all types and to allow the duty specialist to be available exclusively to the unit;
- 3.5 medical staff with an appropriate level of experience present in the unit at all times;
- 3.6 nursing staff available to greater than 1:1 ratio for patients requiring complex management;
- 3.7 a preponderance of nursing staff with intensive care certification:
- 3.8 a nurse educator and formal nursing educational programme;
- 3.9 24 hour access to physiotherapy, laboratory, imaging and other diagnostic facilities;
- 3.10 suitable isolation procedures;
- 3.11 formal audit and review:
- 3.12 support staff as appropriate, e.g. biomedical engineer, clerical and scientific staff;
- 3.13 educational programmes for medical staff;
- 3.14 adequate office space;
- 3.15 an active research programme, and
- 3.16 an orientation programme for new staff.

### MINIMUM STANDARDS GUIDELINES

### 4. OPERATIONAL

All units should have defined policies for admission, management, discharge and referral of patients. The unit should be under the direction of a single medical specialist. This person should institute agreed policies, develop a team approach for management and be responsible to the hospital administration through appropriate channels. Clinical management of the patient must be achieved within the framework of agreed policies. The unit should have procedures for formal audit, peer review and quality assurance. In Level II units, an active research programme should be encouraged, while in Level III units, an active research programme must exist. Services required on a 24 hour basis include physiotherapy, imaging, laboratory and other diagnostic facilities.

### 5. STAFFING

### 5.1 Medical Staff

A post-graduate qualification in intensive care is recommended for senior specialist staff appointed in Level II and III units. Sufficient specialist staff to provide for administration, teaching, research, reasonable working hours and leave of all types are necessary. A specialist should be available for support, advice or consultation 24 hours a day solely for these units. There should be 24 hour full-time junior staff with an appropriate level of experience rostered exclusively to Level II and III units at all times. In Level III units there must be access to a broad range of specialty consultants.

### 5.2 Nursing Staff

The nursing staff:patient ratio and the total number of nursing staff required by each unit depends on many variables such as the total number of patients, severity of illness of patients, as well as individual policies for support and monitoring in each unit. Level I and II units should be capable of providing a nursing staff:patient ratio of 1:1 for all critically ill patients. Level III units should be capable of providing nursing care to greater than 1:1 ratio for critically ill or unstable patients. These units need a preponderance of nursing staff with intensive care certification.

An artificially ventilated patient needs at least one nurse at the bedside at all times. A ventilated patient with more complex support such as dialysis and inotropic support may need two nurses per patient for at least some of the shift. Others such as post-operative patients admitted for overnight monitoring and treatment with a continuous epidural and supplemental oxygen, may require only one nurse per 2-3 patients. Allowances must be made for meal breaks, handover times, holidays, sickness, study leave, etc.

### 5.3 Other Staff

Depending on the needs of the unit, physiotherapists, radiographers, dieticians, technicians including biomedical engineering and scientific officers, cleaning staff, social workers, occupational therapists, interpreters, pastoral, secretarial and clerical staff are all required. Secretarial services should be available to support educational and administrative activities. These should be separate from ward clerk duties in the ICU.

### 5.4 Education

The unit should have an educational programme

for medical, nursing and other staff. Units at Level II or III should have a nurse educator and a formal educational programme.

#### 6. STRUCTURE OF AN ICU

### 6.1 Siting

The ICU should be a separate unit within the hospital with easy access to the emergency department, operating theatres and organ imaging.

### 6.2 Design

A high standard of intensive care medicine is influenced by good design and adequate space. Whenever renovations or new structures are being planned there are certain features which should be considered.

- 6.2.1 Patient Area at least 20m² floor area is required for each bedspace in an open area exclusive of service areas indicated below. At least one wash basin for every two beds is recommended. At least one single room should be available for every six open space beds. Each single room needs to have its own wash basin. There must be an adequate number of service outlets depending on the purpose of the unit. A Level III unit will require at least three oxygen, two air and three suction outlets, and at least 16 power points for each bedspace. Adequate and appropriate lighting for clinical observation must be available. Service outlets and lighting must comply with standards prescribed by the appropriate authority. For the psychological well-being of patients and staff, windows and bed access to the exterior are desirable features. Design of the unit should take into account the need for patient privacy.
- 6.2.2 Working Area the working area must include adequate space for staff to work in comfort while maintaining visual contact with the patient. Adequate space must be allowed for telephones and other communication systems, patient monitoring, storage of stationery, x-rays, medication storage areas (including a refrigerator), resuscitation equipment, mobile x-ray machine, etc. Adequate space for a receptionist and/or ward clerk must be available. X-ray viewing facilities must enable simultaneous viewing of multiple x-rays.
- 6.2.3 *Environment* the unit should have appropriate air conditioning which allows control of temperature, humidity and air change.

- 6.2.4 *Isolation area* the unit must be capable of isolation procedures.
- 6.2.5 **Equipment storage area** e.g. for monitors, ventilators, infusion pumps and syringes, dialysis equipment, disposables, fluids, drip stands, trolleys, blood warmers, suction apparatus, linen, large items of special equipment.
- 6.2.6 *Dirty utility* area for cleaning appliances, urine testing, emptying and cleaning bed pans and urine bottles. Unit design should provide appropriate movement pathways for contaminated equipment.
- 6.2.7 **Staff Facilities** should be sited close to the patient area and have adequate communication with it.
- 6.2.8 Seminar Room should be situated close to the patient area with adequate communication, and be equipped with seating, audiovisual aids, wall boards and other teaching aids.
- 6.2.9 Nursing Offices separate offices must be provided at least for the Nurse in Charge and Nurse Educator.
- 6.2.10 *Medical Offices* each senior doctor should have adequate office space.
- 6.2.11 Relatives' area a separate waiting area must be available (with drinks dispenser, radio, television and comfortable seating desirable). A separate interview room and a separate area for distressed relatives, should be available and overnight rooms for relatives should also be considered.
- 6.2.12 Secretarial area a separate area should be available for departmental secretarial assistance. Records storage has to be accommodated.
- 6.2.13 Computing facilities a separate area should be designated for computerised patient data entry and analysis. Confidentiality should be built into any system.
- 6.2.14 *Cleaners' area* for storage of equipment and materials.
- 6.2.15 Workshop and Laboratory should be considered for any unit which does not rely on centralised services.
- 6.2.16 *Library facilities* an appropriate range of bench manuals, textbooks and journals for rapid access 24 hours a day should be available within the unit complex.

### 7. EQUIPMENT

- 7.1 The type and quantity of equipment will vary with the type, size and function of the unit and must be appropriate to the workload of the unit, judged by contemporary standards.
- 7.2 There must be a regular system in force for checking the safety equipment.
- 7.3 Basic equipment should include:
  - ventilators
  - hand ventilating assemblies
  - suction apparatus
  - airway access equipment, including bronchoscopic equipment
  - · vascular access equipment
  - monitoring equipment, both non-invasive and invasive
  - defibrillation and pacing facilities
  - equipment to control patient's temperature
  - chest drainage equipment
  - infusion and specialised pumps
  - portable transport equipment
  - specialised beds

Other equipment (e.g. haemodialysis and intraaortic balloon counter pulsation equipment etc) for specialised diagnostic or therapeutic procedures should be available when clinically indicated and in order to support the delineated role of the ICU.

