DECEMBER 2014

ANZCA BULLETIN

ANZCA
AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS

FPM
FACULTY OF PAIN MEDICINE ANZCA

Fighting Ebola: Jenny Stedmon on her time in Sierre Leone

What you told us: Surveys outline what Fellows want

Research support: ANZCA divides $A1.5 million for research

Anaesthesia deaths: Latest ANZCA mortality report out now

ANZCA Bulletin

The Australian and New Zealand College of Anaesthetists (ANZCA) is the professional medical body in Australia and New Zealand that conducts education, training and continuing professional development of anaesthetists and specialist pain medicine physicians. ANZCA comprises about 5750 Fellows and 1600 trainees across Australia and New Zealand and serves the community by upholding the highest standards of patient safety.

Cover: Protective equipment worn by health workers treating patients with the Ebola virus in Sierra Leone is sterilised and hung out to dry.

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Contents

President's message

This issue of the *Bulletin* contains many articles of vital interest to Fellows and trainees including the results of the Graduate Outcomes Survey and the ANZCA Fellowship Survey conducted earlier this year. In addition we feature the findings of the triennial ANZCA mortality report, *Safety of Anaesthesia: A review of anaesthesia-related mortality reporting in Australia and New Zealand 2009-2011*.

In November ANZCA Councillor Vanessa Beavis, Chair of the CPD Committee, the CEO Linda Sorrell, and I attended a workshop on revalidation, convened by the Committee of Presidents of Medical Colleges (CPMC). The purpose of the workshop was to determine a consensus set of principles on what revalidation means to the colleges and how it could operate in the Australian context, to refer to the Medical Board of Australia (MBA) for consideration.

The MBA has signalled that it will not be introducing revalidation in 2015, although it will be conducting research and setting up an expert panel to make recommendations for a possible model. If you are not sure what revalidation means, I recommend the article in the *Medical Journal of Australia* by Breen[1] earlier this year. A further look at the American Society of Anesthesiologists' MOCA program[2] and the Royal College of Anaesthetists Revalidation program[3] would also be useful for gaining an idea of what our overseas colleagues are already undertaking for their continuing professional development (CPD).

It should be noted that the Australasian CPD programs of other procedural specialties (for example, surgery, obstetrics and gynaecology and radiology), like ours, also contain elements of practice audit and peer assessment of performance. ANZCA's program is only unique in having the mandated emergency responses. These have been popular with Fellows – in 2014, 4069 mandatory responses have already been entered onto CPD online portfolios by 2296 Fellows.

If you are attending the ASM in Adelaide, please bring your phone, tablet or laptop. Staff at the ANZCA booth will be on hand if you need help with CPD.

This issue of the *Bulletin* also contains one of a planned series of articles by private practitioners on how to obtain and enter those elusive practice evaluation points.

ANZCA has successfully launched Networks. Networks delivers online learning including courses, webinars and podcasts and it is also modernising the work of committees by enabling the sharing of meeting documentation, and providing tools for collaboration. Fellows and trainees will shortly have access to the trainee orientation and support resources, as well as the supervisor orientation support resources. A primary examination preparation resource has just been launched and I encourage trainees, and Fellows working with trainees preparing for exams, to view this.

I recently attended the Hong Kong College of Anaesthesiology continuing medical education meeting which celebrated the 25th anniversary of the Hong Kong College and the 60th anniversary of their society. Following the outstanding success this year of the combined ANZCA Annual Scientific Meeting and RACS Annual Scientific Congress in Singapore, ANZCA Council has given the go-ahead for another combined meeting with RACS in 2018 to be held in Hong Kong.

Whilst at the Hong Kong meeting, I attended a presentation on the Academy of Medical Royal Colleges' guideline titled "Safe Sedation Practice for Healthcare Procedures: Standards and Guidance (2013)[4]". The document recommends fundamental and development standards in safe sedation practice and recommends competency-based formal training for all healthcare professionals involved in sedation.

Fellows may be interested to know that a similar process has already begun in NSW by the Agency for Clinical Innovation, (ACI), entitled the Safe Procedural Sedation Project.[5,6] The underlying principles are risk stratification pre-procedure, a dedicated clinician with appropriate knowledge and skills intra-procedure, and post-procedure monitoring and application of discharge criteria.

A considerable amount of sedation is given by non-critical care specialists in non-operating theatre settings in most hospitals, for example, cardiology and radiology suites, many endoscopy and bronchoscopy suites. These are the areas where such principles would apply to ensure that every patient receiving sedation receives care from individuals who are suitably trained.

I wish you all well for the festive season and hope you manage to spend some time with friends and loved ones over the holiday period.

Dr Genevieve Goulding
ANZCA President

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Awards

Queensland Fellow wins Ray Hader award

A Fellow who compiled a folder full of welfare resources and articles for colleagues while working as a registrar at the Royal Brisbane and Women's Hospital has won the Dr Ray Hader Award for Pastoral Care.

Dr Anna Hallett, who originally trained and worked as an anaesthetist in England, also presented to colleagues at the hospital about the prevalence of mental illness amongst anaesthetists, the importance of peer support and the existence of the welfare folder. She became Queensland's first welfare officer while a provisional Fellow at the Queen Elizabeth II Jubilee Hospital in 2014.

She has directly helped at least three colleagues facing difficulties, making her an ideal recipient of the Ray Hader award that recognises those who have made a significant contribution to the welfare of one or more ANZCA trainees in the area of pastoral care.

Recognised for patient safety research

ANZCA councillor Professor Alan Merry was one of 12 New Zealanders elected as Fellows of the Royal Society of New Zealand in October for showing exceptional distinction in research. Professor Merry heads the School of Medicine at Auckland University's Faculty of Medical and Health Science. He has researched patient safety (particularly in anaesthetics) and the influence of the law on medical practice. His work on the conceptual basis of negligence and medical manslaughter has contributed to changes in clinical practice internationally and to legislative changes in New Zealand.

Lifetime achievement for Melbourne anaesthetist

The Chair of ANZCA's Mortality Sub-Committee and Director of Anaesthesia at the Austin hospital, Associate Professor Larry McNicol, has received a Victorian Health Lifetime Achievement award for his commitment to the public health system for more than 25 years.

At the awards in October, Associate Professor McNicol was acknowledged as a state and national leader in patient safety and quality of healthcare, including clinical governance in anaesthesia, perioperative care, transfusion medicine and patient blood management.

Chief executive officer's message

It has been another busy year for ANZCA as we continue our push towards improving what we offer all ANZCA and FPM Fellows and trainees.

This year we enjoyed an outstanding annual scientific meeting (ASM), preceded by a highly successful FPM Refresher Course Day, in Singapore. The ASM was held with the Royal Australasian College of Surgeons in a Monday to Friday format, the first day given over to workshops.

At the ASM we introduced a new "app" and a new website (the Virtual ASM), which enabled delegates to download the program, view the abstracts and build a personalised schedule. The Virtual ASM allowed anytime access to both audio and slides from nearly all presentations.

Our regional and New Zealand staff supported more than 30 continuing education meetings and more than 40 trainee courses. We also supported several successful special interest group meetings.

We relocated the ANZCA Library and the Geoffrey Kaye Museum of Anaesthetic History within a dedicated knowledge centre as part of the refurbishment of the College's historic Ulimaroa building. The centre includes a new Fellows' room, which is a space for any Fellows visiting the College.

Almost $A1.5 million in research grants was awarded through the Anaesthesia and Pain Medicine Foundation and four new members were recruited to the foundation's Board of Governors.

In New Zealand, we have been promoting and supporting research in anaesthesia and pain medicine through the inaugural New Zealand anaesthesia research workshop and support of the annual registrar meeting. We also held the inaugural ANZCA meeting for clinical directors of New Zealand anaesthesia departments to enhance communication, understanding and support across the country.

Technology has played a big part in our work this year.

We rolled out our world-class continuing professional development (CPD) program with a new online CPD portfolio system and launched Networks, an online system that will greatly improve learning and collaboration opportunities within the College, in particular providing improved support to ANZCA's many committees and the ANZCA Council.

We made key enhancements to the training portfolio system, including the automation of multi-source feedback, which has saved time for trainee and their supervisors. We also have been developing an online hospital accreditation system, which allows both hospitals and visitors to access their individual data on a streamlined online system.

Online orientation resources to support trainees and supervisors also were launched this year as well as online learning resources for primary examination preparation. Five educational pain medicine podcasts also have been published.

We ran a highly successful National Anaesthesia Day on October 16, which focused on the important role of anaesthetists in helping patients to quit smoking in line with *PS12 Guidelines on Smoking as Related to the Perioperative Period*. Many hospitals got involved and the day attracted extensive media coverage. See the full report on page 10.