Protocols and inservice training for medical and nursing staff need to be available for the use of all equipment, including steps to be taken in the event of malfunction.

### 8. MONITORING

Monitoring of certain fundamental physiological variables should be carried out.

Some or all of these basic recommendations will need to be exceeded routinely depending on the physical status of the patient. Occasionally some of the recommended methods of monitoring may be impractical or inappropriate. Intensive care units should establish policies to deal with such circumstances.

The described monitoring methods may fail to detect unfavourable clinical developments and their use does not guarantee any specific patient outcome.

The health care facility in which the intensive care is being carried out is responsible for provision of equipment for intensive care and monitoring on the advice of one or more designated intensive care specialists, and for effective maintenance of this equipment.

#### 8.1 Personnel

Clinical monitoring by a vigilant nurse is the basis of intensive patient care. This should be supplemented by appropriate devices to assist the nurse.

### 8.2 Patient Monitoring

### 8.2.1 Circulation

The circulation must be monitored at frequent and clinically appropriate intervals by detection of the arterial pulse, ECG display and measurement of the arterial blood pressure.

### 8.2.2 Respiration

Respiratory function should be assessed at frequent and clinically appropriate intervals by observation, supported by capnography and blood gas analysis.

### 8.2.3 Oxygenation

The patient's oxygenation should be assessed at frequent and clinically appropriate intervals by observation, pulse oximetry and blood gas analysis as appropriate.

### 8.3 Equipment

### 8.3.1 Piped gas supply failure alarm

There must be piped gas supply failure alarms.

### 8.3.2 Oxygen supply failure alarm

An automatically activated device to monitor oxygen supply pressure and to warn of low pressure must be fitted to ventilators.

### 8.3.3 Oxygen analyser

An oxygen analyser must be available to measure the oxygen concentration delivered by ventilators or breathing systems.

### 8.3.4 Alarms for Breathing System Disconnection or Ventilator Failure

When an automatic ventilator is in use, a device capable of warning promptly of a breathing system disconnection or ventilator failure must be in continual operation.

### 8.3.5 Ventilator volumes and pressures

When an automatic ventilator is in use ventilatory volumes and pressure must be able to be measured, and a device capable of warning promptly of excessive pressure in the breathing system must be in continuous operation.

### 8.3.6 Humidifier temperature

When a heated humidifier is in use monitoring of the inspired temperature must be available which alarms at high temperature.

### 8.3.7 Electrocardiograph

Equipment to monitor and continually display the electrocardiograph must be available for every patient.

### 8.3.8 Pulse Oximeter

A pulse oximeter must be available for every patient in intensive care.

### 8.3.9 Air embolus

When a patient is treated by haemodialysis, plasmapheresis or circulatory perfusion, monitoring for air embolus must be in use.

### 8.3.10 Other Equipment

When clinically indicated, equipment should be available to measure other physiological variables such as intraarterial and pulmonary artery pressures, cardiac output, inspiratory pressure and airway flow, intracranial pressure, temperature, neuromuscular transmission, expired carbon dioxide.

These guidelines should be interpreted in conjunction with the following Policy Documents of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists:

- IC-2 "The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts"
- IC-3 "Guidelines for Hospitals seeking Faculty Approval of Training Posts in Intensive Care"
- IC-4 "The Supervision of Vocational Trainees in Intensive Care"
- IC-6 "Supervisors of Training in Intensive Care"
- IC-7 "Secretarial Services to Intensive Care Units"

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February 1994

IC-2 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

## THE DUTIES OF AN INTENSIVE CARE SPECIALIST IN HOSPITALS WITH APPROVED TRAINING POSTS

### 1. PREAMBLE

These guidelines have been developed to indicate to hospitals what the Faculty of Intensive Care believes to be the duties of an intensive care specialist, and how the specialist's time should be divided between clinical duties, administrative and educational duties.

### 2. THE DUTIES OF AN INTENSIVE CARE SPECIALIST

### 2.1 Clinical Duties include:

- 2.1.1 Providing care and assuming responsibility for patients in the intensive care unit.
- 2.1.2 Supervising trainees in the intensive care unit.
- 2.1.3 Being available to medical colleagues for consultation and liaison as appropriate regarding patient care.
- 2.1.4 Being immediately available for urgent consultation and assistance in the resuscitation and subsequent management of critically ill patients.

## 2.2 The intensive care specialist may also be responsible for providing:

- 2.2.1 Parenteral nutrition service to patients in all areas of the hospital.
- 2.2.2 Transport of critically ill patients.
- 2.2.3 Acute resuscitation for trauma and other emergencies.
- 2.2.4 Such other clinical services as may be necessary and appropriate to the specialty.

## 2.3 Administrative and Educational Duties include:

2.3.1 Ensuring that administrative duties relating to the proper functioning of the unit and the hospital are carried out.

- 2.3.2 Providing and participating in appropriate educational activities for:
  - 2.3.2.1 Trainee specialists.
  - 2.3.2.2 Intern and resident medical officers.
  - 2.3.2.3 Postgraduate nurses.
  - 2.3.2.4 Medical students.
  - 2.3.2.5 Undergraduate nurses.
  - 2.3.2.6 Paramedical staff.
  - 2.3.2.7 Interested community groups (in subjects such as "basic life support").
- 2.3.3 Preparing material to be used for teaching.
- 2.3.4 Ensuring and reviewing quality of patient care by participating in peer review and quality assurance programmes.
- 2.3.5 Maintaining personal knowledge and skills and participating in continuing medical education.
- 2.3.6 Contributing to activities of professional associations.
- 2.3.7 Carrying out reviews and investigations of clinical management and physiological, pharmacological and other matters relevant to intensive care and resuscitation.
- 2.3.8 Ensuring that research is carried out on techniques, equipment or therapy as is necessary for the proper functioning of the unit.
- 2.3.9 Contributing to advisory services to hospital committees, health authorities and other organisations.

## 3. THE APPORTIONMENT OF TIME BETWEEN CLINICAL DUTIES AND ADMINISTRATIVE AND EDUCATIONAL DUTIES

All intensive care specialists should have a commitment to continuing medical education of themselves and their colleagues. One half day per week on average should be allowed for this activity to ensure that the unit standards are maintained. All intensive care specialists also have commitments to administration, quality assurance and other educational duties and further time must be set aside for these duties which may be distributed throughout the staff to allow the expertise within the department to be utilised.

### 3.1 The Director of Intensive Care

- 3.1.1 The Director has a prime responsibility to ensure that the intensive care service runs well and appropriately. Consequently administration comprises a significant part of the workload. A minimum regular clinical involvement is needed to maintain skills and four half days is considered to be a reasonable weekly allocation for this purpose.
- 3.1.2 If the Director is not a full time appointee appropriate time must be provided for administrative duties and personal continuing education needs.