To date we have created and distributed 28 media releases with another three planned before the end of the year. This has resulted in more than 1000 print, TV, radio and online articles. The work of ANZCA and its Fellows reached an estimated combined cumulative audience of more than 10 million readers, viewers and listeners (10,104,795) according to ANZCA's media monitoring service iSentia.

We formally evaluated the Specialist Training Program and are negotiating for the continuation of the scheme post 2015 and we made more than 60 submissions to governments and other organisations in Australia and New Zealand.

At the beginning of the year we held the inaugural annual staff recognition awards to recognise staff who have displayed the highest standards in customer service, innovation, process improvement and teamwork. All ANZCA business units have now completed service charters to help improve our dealings with key stakeholders.

This year we also surveyed Fellows to find out what matters to them. A full report is on page 16. The annual Graduate Outcomes Survey also has given us workforce data, which is important for our advocacy role.

Also this year we reviewed the ANZCA committee structure (see report and chart on page 52), resulting in the creation of a new Professional Affairs Executive Committee (PAEC) to provide oversight for professional and fellowship level issues. The newly named Safety and Quality Committee, Overseas Aid Committee, Continuing Professional Development Committee and Indigenous Health Committee will report to PAEC. A new ASM and Events Planning Committee will report to me and the IMGS Committee and ANZCA Trainee Committee will report through the educational governance structure.

We also delivered the new ANZCA Project Framework to ensure that ANZCA's initiatives are delivered in a consistent manner to improve the delivery of successful projects.

FPM has launched its innovative curriculum and training program to be rolled out in 2015 and the online pain management education program "Better Pain Management" for health professionals has been developed.

The FPM Pain Device Implant Registry pilot has advanced with seed funding secured and a university engaged to collate and manage the data. Stage 1 of the electronic Persistent Pain Outcomes Collaboration (ePPOC) has been implemented and an operational model developed.

There is much planned for 2015, but for now I hope you all enjoy a happy and relaxed festive season and I look forward to working towards another successful year.

Linda Sorrell
Chief Executive Officer, ANZCA

Letters to the editor

The TGA, 5-HT3 antagonists and Aesop's "Boy who cried wolf"

The Therapeutic Goods Administration (TGA)[1] has recently reproduced the warnings previously issued by the World Health Organization, Food and Drug Administration and others concerning the supposed emergence of serotonin toxicity (ST) precipitated by 5-HT3 antagonists such as ondansetron. This note is to bring attention to expert rebuttals of these warnings[2-4]. Expressed concisely: the idea lacks scientific credibility because there is no sound evidence that cases of ST have actually occurred, nor that such drugs are even theoretically capable of elevating serotonin. Hopefully doctors will have the experience and confidence to disregard this particular senseless warning, but what about all the other warnings?

Dr P K Gillman MRCPsych PsychoTropical Research, Bucasia, Qld

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National Anaesthesia Day imagery

A formal "thanks" to organisers of National Anaesthesia Day, but I was surprised that for the second year running, the image of "an anaesthetist" on the posters was once again a female dressed in operating room "blues" with a "beehive" hair cover.

Now this is certainly one representation of our speciality – but it is not the only one, and it is also one that is easily confused by the public with many other members of the operating room team.

Can I suggest that in the future we also present anaesthetists in "doctor" garb – perhaps a suit and white coat, with a stethoscope, to emphasise our level of qualifications?

Perhaps we could have both – theatre blues, and "consultant" wear – on the same poster?

And maybe sometimes the anaesthetist could also represent the males in our profession too.

Chris Jones, FANZCA
Sydney

"Science of climate change"

I hope that Drs Bashford, Weber and McGain ("Climate Change Convincing", *ANZCA Bulletin* Sept 2014, Time to act on Climate Change" *ANZCA Bulletin* Sept 2014) hold to a higher standard of scientific proof in their anaesthetic practice than they do regarding the "science" of climate change. Having smeared Dr Greg Smith as a climate "denier" for pointing out some of the flaws in the dominant conservative climate groupthink they can do little better than appeal to authority and try to exclude his view. The global warming "hypothesis" is supported not by observations but by models which the actual climate seems to stubbornly refuse to follow as global temperatures have not risen in 17 to 18 years. Science is an activity of evidence gathering and hypothesis testing, as the theory of man made climate change appears to be unfalsifiable it is not scientific. Over millennia oceans have risen and fallen, carbon dioxide levels have been many times higher than at present, shellfish and coral have thrived and the climate has changed. It will continue to change regardless of our actions.

Let us by all means conserve resources. Rather than worrying about Desflurane and nitrous oxide let's reduce overall gas usage and some of the useless waste in the operating room much of which is pushed on perioperative nursing societies by obvious commercial interest and a minimum of evidence.

Peter Hebbard MB BS FANZCA PG Dip Echo
Clinical Associate Professor
and Specialist Anaesthetist

Interesting debate

I am not sure the *ANZCA Bulletin* is the appropriate forum to be debating climate change, but I have been following the discussion with interest, beginning with the letter in the March issue by Dr Hellier and then that by Dr Smith in June, and now (September) several more letters.

It seems to me, from my reading, and from the references quoted by Dr Smith, that it is far from certain that any change is man-made, or that an anaesthetic agent such as Desflurane, despite its apparent greater effect than other agents, is responsible. The effect must surely be related to the amount released into the atmosphere, which can be minimised by the proper use in a closed system. This not only limits the amount of pollution to that subsequently exhaled by the patient, but is appropriate to limit expenditure as well.

Mack Holmes, FANZCA
Dunedin

Medical editor's note

The issue of climate change has given rise to many diverse opinions over recent editions of the *Bulletin* and while we appreciate the robust debate, it is now time to focus on other issues and allow this debate to continue in other more appropriate forums.

Dr Rowan Thomas
Medical Editor, *ANZCA Bulletin*

College to acknowledge traditional owners

It is increasingly common for meetings to acknowledge the local traditional owners of the land on which the meeting is held. The public acknowledgement is said to contribute by:

- **Recognising and paying respect to indigenous peoples, cultures and heritage.**
- **Affirming indigenous cultures are living, dynamic entities.**
- **Assisting to build relationships and partnerships.**

This issue was discussed at the September meeting of the Indigenous Health Committee, which firmly supported the principle of acknowledging traditional owners. Such an acknowledgement is in line with ANZCA's 2013-17 Strategic Plan, which includes to "advocate for community development with a focus on indigenous health and overseas aid".

The ANZCA Council has supported this recommendation from the Indigenous Health Committee, and will incorporate a formal acknowledgement of the traditional owners of the land in the opening formalities of each council meeting.

The concept of installing an appropriately inscribed plaque in each of the ANZCA regional and national offices was also supported.

There is no universally accepted wording for the acknowledgement, but the following will be adopted for Melbourne council meetings and regional office plaques, respectively.

Council: "We would like to acknowledge the peoples of the Kulin nation as the traditional owners of this land, and we pay our respects to their elders, past and present."

Plaques: "ANZCA acknowledges the (relevant nation dependent on where the ANZCA office is) as the traditional owners of this land, and pays respect to their elders, past and present."

A plaque with similar and regionally appropriate wording will be displayed in the New Zealand National Office.

Dr Rod Mitchell, Dr Dash Newington and **Dr Paul Mills**
ANZCA Indigenous Health Committee

ANZCA and FPM in the news


While you were sleeping ...


Making sense of accidental awareness

Jill Margo

When a patient becomes aware during a general anaesthetic, the anaesthetist can be just as upset about the incident as the patient, according to Kate Leslie, past president of the Australian and New Zealand College of Anaesthetists.

She has studied this subject for decades and says accidental awareness goes to the heart of the contract between the anaesthetist and patient.

"When we give a general anaesthetic, we give a promise it will keep the patient oblivious to the pain of surgery, and when it doesn't we feel we have let the patient down."

Leslie, a professor and anaesthetist at the Royal Melbourne Hospital, says there are three main reasons why a general anaesthetic can go wrong.

First, there may be an inadequate delivery of drugs to a normal patient.

This could be the result of an error in judgement or a fault in the equipment.

Second, there is a group of patients who are so ill they can't take too much anaesthetic because it may affect their blood pressure and heart function.

Normally, they are warned that as a result of a lighter anaesthetic, they may have memories of the operation.

This can be the case with trauma victims or women who are having an emergency caesarean.

The third is that people who appear normal are given normal anaesthetics but are, in fact, more resistant. This resistance may be due to their genetics.