### 3.2 The Deputy Director of Intensive Care

- 3.2.1 When the clinical, administrative and educational workload is appropriately large a Deputy Director should be appointed to a hospital to assist the Director in the administration of the unit.
- 3.2.2 Under these circumstances the Director or Deputy Director between them will provide up to ten half days of clinical service per week. This ensures that appropriate time is available for administrative and clinical duties.

### 3.3 The Staff Intensive Care Specialist

The whole time or staff intensive care specialist must have a commitment to personal continuing education, administration, quality assurance and other educational activities. Time must be allocated for these. Thus the clinical duties of a whole time or staff intensive care specialist should not exceed, on average, seven half days per week when the clinical workload is distributed amongst the specialist staff in the unit.

### 3.4 The Visiting Intensive Care Specialist

Visiting intensive care specialists have similar commitments to staff intensive care specialists and equivalent provision should be made for administrative and educational duties.

### 3.5 Trainees

Trainees are not specialists; they are specialists in training. Early in their training they must be directly supervised on a one to one basis whenever they perform clinical duties. As they become more experienced, the supervision can be gradually made less direct, until they need only the ready availability of a specialist for advice and on occasions, direct help (in accordance with Faculty Policy Document IC-4 (1994) "The Supervision of Vocational Trainees in Intensive Care").

### CONCLUSION

All staff must have sufficient exposure to clinical duties to maintain their skills. They must also have sufficient time set aside for administrative and educational activities to ensure a high standard of practice both at a unit level and an individual level.

These guidelines should be interpreted in conjunction with the following Policy Documents of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists:

IC-1 "Minimum Standards for Intensive Care Units" IC-4 "The Supervision of Vocational Trainees in Intensive Care"

This policy document has been prepared having regard to general circumstances, and it is the responsibility of the practitioner to have express regard to the particular circumstances of each case, and the application of this policy document in each case.

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February 1994

IC-3 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

### GUIDELINES FOR HOSPITALS SEEKING FACULTY APPROVAL OF TRAINING POSTS IN INTENSIVE CARE

### 1. GENERAL

- 1.1 The Faculty of Intensive Care classifies intensive care units into a number of categories for the purpose of its Administrative Instructions related to training in intensive care.
- 1.2 To be suitable for approval an intensive care unit must:
  - 1.2.1 be fully established and operational;
  - 1.2.2 have a wide spectrum of experience with an acceptable case load;
  - 1.2.3 be part of a hospital with a comprehensive range of medical and surgical specialties;
  - 1.2.4 have access to a wide spectrum of investigative facilities;
  - 1.2.5 have an adequate number of specialised medical, nursing and ancillary staff;
  - 1.2.6 have available, at all times, clinical supervision by appropriately qualified senior medical staff;
  - 1.2.7 have suitable facilities for the role of the unit, and for the staff who work in it;
  - 1.2.8 have a programme of education, review and research, which must include a formal teaching programme readily available to trainees; and
  - 1.2.9 have defined admission, management, discharge and referral policies.
- 1.3 The hospital must be prepared for the Faculty, at intervals determined by the Board, to carry out visits to the unit to assess its suitability for training. Information about caseload, staffing patterns and the rosters will be required.
- 1.4 The training appointment must be entirely in intensive care, and include provision for the trainee to take part in out-of-hours unit rosters.

- 1.5 When appointments to the senior staff are made, the advice of a properly constituted committee capable of evaluating the qualifications of the applicants must be sought. Faculty nominees are available to committees for this purpose.
- 1.6 The Faculty expects that the job specifications of the senior medical staff will comply broadly with Faculty Policy Document IC-2 "The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts".
- 1.7 Supervisors of Training are nominated by the hospital and appointed by the Board of Faculty. The Supervisor is expected to carry out the duties listed in Faculty Policy Document IC-6 "Supervisors of Training in Intensive Care".
- 1.8 The Faculty expects that supervision of vocational trainees will conform to the principles of the Faculty Policy Document IC-4 "The Supervision of Vocational Trainees in Intensive Care".
- 1.9 Posts for training in intensive care units approved by the Faculty must be advertised and the approval must be indicated in the advertisement. Where the number of approved posts is less than the number being advertised, it must be made clear which posts are not approved.
- 1.10 The Faculty expects that trainees be involved in audit activities.
- 1.11 The hospital must agree to notify the Board, through its Supervisor of Training, of any changes that might affect training. Changes such as a reduction in the workload or a reduction in the number of senior staff working in the unit are regarded as important.
- 1.12 Applications for an increase in the number of approved positions will be received by the Board, but before granting approval the Board may need to re-inspect the unit.

### 2. CLASSIFICATION OF UNITS

#### 2.1 Criteria

The period of training in a unit which is approved may be determined by:

- 2.1.1 the nature and complexity of illness in the patients treated in the unit;
- 2.1.2 procedures performed in the unit;
- 2.1.3 the range of the rapeutic and diagnostic procedures and investigations available in the hospital;
- 2.1.4 research activities in the unit;
- 2.1.5 the number and qualifications of medical, nursing and other health professionals assigned to the unit;
- 2.1.6 training programmes for staff, and
- 2.1.7 continuing education activities within the hospital.

### 2.2 Categories

Recognised for Compulsory Training

2.2.1 The unit is suitable for the compulsory years of training in accordance with A.I. 1.5.1.1. Such a unit is also considered to be suitable for further optional training in intensive care.

Recognised for Optional Training

2.2.2 The unit is suitable for optional training only, in accordance with A.I. 1.5.1.2.

## 2.3 Units Suitable for the Compulsory Years of Training

In addition to the general guidelines above, the unit must have a full-time specialist with a recognised qualification in intensive care in charge.

- 2.3.1 An intensive care specialist must be rostered to supervise the unit at all times. When providing supervision the specialist must be rostered only for intensive care duties.
- 2.3.2 Trainees must be exposed to more than one intensive care specialist, with each specialist having a minimum of 50% involvement in the unit.
- 2.3.3 The unit caseload should exceed 500 admissions per annum.
- 2.3.4 The unit should provide a broad general experience of intensive care.

- 2.3.5 At least one medical officer must be on duty solely for the unit, and must be present in the unit at all times, except for emergency resuscitations.
- 2.3.6 There should be evidence that the unit has a quality assurance programme and that evaluations in accordance with this programme are frequently carried out.
- 2.3.7 There shall be an active teaching programme for medical staff, to which daily review of patients in the unit shall make a significant contribution.
- 2.3.8 The Faculty expects there will be adequate office space for both the senior and the junior staff. Neither can be expected to carry out their roles properly without it.
- 2.3.9 Adequate secretarial help must be provided in accordance with Faculty Policy Document IC-7 "Secretarial Services to Intensive Care Units".

### 2.4 Units Suitable for Optional Training Only

In addition to the general guidelines above, the unit must have an intensive care specialist with a recognised qualification in intensive care in charge.

- 2.1.4 There must be an appropriately qualified specialist rostered to supervise the unit at all times. When providing supervision the specialist must be rostered only for intensive care duties.
- 2.4.2 Trainees must have regular exposure to at least one intensive care specialist, who has at least a 50% involvement in the unit.
- 2.4.3 The unit case load should be at least 350 admissions per annum.
- 2.4.4 At least one medical officer must be on duty solely for the unit at all times. "On duty" signifies that this medical officer must be present in the hospital.
- 2.4.5 There should be evidence that the unit has a quality assurance programme and that evaluations in accordance with this programme are frequently carried out.
- 2.4.6 There shall be an active teaching programme for medical staff, to which daily review of patients shall make a significant contribution.
- 2.4.7 The Faculty expects there will be adequate office space for both the senior and the junior staff. Neither can be expected to carry out their roles properly without it.

2.4.8 Adequate secretarial help must be provided in accordance with Faculty Policy Document IC-7 "Secretarial Services to Intensive Care Units".

### 3. PHYSICAL FACILITIES AND EQUIPMENT

### 3.1 The Patient Care Area

- 3.1.1 The number of beds available should be appropriate to the size and function of the hospital.
- 3.1.2 The area for each bed should be sufficient to allow easy access to the patient and to allow the deployment of equipment needed to manage the patient appropriately.
- 3.1.3 Services to the bed must be conveniently placed and in sufficient number to cope with the peak demand.
- 3.1.4 The design should take into account the serious risk of cross infection. There should be easy access to hand washing from each bed station and it should be easy to isolate individual patients.

### 3.2 Equipment

- 3.2.1 Equipment available in the unit must be appropriate to the work done in the unit and to the work load, judged by contemporary standards.
- 3.2.2 There must be a regular equipment safety checking system in force.
- 3.2.3 The beds must be of suitable design.

### 3.3 Support Areas

- 3.3.1 Adequate storage space is essential.
- 3.3.2 There should be a clear separation of clean and dirty working areas.
- 3.3.3 A ward administration area is required that must readily accommodate the staff who must work there.
- 3.3.4 Offices must be provided for each of the full time senior medical staff working in the unit.
- 3.3.5 There must be a suitably quiet area for the trainees to study when they have the opportunity.

- 3.3.6 The unit should have ready access to a teaching area with the appropriate facilities.
- 3.3.7 A relatives' waiting area must be available, with a separate private area for distressed relatives.

### 3.4 Teaching

- 3.4.1 The Faculty expects that there will be a formal programme of teaching provided for trainees. This teaching will include:
  - 3.4.1.1 Tutorials
  - 3.4.1.2 Daily review of patients with the senior clinician-in-charge.
  - 3.4.1.3 Case presentations and review sessions.
- 3.4.2 A programme of teaching for the medical, nursing and ancillary staff working in the unit is expected by the Faculty.

These guidelines should be interpreted in conjunction with the following Policy Documents of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists.

- IC-1 "Minimum Standards for Intensive Care Units"
- IC-2 "The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts"
- IC-4 "The Supervision of Vocational Trainees in Intensive Care"
- IC-6 "Supervisors of Training in Intensive Care"
- IC-7 "Secretarial Services to Intensive Care Units"

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February, 1994

IC-4 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

## THE SUPERVISION OF VOCATIONAL TRAINEES IN INTENSIVE CARE

Supervision must be available at all times and this should be performed by a person who possesses the FFICANZCA, or a qualification acceptable to the Board. This supervision should include not only clinical situations but also record-keeping, audit, teaching and preparation of scientific material, and should encompass the skills, knowledge and attitudes desirable in an intensive care specialist.

### 1. CATEGORIES OF SUPERVISION

During training it is expected there will be a progression of responsibility allowed to the trainee. Four categories have been defined. The category under which each trainee works depends upon individual circumstances, and the trainee's experience and development of skills, viz:

- A supervisor working directly with one trainee in a clinical situation involving the examination and/or treatment of a patient.
- A supervisor in the same department/ward as a trainee, and available for immediate assistance and consultation.
- 3. A supervisor present elsewhere in the hospital, but immediately available for consultation and assistance.
- A supervisor not in the hospital, but readily contactable, and, if necessary, available within reasonable travelling time, and who is specifically rostered for the period in question.

### 2. MINIMUM SUPERVISION LEVELS

Supervision must be available at all times, without distinction between ordinary hours and out-of-hours' times.

- 2.1 Early in training, a high proportion of supervision must be as in Category 1 or 2.
- 2.2 Later in training, supervision may be as in Category 3 or 4 when appropriate, but it is expected that patient review will be held each day with the supervisor and that new patients will be discussed with the supervisor soon after admission.

Closer supervision and direct help must be available when sought by the trainee.

### 3. SPECIAL CONDITIONS

- 3.1 Consultation with a supervisor is especially relevant in the following situations:
  - 3.1.1 Reception of new patients into a unit, and discharge of patients from the unit.
  - 3.1.2 Unexpected or unexplained changes in a patient's condition.
  - 3.1.3 Performance of complex procedures on a patient.
  - 3.1.4 Treatment of children in a non-paediatric hospital.
  - 3.1.5 Changes to management which have serious ethical implications (e.g. withdrawal of life support).
  - 3.1.6 Discussion with referring clinicians on major treatment policies.
  - 3.1.7 Proposed refusal of a request for admission to the unit.
  - 3.1.8 Mobilisation of intensive care resources to go outside a hospital.
- 3.2 An intensive care unit should have a written list of guidelines and general policies, in which the requirements of the Faculty for supervision are included.

These guidelines should be interpreted in conjunction with the following Policy Document of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists.

IC-3 "Guidelines for Hospitals seeking Faculty Approval of Training Posts in Intensive Carc"

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February, 1994

IC-5 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

### DUTIES OF REGIONAL EDUCATION OFFICERS IN INTENSIVE CARE

- 1. Regional Education Officers occupy an important position in the Faculty's educational network. They have responsibilities to provide liaison between trainees, Supervisors of Training, their Regional Committee where relevant and the central administration of the Faculty. Specific duties include:
  - 1.1 Maintaining a list of approved hospitals in each region. Notifying the Regional Committee and the Board of any changes in senior intensive care staffing which have the potential to affect the training programmes.
  - 1.2 Obtaining a list, (on Form R2) from Supervisors of Training of all trainees in Faculty approved posts.
    - This list should be forwarded to the Faculty within two months of the commencement of the hospital employment year in each region.
  - 1.3 Notification from Supervisors of Training of any changes in the list referred to in 1.2 created by trainees joining or leaving training posts during the hospital employment year. It is particularly important that the date of such changes are noted to allow independent verification of training by the Censor.
- 2. Informing the Faculty of changes in personnel occupying the following positions in each approved hospital:
  - 2.1 Chief Executive Officer or equivalent.
  - 2.2 Chief Medical Officer or equivalent.
  - 2.3 Director of Intensive Care and Deputy.
  - 2.4 Supervisors of Training in Intensive Care (see Faculty Policy Document IC-6 "Supervisors of Training in Intensive Care").
- 3. Assisting Supervisors of Training with monitoring of staffing and trainee supervision in each approved hospital.
- 4. Understanding of Faculty Administrative Instructions related to training and examinations.
- Maintaining a calendar of dates relevant to Faculty examinations.