Leslie says although a national audit has never been conducted in Australia, from the research that has been done, Australia's experience is quite similar to that described in Britain's *Fifth National Audit Project*.

As to the rate, she says one in 19,000 episodes of accidental awareness only reflects the cases that were spontaneously reported by patients.

When every patient is deliberately questioned after an operation, the rate is more likely to be one in 1000.

"Many patients don't report awareness because they don't understand what happened to them, because they are not fussed about what happened, because they find it too distressing to revisit or because they think their doctor will not believe them," Leslie says."

It is important for patients about to have an operation to understand whether they will be having a general anaesthetic, a local one, a regional block or just sedation.

The editorial accompanying the UK study in the journal *Anaesthesia*, strongly makes the point that when patients have something other than a general anaesthetic, it is important they are forewarned and understand that they may remember what happened.

"I normally explain [by] saying, 'this is just sedation, it is not general anaesthetic and you might remember a little about it, but it's my job to make sure you don't care because you feel relaxed and comfortable'," Leslie says.

"The most distressing thing for patients about being aware during a general anaesthetic is that they feel isolated and alone."

"They feel nobody knows they are awake and if they are paralysed, they feel unable to escape the horror of what is happening to them."

"The NAP 5 study has given us important information to help reduce the incidence of awareness."


Smokers urged to come clean ahead of surgery

SMOKERS may soon be forced to confess and encouraged to quit before public hospital operations, after a State Government-backed trial found compulsory disclosure drove many to ditch tobacco.

This year ANZCA and FPM has featured in a wide range of media across our core areas of expertise – from chronic pain management and the latest research showing the possibility of its genetic links – to research into accidental anaesthesia awareness.

At the time of printing the December *Bulletin*, the Communications unit has created and distributed 28 media releases (including two media alerts), resulting in about 1000 print, TV, radio and online articles. The work of ANZCA and its Fellows reached an estimated combined cumulative audience of more than 10 million readers, viewers and listeners (10,104,795) according to ANZCA's media monitoring service iSentia.

In 2014 ANZCA has featured in:
- **More than 90 print reports.**
- **More than 300 radio reports.**
- **Fifty-one television reports.**
- **More than 500 online stories.**

Highlights since the last *Bulletin* include an exclusive report on National Anaesthesia Day in the *Herald Sun*. The story focused on a recent trial that involved collecting the smoking status of every patient across seven healthcare sites in Australia. The Faculty of Pain Medicine's Professor Milton Cohen was part of an expert panel on the SBS television program *Insight*, which debated the role of medicinal cannabis. Associate Professor Andrew Davidson also participated in an SBS *Insight* program on the topic of consciousness, part of which focused on our understanding of anaesthetic depth.

The reopening of the Geoffrey Kaye Museum of Anaesthetic History featured in a prominent Fairfax newspaper article (*The Age*, circulation 240,000) on Saturday, September 20. This coverage was followed by two ABC radio interviews on the significance of the ANZCA collection.

Ebru Yaman
Media Manager, ANZCA

Media releases since the September *Bulletin*:

October 16
Anaesthetists tackle the "Titanic" problem of smoking and surgery

October 16
Stop smoking before your operation, anaesthetists urge

October 16
New Zealand leads the way in helping patients stop smoking

October 10
Anaesthetists tackle smoking patients (Australia)

October 10
Anaesthetists tackle smoking patients (NZ)

September 19
The fascinating history of anaesthesia: From biting the bullet to pain-free surgery

September 7
Mental illness complicates chronic pain treatment, conference hears

September 5
Childhood and family conditions carry risk of chronic pain in adults, new findings from a twin family study reveal

Hospitals embrace National Anaesthesia Day

Throughout Australia and New Zealand – and as far away as Boston, Massachusetts in the US where the first ether anaesthetic was given on October 16, 1846 – ANZCA Fellows again embraced National Anaesthesia Day.

This year the theme was "Stop smoking before your anaesthetic", coinciding with the release of ANZCA's *PS12 Guidelines on Smoking as Related to the Perioperative Period* (see www.anzca.edu.au/resources/professional-documents). This professional document encourages anaesthetists to embrace the "teachable moment" when smoking patients are in hospital and thinking about their health to encourage them to stop smoking. Research shows this works and it's never too late to quit – even 24 hours makes a difference.

More than 200 National Anaesthesia Day kits were sent to hospitals, private clinics and other health services on the ANZCA database as well as regional/NZ offices and all ANZCA councillors. The kits contained:

- "Stop smoking before your anaesthetic" posters.
- National Anaesthesia Day balloons.
- *PS12 Guidelines on Smoking as Related to the Perioperative Period*.
- "Stop smoking before your anaesthetic" leaflet (downloadable from website).
- "Who is your anaesthetist?" poster (downloadable from website).

The phrase "Anaesthetists – caring for the body and its breath of life", a translation of the ANZCA coat of arms motto *"Corpus curare spiritumque"*, was included on the posters for the first time this year and will be included in future years.

Auckland strongly embraced the day again with staffed booths displaying equipment, mannequins, posters, balloons and information leaflets set up throughout the Auckland City Hospital system, including Starship Children's Hospital, National Women's Hospital, the Greenlane Surgical Centre and various departments. Anaesthesia staff also organised hands-on public activities, such as ventilating "patients" and using ultrasound, and gave helium-filled balloons to children.

At an Auckland District Health Board smoke-free booth, set up to coincide with National Anaesthesia Day activities, patients could measure their carbon monoxide levels and compare how these differ between smokers and non-smokers. A video clip showed the patient's journey through an operation.

New Zealand Health Minister Dr Jonathon Coleman visited the displays at Auckland City Hospital.

Many hospitals participating in 2014 National Anaesthesia Day advised the College about their activities. Dubbo Hospital, for example, set up a foyer display where patients could talk about smoking and its perioperative implications and staff gave demonstrations on giving an anaesthetic. Later, hospital staff held a symposium about the history of anaesthesia and held a quiz, followed by a dinner.

Many other hospitals had staffed foyer displays, including Dunedin Hospital in New Zealand, which displayed an anaesthetic machine and ultrasound equipment and gave the public the opportunity to talk to anaesthetists.

Other participating hospitals included St Vincent's in Melbourne, Alfred Health (including Alfred Hospital), Peter MacCallum Cancer Centre, Austin Health, Box Hill Hospital, Bendigo Health, Goulburn Valley Health in Shepparton, Northern Hospital in Epping, Townsville Hospital, Tamworth Hospital, Lismore Base Hospital, John Hunter Hospital in Newcastle, Gosford Hospital, Alice Springs Hospital and in WA, Sir Charles Gairdner, Joondalup, Rockingham hospitals, and the new Fiona Stanley Hospital. In New Zealand, the College was contacted by Middlemore, Tauranga and Wellington hospitals. The Davis St Anaesthetic Practice in Melbourne also asked for material.

Hospitals across Australia and NZ marked National Anaesthesia Day with displays and demonstrations, from left: The new Fiona Stanley Hospital in Perth; Lismore Base Hospital in NSW; Wellington Hospital, NZ; NZ Health Minister Dr Jonathon Coleman visited the displays at Auckland City Hospital.

ANZCA's Communications team is now working towards 2015 National Anaesthesia Day, which will focus on the growing obesity problem and its impact on anaesthesia.

Media coverage

Media interest in the event grew significantly from last year. Two media alerts and three embargoed media releases were issued to broadcast and print media, including community newspapers, across Australia and New Zealand. Also available were anaesthesia/anaesthetist fact sheets.

Pre-recorded radio "grabs" by ANZCA President Dr Genevieve Goulding about the importance of stopping smoking were sent to radio stations for use in news reports across Australia and these were downloaded by nearly 400 radio stations, a huge increase on 2013.

The media promotion resulted in three television reports (two in Australia and one in New Zealand), more than 700 online mentions and more than 100 radio reports featuring Dr Goulding, Dr Nigel Robertson, Dr David Bramley and Dr Ashley Webb, as well as local spokespeople on hospital activities and the importance of giving up smoking before an anaesthetic. There was strong local newspaper coverage in New Zealand, including in *NZ Doctor*, Auckland's *Central Leader* and the *Otago Daily Times* as well as coverage on radio NewstalkZB news and Radio Rhema.

Melbourne's *Herald Sun* (circulation 400,000) ran an exclusive article about a successful pilot study in Victoria that focused on asking patients about their smoking status and encouraging them to quit. This was followed up by a radio 3AW interview (audience of 90,000) with Dr Bramley.

There was strong engagement via Twitter with hospitals tweeting photographs of their activities.