- 6. Maintaining contact with Supervisors of Training with advice as appropriate on matters related to training and examinations. At least one meeting each year of Supervisors in each region is recommended.
- 7. Advising trainees of relevant educational activities.
- 8. Keeping the Faculty Education Officer informed of regional activities and problems. Providing a report to the Board by 1st July each year.
- 9. Attending or nominating a representative to attend the annual meeting of Regional Education Officers with the Faculty Education Officer held during the ASM.
- 10. Monitoring and advising on systems for assessment of trainee performance in approved hospitals.
- 11. Providing advice as appropriate to trainees and prospective trainees.

These guidelines should be interpreted in conjunction with the following Policy Documents of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists.

- IC-2 "The Duties of an Intensive Care Specialist in Hospitals with Approved Training Posts"
- IC-3 "Guidelines for Hospitals seeking Faculty Approval of Training Posts in Intensive Care"
- IC-4 "The Supervision of Vocational Trainees in Intensive Care"
- IC-6 "Supervisors of Training in Intensive Care"

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February 1994

IC-6 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

### SUPERVISORS OF TRAINING IN INTENSIVE CARE

Supervisors of Training are the Faculty's representatives on training in its approved hospitals. They have an important role and must have a broad understanding of Faculty affairs. They provide liaison between trainees and Hospital authorities (in respect of matters related to training) as well as with Regional Education Officers and the Faculty.

### 1. APPOINTMENT AND TENURE

- 1.1 The Supervisor of Training in Intensive Care shall be nominated by the Hospital Administration on the recommendation of the Department. The Hospital Administration shall be responsible for notifying the Board of the recommendation for appointment. The appointment shall be ratified by the Board of Faculty.
- 1.2 The appointee shall hold the Diploma of FFICANZCA or an equivalent qualification acceptable to the Board and should not be a candidate for any Faculty examination.
- 1.3 The Board, at its discretion and after consultation with the relevant Regional Education Officer, may not approve of the Supervisor recommended by a Hospital. In that case, the Administrative Officer shall notify the Hospital and request the recommendation of a different Supervisor.

### 2. DUTIES OF SUPERVISORS

### 2.1 Within the Hospital

- 2.1.1 To be familiar with the Faculty's Administrative Instructions on Training, Examinations and Registration of Trainees.
- 2.1.2 To provide a list (on Form R2) to the Regional Education Officer of the names of all trainees in Faculty approved posts. This list is to be forwarded to the Regional Education Officer within two months of the start of the hospital employment year. Form R2 will be provided by the Regional Education Officer.
- 2.1.3 To notify the Regional Education Officer of any changes to the list referred to in 2.1.2 created by trainees joining or leaving training posts during the hospital employment year. It is particularly important that the date of such changes are noted to allow

- independent verification of training by the Censor.
- 2.1.4 To notify the Regional Education Officer of any senior staffing changes likely to impact on training.
- 2.1.5 To advise potential and current trainees on their training, registration requirements, fee payments and examination preparation.
- 2.1.6 To monitor supervision, experience and fair allocation of duties for trainees and to facilitate such changes if necessary.
- 2.1.7 To liaise with the Director of the Department in respect of trainee duties, supervision, rest and study time and release for approved courses.
- 2.1.8 To complete and despatch promptly trainees' training certificates to the Board with particular emphasis on the accuracy of the dates of specialty attachments.

### 2.2 Outside the Hospital

- 2.2.1 To establish and maintain liaison with the Regional Education Officer and with other Supervisors of Training.
- 2.2.2 To refer any difficulties in respect of training or trainees to the Regional Education Officer.
- 2.2.3 To be aware of appropriate courses and to see that trainees receive this information.
- 2.2.4 To maintain a calendar of examination dates, and dates of closure for entries.
- 2.2.5 To attend, when possible, any regional meetings of the Supervisors of Training.

These guidelines should be interpreted in conjunction with the following Policy Documents of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists.

- IC-3 "Guidelines for Hospitals seeking Faculty Approval of Training Posts in Intensive Care"
- IC-4 "The Supervision of Vocational Trainees in Intensive Care"

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February 1994

IC-7 (1994)

## FACULTY OF INTENSIVE CARE AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

### SECRETARIAL SERVICES TO INTENSIVE CARE UNITS

All intensive care units require administrative support by adequate secretarial services to allow the medical, nursing and technical staff within the unit to perform their duties effectively. For those departments in hospitals which are approved for Faculty trainees, the secretarial, administrative and educational support needed will require the appointment of appropriate secretarial staff. In general, access to a typing pool is inadequate for this purpose.

#### **DUTIES OF SECRETARIAL STAFF**

The duties of the secretarial staff will fall into three main areas: individual secretarial support, departmental administrative support and departmental educational support.

### 1. INDIVIDUAL SECRETARIAL SUPPORT DUTIES

Provision of general secretarial services to individual specialists, trainees and other members of the department.

### 2. ADMINISTRATIVE SUPPORT DUTIES

Preparation, circulation and updating of departmental duty rosters, maintenance of departmental and medical records and general administration.

### 3. EDUCATIONAL SUPPORT DUTIES

Co-ordination of the administrative aspects of the continuing medical education, clinical review and quality assurance activities of the department for all medical, nursing and technical staff.

3.1 Preparation and distribution of material for departmental meetings, including tutorials, peer review, clinical audit and quality assurance meetings.

- 3.2 Maintenance of the departmental library of books, journals, slides and other audio-visual material and preparation of visual display material.
- 3.3. Performance of literature searches, photocopying and circulation of documents from within the department, other departments of the hospital and other libraries.
- 3.4 Facilitation of the exchange of correspondence between the Faculty, Trainees and Supervisors of Training. See Faculty Policy Document IC-6 "Supervisors of Training in Intensive Care".

These guidelines should be interpreted in conjunction with the following Policy Documents of the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists.

- IC-1 "Minimum Standards for Intensive Care Units"
- IC-3 "Guidelines for Hospitals seeking Faculty Approval of Training Posts in Intensive Care"
- IC-6 "Supervisors of Training in Intensive Care"

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February, 1994

# HIGHLIGHTS FROM THE RACS COUNCIL MEETING HELD JUNE 1994

## AWARDS, ELECTIONS AND HONOURS

Council extended its congratulations to the following recipients of honours and awards:

### Awards in the Order of Australia

N A Beischer, AO J M Ellis, AM F T McDermott, AM W R Parker, AM

### Fellowship of the Royal Society

P J Morris

### Award for Excellence in Surgery

Sir Brian Barratt-Boyes

#### **RACS Medal**

M Gorton (College Honorary Solicitor)

### Fellowships and Scholarships

\$208,000 was awarded for RACS Foundation Fellowships and Scholarships for 1995. \$250,000 in Grants-in-Aid and Travelling Fellowships for 1995 had been awarded previously.

### CENSOR-IN-CHIEF

### OVERSEAS TRAINING AND RELATIONS

### South Africa

Council supported in principle a proposal to assist in the leadership training of disadvantaged South African surgeons. Training would be in such areas as departmental management, budgeting, overseeing training, teaching and in patient responsibility.

### Fiji

In conjunction with the AOA, the College will make representations to the Fijian Government on the advancement of postgraduate surgical training in Fiji.

### CERTIFICATE OF TRAINING FOR OVERSEAS SURGEONS

The following overseas Surgeons were awarded the above Certificate:

Dr August Mallya (Tanzania), General Surgery

Dr Harjit Singh (Malaysia), General Surgery

Dr Francis Lee (Hong Kong), Urology

### SCIENTIFIC MEETINGS

### Annual Scientific Congress - Hobart 1994

Council congratulated all those associated with the organisation of the highly successful 1994 ASC, in particular the Convenor, J McL Hunn.

The Younger Fellows Course convened by Dr Amanda Young was also a most productive and enjoyable meeting.

### Annual Scientific Congress - Perth 1995

It was noted that arrangements for the 1995 Annual Scientific Congress were well advanced.

### **EDUCATION**

### **Continuing Medical Education**

Grants for two meetings were approved, as were guidelines for approving future grants and seeding grants.

#### Recertification

The question of the role of the College with respect to CME and Recertification for Surgeons who are not Fellows of the College was debated and will be further considered.

### Library

A report on a review of computer requirements for the Library and a draft paper on the future role of the Library were discussed. Council approved a Working Party to consider this latter matter further.

### PROFESSIONAL AFFAIRS

### Credentialling in Breast Surgery

Whilst recognising pressure for credentialling of Surgeons to carry out Breast Surgery and that increasing sub-specialisation in various fields was inevitable, Council reaffirmed its policy that holders of the FRACS were properly trained and qualified to undertake Breast Surgery.

### **Professional Services Review Scheme**

Council appointed the following to a panel to serve on the Professional Services Review Panel established pursuant to the Health Insurance Act through the Health Legislation (Professional Services Review) Amendment Act 1993:

B J Dooley

D M Sheldon

M R Fearnside

R B Black

### Royal Flying Doctor Service

Council adopted a College position in regard to the Royal Flying Doctor Service. Further information on this is available on request from the Secretary.

### TECHNICAL

### **AIDS Video**

It was noted that a video on AIDS and Surgery, produced at the instigation and under the direction of the College, and funded by the Commonwealth Government had been completed. It was further noted that the video would be widely distributed in the near future.

### Committee on New Technology

Computer assisted learning, integrated monitoring, E-Mail/Bulletin Boards and molecular genetics were discussed by Council.

### INTERNAL

#### The Impaired Surgeon

The RACS Code of Ethics states that Fellows have a responsibility to offer counselling in a sensitive and compassionate manner to an impaired colleague.

A Working Party is to consider further whether the College has a more formal role in counselling the impaired surgeon.

### **Development Committee**

A Development Committee was appointed and a structure and  $modus\ operandi$  for the Development Committee and the Development Office were adopted by Council.

### **New Zealand Committee Office**

A proposal for changes to staffing and a reorganisation of responsibilities in the New Zealand Office was adopted.

### Reallocation of Office Space - Melbourne

Council approved recommendations from the House Committee for the reallocation of space in the College Headquarters following the departure of ANZCA from the College Headquarters.

### **Council Elections**

The following results of the Council elections held on May 25, 1994, were noted:

Name		<b>Total Votes</b>
Brown A R	861*	
King P R	859*	
McRae C U	827*	
Clunie G J A	806**	
Sheldon D M		741**
Hunn J McL	714	
Blair R D	644	
Cartmill T B	620	
Fearnside M R		591
Little K E T		574
Milroy B C		438
Total Votes cast		7675
* Re-elected to Council.	** Newly elected to Council.	
Number of Fellows voting:		
Valid votes		1535
Informal votes		13
		1548

### Suspension

Council suspended M Coroneos from Fellowship of the College pursuant to Article 30 (c)(iii) of the Articles of Association, for conduct contrary and derogatory and inconsistent with the principles, ethics, dignity, standards and purposes of the College.

### COURT OF EXAMINERS - MAY, 1994



(Left to right) Back row: Drs Ted Ward, John Weekes, David Sage, Ed Loughman, David Scott, Tony Weeks, Craig Morgan, Dick Willis, John Rigg, Peter Hales, Andy Pybus, John Russell.
Front row: Drs Greg Knoblanche, Glenda Rudkin, Barrie McCann (Chairman of the Court), Peter Klineberg, Ian Rechtman,

Sandra Taylor, Roman Kluger, Ken Sleeman.

## **POLICY DOCUMENTS**

P26(1994)

### GUIDELINES ON PROVIDING INFORMATION ABOUT ANAESTHESIA

A person is entitled to know the implications of an anaesthetic before it is administered, and to seek clarification of any issues which may be of concern. The person must be free to accept or reject advice.

### 1. PRINCIPLES

- 1.1 Information about the proposed anaesthesia should be provided in such a way that the particular patient is able to appreciate broadly what the anaesthetic involves.
- 1.2 Where real alternatives exist, anaesthetic options should be outlined, with their advantages and disadvantages.
- 1.3 The patient should be aware of the financial implications of anaesthesia.

### 2. PRESENTING INFORMATION

- 2.1 Information should be provided during the preanaesthetic consultation. Follow-up at a postoperative visit may be indicated.
- 2.2 Information should be communicated in a form the patient is likely to understand.
- 2.3 Basic information about anaesthesia should be provided, even if the patient requests no information.
- 2.4 Questions should be encouraged and answered clearly.
- 2.5 An interpreter should be used wherever necessary.
- 2.6 Where the patient clearly does not wish for further information and states this wish, the anaesthetist should record this fact in the notes and should not force further information upon the patient.
- 2.7 Where blood products may be required discussion should take place concerning "risks", advantages and alternatives to blood products.

#### 3. RISKS

- 3.1 Known risks should be disclosed when either an adverse outcome is rare but the detriment severe, or an adverse outcome is common but the detriment is slight.
- 3.2 The uncertainty of adverse aspects should be explained, and the difficulty of relating adverse events to the particular patient, depending on age, pre-existing disease and the nature of the surgery (See Appendix).
- 3.3 Discussion of risks should depend upon the anaesthetist's assessment of the best anaesthetic technique and drug therapy, the seriousness and nature of the patient's condition, the complexity of anaesthesia, the questions asked by the patient, and the patient's attitude and apparent level of understanding.

### 4. WITHHOLDING OF INFORMATION

Information should only be withheld on the rare occasion when it is believed the patient's health might be seriously harmed by the information.

### 5. EMERGENCIES

It may not be possible or sensible to provide information when immediate intervention is necessary to preserve life or prevent serious harm.

### 6. INCOMPETENT PATIENTS

Adequate information cannot be given to small children, the intellectually disabled, the mentally ill and the unconscious. Appropriate consent must be sought in these situations – e.g. from parents, guardians, Guardianship Board, unless it is an emergency situation. As full an explanation as possible should be given, appropriate to the patient's understanding.

### 7. RECORDS

A summary of the discussion and of the patient's understanding should be recorded in the patient's anaesthetic record or hospital file.