Clea Hincks
General Manager, Communications

National Anaesthesia Day
October 16, 2014

Key messages for patients

Smoking and anaesthesia

If you are having an anaesthetic for surgery you face greater risks if you are a smoker.

- You face more complications during and after your operation.
- Your body is starved of oxygen.
- It is more difficult for you to breathe during and after surgery.
- It can lead to blood clots.
- You will have more trouble recovering.

The good news is that it is never too late to quit – even stopping just 24 hours before your operation helps, but the longer the better.

- After **24 hours**, your blood pressure improves and more oxygen reaches your heart.
- After **1 week**, your lungs are better at removing mucus, tar and dust.
- After **3 to 4 weeks**, your body is better at fighting wound infections.
- Quitting **6-8 weeks** before surgery improves your lung function.

Hospitals can support patients to stop smoking in preparation for their operation.

"Stop smoking before your anaesthetic – every day makes a difference"

Hospitals embrace National Anaesthesia Day (continued)

"They were fascinated to hear an anaesthesia body had taken its advocacy role in raising the profile of the specialty seriously and were educating both patients and the wider public."

National Anaesthesia Day a model for boosting US awareness

One of the factors that drew me to undertake a Clinical and Research Anaesthesia Fellowship in Boston, Massachusetts was the integral part the city plays in the history of our specialty. In America, October 16 is known as Ether Day to commemorate the famous first public demonstration of inhaled anaesthesia in 1846.

It wasn't until a few months into my fellowship that I discovered I walked past the Ether Monument (above) daily on my commute to work. One of the inscriptions reads: *"To commemorate the discovery that the inhaling of ether causes insensibility to pain. First proved to the world at the Mass. General Hospital in Boston AD MDCCCXLVI."*

Whilst discussing the upcoming Ether Day with some of my colleagues at Brigham and Women's Hospital (BWH), the topic of the ANZCA National Anaesthesia Day arose. They were fascinated to hear an anaesthesia body had taken its advocacy role in raising the profile of the specialty seriously and were educating both patients and the wider public. Many patients seemed as uncertain of the role and training of their "anesthesiologist" in the US as they do of their "anaesthetist" in Australia.

I was graciously allocated some time at one of the departmental educational meetings (my first foray into the invited visiting international speaker circuit), where I briefly explained the aims and purpose of National Anaesthesia Day. Although I spoke on the morning of October 15, the time difference meant it was almost the 16th in Australia and New Zealand. I even had a chance to display the posters and balloons the College had sent me in the Department of Anesthesiology at BWH.

I expect to still be in Boston on October 16 next year and look forward to being involved again in some small way in this worthwhile activity. If the level of curiosity is any indication, perhaps my American colleagues will encourage Ether Day be used in a similar manner to the ANZCA National Anaesthesia Day in the near future.

Dr Jamahal Luxford, FANZCA
Clinical/research Fellow
Brigham and Women's Hospital, Boston, Massachusetts, US

Smokefree project helps patients quit

A simple change to hospital admission and discharge protocols could dramatically increase quitting rates among smokers, a project piloted across seven hospitals and health services has shown.

Seven sites across Victoria took part in the Supporting Patients to be Smokefree Project, which collected data from December 2013 to June 2014. The project is based on New Zealand's policy of mandatory asking, recording and reporting the smoking status of every patient admitted to hospital.

Sites involved in the project, which was led by Alfred Health and funded by the Victorian Government, included Ballarat Health Services, Bendigo Health, Goulburn Valley Health, Kyabram District Health, Northeast Health Wangaratta, South West Healthcare and Western Health.

The initiative aimed "to ensure all people who accessed the Victorian health system had their smoking identified and were supported with at least a brief intervention response" such as information about quitting and nicotine replacement therapy.

This is in keeping with ANZCA's PS12 document, guidelines on smoking that state "ANZCA ... recognises that the perioperative period represents a 'teachable moment' when many smokers quit or attempt to quit smoking, sometimes permanently".

The guidelines were released to coincide with National Anaesthesia Day on October 16, which had the theme "Stop smoking before your anaesthetic".

National Anaesthesia Day aimed to spread the simple message that it is never too late to stop smoking before an operation to reduce your risk of surgical complications.

Anaesthetist Dr David Bramley, the deputy director of the department of anaesthesia and pain medicine at Western Health, said it should be mandatory for hospitals to ask all patients about their smoking status and to offer advice and support to stop smoking as early as first presentation.