### **APPENDIX**

E14(1994)

Examples of risk might be:

- (a) Common adverse effects of general anaesthesia include fatigue, altered mental state, sleep disturbance, nausea, vomiting, sore throat, bruising from venipuncture.
- (b) Less common, but not rare adverse effects such as awareness or spinal headache.
- (c) Rare adverse effects which are unpredictable, such as anaphylaxis, neurological damage or death in healthy people.
- (d) Adverse effects which are related to the pre-existing disease, such as death in a patient with recent myocardial infarction undergoing emergency surgery.

### RELATED DOCUMENTS

P7 "The Pre-Anaesthetic Consultation".

P20 "Responsibilities of Anaesthetists in the Post-Operative Period".

P22 "Statement on Patient's Rights and Responsibilities".

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Whilst the College endeavours to ensure that policy documents are as current as possible at the time of their preparation, it takes no responsibility for matters arising from changed circumstances or information or material which may have become available subsequently.

Promulgated: 1994

### GUIDELINES FOR THE IN-TRAINING ASSESSMENT OF TRAINEES IN ANAESTHESIA

### 1. INTRODUCTION

- 1.1 Assessment of trainees by their own Departments is an essential part of the training of specialists in Anaesthesia. It allows information concerning highly desirable but non-examinable attributes to form part of the College's assessment processes.
- 1.2 In-training assessment of trainees will have two components:
  - 1.2.1 Assessment by Training Departments.
  - 1.2.2 A statement (as in 4.2) from the Assessor prior to presentation for the Final Examination.

## 2. GUIDELINES FOR IN-TRAINING ASSESSMENT

- 2.1 Assessments will be carried out for all registered College trainees at six monthly intervals or in the case of a shorter attachment, at the conclusion of that attachment or earlier if indicated.
- 2.2 Assessments should be undertaken by senior staff of the department with whom the trainee has worked during the assessment period. Staff should use Form ITA-1. Staff must award a score with which they are comfortable. They must have personal knowledge of the trainee. If there is any doubt about an assessment, it is appropriate to use the 'insufficient knowledge to comment' category.
- 2.3 Assessments will be collated by the Supervisor of Training on Form ITA-2 to make an overall score under each of the various headings.
- 2.4 The collated assessment must be discussed formally with the trainee whose comments and signature must be a part of the assessment. Information sharing between senior staff and trainee is an essential part of the process. It is normally appropriate for a third person to be present at the

interview. Assessments must also be signed by the Supervisor of Training. Two copies of the assessment must be signed. One of these must be given to the trainee. Opportunity must be given for correction of problems and where appropriate, a special additional assessment arranged.

- 2.5 The second signed copy of the assessment should be sent by the Supervisor of Training to the Regional Education Officer. Copies of Form ITA-1 should be destroyed.
- 2.6 In Hong Kong, Malaysia and Singapore, the Regional Training Officer shall undertake the duties of the Regional Education Officer.

## 3. RESPONSIBILITIES OF THE REGIONAL EDUCATION (TRAINING) OFFICER

- 3.1 To maintain a register of all trainees in the region (on the basis of information provided by Supervisors of Training on Forms R1 and R2 see Policy Documents E4 and E5) and to ensure that a signed copy of Form ITA-2 is received from Supervisors of Training in respect of each assessment.
- 3.2 To send the copy of Form ITA-2 to the Assessor.
- 3.3 To ensure that notification of trainee movements between regions are known to the College office and the Regional Education (Training) Officer in the new area.

### 4. RESPONSIBILITIES OF THE ASSESSOR

- 4.1 To keep copies of Form ITA-2 in each trainee's central record file.
- 4.2 At the time of initial entry to the Final Examination, the Assessor will review all assessments made in respect of each trainee. On the basis of that review, the Assessor will have the option of informing the Chairman of Examinations that:

"On the basis of information contained in the assessments of this trainee, it is considered that he/she is a suitable candidate for the College's Final Examination."

- 4.3 Following the review of assessments, the Assessor shall:
  - 4.3.1 Inform trainees, who have been approved of their suitability to present for examination
  - 4.3.2 Inform the Executive Committee of the College Council if it is considered that a trainee should not present for the Final Examination. The Assessor may:
    - 4.3.2.1 Inform these trainees that they will not be permitted to present for the Final Examination.
    - 4.3.2.2 Inform trainees that they may only present for the Final Examination after undertaking further specified training.
- 4.4 Trainees have the right of appeal according to the College's policies.

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Promulgated: June 1994

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## COUNCIL OFFICE BEARERS AND COMMITTEES FOR 1994/95

President	M J Davies	Primary Examination Committee	
Vice President	N J Davis	Chairman	P Roessler
Assessor	I Rechtman	Deputy Chairman	P Kam
	B F Horan	Chairman of Examinations	R J Willis
Assistant Assessor	J M Gibbs		R P Lee
Education Officer Chairman of Executive	N J Davis	Chairman of Faculty Fellowship Examination	
	R J Willis	and two Members	R L Eyres
Chairman of Examinations	R G Walsh		A W Quail
Treasurer  Pharmacoutical/Thehmical & Safety Officer	K G Waish		
Pharmaceutical/Technical & Safety Officer	D R Kerr	Final Examination Committee	
(Australia)	R S Henderson	Chairman	K D Cronin
(New Zealand)		Deputy Chairman	P L Klineberg
Protocol Officer	D H McConnel	Chairman of Examinations	R J Willis
Library Officer	I Rechtman	Council Representative	I Rechtman
ASM Officer	R J Willis	and three Members	E Loughman
Survey Officer	M D Westmore		D A Scott
Maintenance of Standards Officer	G D Phillips	Co-opted	C A Morgan
T		Co-opied	o 11 morgani
Executive	N J Davis	General Examinations Committee	
Chairman	M J Davies	Chairman of Examinations	R J Willis
President		President	M J Davies
Assessor	I Rechtman		J M Gibbs
Treasurer	R G Walsh	Education Officer	
and other such Members as the Council	G D Phillips	Chairman of Primary Examination	P Roessler
may appoint	J M Gibbs	Deputy Chairman of Primary Examination	P Kam
		Chairman of Final Examination	K D Cronin
Education Committee		Deputy Chairman of Final Examination	P L Klineberg
Chairman (Education Officer)	J M Gibbs	Chairman of Faculty Fellowship Examination	R P Lee
President	M J Davies		
Assessor	I Rechtman	ASM Committee	
Chairman of Examinations	R J Willis	ASM Officer (Chairman)	R J Willis
Faculty Education Officer	F H Hawker	President	M J Davies
and other such Members as the Council may	R S Henderson	Protocol Officer	D H McConnel
appoint	D R Kerr		R F Whiting
••	B F Horan	Faculty Representative	J M Sheales
Hospital Accreditation Group		Registrar	J W Sileales
Assessor (Chairman)	I Rechtman		
President	M J Davies	ASM Scientific Programme Committee	D T TT!!!!
Assistant Assessor	B F Horan	ASM Officer (Chairman)	R J Willis
Education Officer	J M Gibbs	President	M J Davies
	N J Davis	Protocol Officer	D H McConnel
		Registrar	J M Sheales
Continuing Education and Quality Assurance	e Committee	Past Scientific Convenor (Tas)	J P Madden
Chairman	R S Henderson	Present Scientific Convenor (Qld)	V I Callanan
President	M J Davies	Future Scientific Convenor (WA)	N M Gibbs
ASM Officer	R J Willis	Tabare bereitaire convener ()	
MOS Officer	G D Phillips	College Representative on Board of Faculty	of Intensive Care
Representative, Faculty of Intensive Care	R F Whiting	College Representative on Board of Faculty	G D Phillips
Representative from ASA	W R Thompson		G D I mmps
Representative from NZSA	A L Garden	am an District	
Representative from ANZICS	F H Hawker	Gilbert Brown Prize Adjudicators	D T 117'11'
and two other Members appointed by Council	D R Kerr	Chairman (to select panel)	R J Willis
and two other Members appointed by Council	G D Phillips		
Workforce Committee	G D I Illinps	Lennard Travers Professorship	
Chairman	D H McConnel		Electoral College
	M J Davies		
President Education Officer	J M Gibbs	Computer Sub-Committee	
	M D Westmore	Chairman	D R Kerr
Survey Officer	B F Horan	Treasurer	R G Walsh
Assistant Assessor	D H McConnel	Registrar	J M Sheales
and such other Members as the Council		Accountant	J D Miller
may appoint	G D Phillips M K Radnor	recountant	C A Morgan
	M K Radilor		O 11 MIOI BUIL

### COUNCIL OFFICE BEARERS AND COMMITTEES FOR 1994/95

Bulletin Editorial Committee Editor	J M Sheales J M Gibbs I Rechtman	Anaesthetic Industry Liaison Committee  Joint Consultative Committee on Anaesthesi	M J Davies D H McConnel R J Willis
Academic Anaesthesia Review Sub-Committ Chairman	<b>ee</b> G D Phillips R S Henderson A B Baker	John Consultative Committee on Anaesthesi	N J Davis D H McConnel F X Moloney
History of Anaesthesia Committee		Committee of Presidents of Medical Colleges	
22.0002y of Panacistacional Committee	G D Phillips A B Baker M G Cooper	Education Standards Sub-Committee Workforce Committee	President A B Baker G D Phillips
Victorian Chairs of Anaesthesia Advisory Co	mmittee	ANZCA/RACS/RACP	President
Victorial Chairs of Anaesthesia Advisory Co	G B Donnan P A Lowe I Rechtman T C K Brown P J Keast R N Westhorpe	Australasian Board of Cardiovascular Perfus  Observer to RACS Council	ionists A B Baker R G Walsh President
	-	Representatives on RACS Council Committee	
Joint Advisory Committee of Combined Colle	e <b>ges</b> or Vice President		
	or vice r resident	Archives	M G Cooper R N Westhorpe
Australian Resuscitation Council	V I Callanan G A Harrison	AIDS and Hepatitis EMST Board	B F Horan G D Phillips
College Historian	M G Cooper	Trauma WORKING PARTIES	G D Phillips
Assistant Historian	A J Newson	Diploma of Pain Management	
Geoffrey Kaye Museum of Anaesthetic Histor	·v	Chairman	J M Gibbs
Curator	R N Westhorpe		T F Little J N Ditton
Assistant Curator	C M Ball		C R Goucke B F Rounsefell
Representatives/Nominees to Other Outside	Organisations		D Jones
Australian Society of Anaesthetists Executive nominee	President or	South East Asia Convenor	B F Horan
Joint Liaison Committee	President Vice President	Simulator Convenor and Chairman	R S Henderson
National Committee on Day Surgery	D H McConnel A K Bacon	Treasurer MOS Officer	R G Walsh G D Phillips A L Garden J Zelcer
Anaesthetic Co-ordinating Committee for AM	IA Federal		
Conference	President Chairman of	Infection Control in Anaesthesia	B F Horan
	Executive		July, 1994

## POLICY DOCUMENTS

E = educational. P = professional. T = technical. EX = examinations.

E1 (1991)	Guidelines for Hospitals Seeking Faculty Approval of Training Posts in Anaesthesia
E3 (1989)	The Supervision of Trainees in Anaesthesia
E4 (1992)	Duties of Regional Education Officers
E5 (1992)	Supervisors of Training in Anaesthesia and Intensive Care
E6 (1990)	The Duties of an Anaesthetist
E7 (1989)	Secretarial Services to Departments of Anaesthesia and/or Intensive Care
E9 (1993)	Quality Assurance
E11 (1992)	Formal Project
E13 (1991)	Guidelines for the Provisional Fellowship Year
E14 (1994)	Guidelines for the In-Training Assessment of Trainees in Anaesthesia
EX1 (1991)	Guidelines for Examiners with Respect to Candidates Suffering Illness (or Accident) at the Time of Examination
T1 (1989)	Recommended Minimum Facilities for Safe Anaesthetic Practice in Operating Suites
T2 (1990)	Protocol for Checking an Anaesthetic Machine Before Use
T3 (1989)	Recommended Minimum Facilities for Safe Anaesthetic Practice in Organ Imaging Units
T4 (1989)	Recommended Minimum Facilities for Safe Anaesthetic Practice for Electro-Convulsive Therapy (ECT)
T5 (1989)	Recommended Minimum Facilities for Safe Anaesthetic Practice in Dental Surgeries
T6 (1989)	Recommended Minimum Facilities for Safe Anaesthetic Practice in Delivery Suites
P1 (1991)	Essential Training for General Practitioners Proposing to Administer Anaesthetics
P2 (1991)	Privileges in Anaesthesia Faculty Policy
P3 (1993)	Major Regional Anaesthesia
P4 (1989)	Guidelines for the Care of Patients Recovering from Anaesthesia
P5 (1991)	Statement on Principles for the Care of Patients who are given Drugs Specifically to produce Coma
P6 (1990)	Minimum Requirements for the Anaesthetic Record
P7 (1992)	The Pre-Anaesthetic Consultation
P8 (1993)	Minimum Assistance Required for the Safe Conduct of Anaesthesia
P9 (1991)	Sedation for Diagnostic and Minor Surgical Procedures
P11 (1991)	Management of Cardiopulmonary Bypass
P12 (1991)	Statement on Smoking
P13 (1992)	Protocol for The Use of Autologous Blood
P14 (1993)	Guidelines for the Conduct of Epidural Analgesia in Obstetrics
P15 (1992)	Guidelines for the Care of Patients Recovering from Anaesthesia Related to Day Surgery
P17 (1992)	Endoscopy of the Airways
P18 (1990)	Monitoring During Anaesthesia
P19 (1990)	Monitored Care by an Anaesthetist
P20 (1990)	Responsibilities of Anaesthetists in the Post-Operative Period
P21 (1992)	Sedation for Dental Procedures
P22 (1990)	Statement on Patients' Rights and Responsibilities
P23 (1992)	Minimum Standards for Transport of the Critically Ill
P24 (1992)	Sedation for Endoscopy
P25 (1993)	Minimum Standards for Pain Management Units
P26(1994)	Guidelines on Providing Information About Anaesthesia
	August 1994