"Anaesthetists care for patients before, during and after surgery. Helping them stop smoking is one of the many things we can do to improve both surgical and general health outcomes," Dr Bramley said.

"An individual's surgical journey often involves multiple visits to hospital, which gives us a perfect opportunity to educate patients and support them to stop smoking. Asking patients if they smoke at pre-admission, arming them with facts and linking them to appropriate supports can help cut smoking rates.

"People are very vulnerable at the time of surgery and are more likely to make decisions that will help their recovery."

Smokers run an increased risk of cardiac and respiratory complications during their operations and are more likely to suffer poor healing and wound infections, Dr Bramley said.

"There are lots of opportunities to intervene – every year more than 300,000 smokers undergo elective surgery in Australia and New Zealand," he said.

"Anaesthetists have a powerful role to play in reducing smoking rates and improving the health of the population."

While Western Health is still analysing data from the pilot, Dr Bramley said half the patients involved were smoking less at the time of their surgery than when they presented to the pre-admission clinic. One in four smokers took up the offer of free nicotine patches.

Ebru Yaman
Media Manager, ANZCA

New health minister for NZ

New Zealand

New Zealand's 51st parliament opened on October 21, following the September 20 general election. The National Party received 47 per cent of the party vote, and has 60 of the 121 seats in parliament. Dr Jonathan Coleman has been appointed as Minister of Health, and also holds the Sport and Recreation portfolio. Dr Coleman is medically qualified, has previously worked as a general practitioner, and was an associate minister of health from 2008-11.

There have been no real surprises with the National Party's health policies. Many of the initiatives are business as usual, or were announced in May 2014 alongside the budget, including investing $90 million to extend free GP visits and prescriptions to children under 13 years of age, and investing $40 million to roll out Healthy Families New Zealand, a community-based program to promote nutrition and physical activity.

A key policy that will affect anaesthesia and pain medicine will be further increases in elective surgery and joint replacements. As part of a strategy to reduce musculoskeletal pain, $44 million will be invested in delivering an extra 2250 orthopaedic operations and an extra 1500 general elective operations over the next three years. This is in addition to usual increases in orthopaedic operations. Also, $6 million will be invested in establishing primary-care based teams for the early intervention of patients with musculoskeletal conditions, to assist with pain management. The teams will be co-ordinated through general practice and will link with hospital services, including pain medicine services. Other policies include investing $4 million to establish a National Renal Transplant Service, with the aim of increasing live kidney donor transplants by 10 per year over four years; training specialist nurses to perform endoscopies; and the Accident Compensation Corporation's (ACC) focus on moving long-term claimants off ACC.

The Vulnerable Children's Act will be implemented, introducing new requirements for district health boards (DHBs) and health practitioners who work with children. Under the act, DHBs must adopt and report on child protection policies, and health practitioners who work with children will undergo safety checks. Prime Minister John Key also has signalled to the media that child poverty will be a priority, and has asked Treasury and the Department of Prime Minister & Cabinet to develop policy in this area.

The government also will aim to progress the Trans-Pacific Partnership Agreement (TPPA) with the US, Japan, Australia and other Asia Pacific countries. Concerns have been raised that the TPPA may impact on New Zealand's ability to legislate and regulate public health issues such as tobacco and alcohol, and may affect Pharmac's ability to purchase low-cost pharmaceuticals. However, the likely content of the TPPA is not known at this stage.

Meetings

In September, ANZCA representatives met with Health Workforce New Zealand (HWNZ) and other organisations, including the NZ Society of Anaesthetists, the NZ Anaesthetic Technicians' Society, the Medical Sciences Council of NZ, the Perioperative Nurses College and others, to discuss the assistant to the anaesthetist workforce. It was noted that there is a shortage of assistants to the anaesthetist, particularly in smaller DHBs. HWNZ is intending to gather more data on the assistant to the anaesthetist workforce.

On October 22, the Medical Council of New Zealand (MCNZ) held its annual meeting for Vocational Educational Advisory Bodies. MCNZ presented a draft Memorandum of Understanding between MCNZ and the colleges. ANZCA will be invited to formally consider and provide feedback on the draft document. MCNZ also provided an update on changes to prevocational training for postgraduate year one and year two doctors. The MCNZ has approved standards for accreditation of training providers and clinical attachments, and training providers are expected to meet the standards by November 2015. Regular practice review also was discussed. Although not mandatory for vocationally registered specialist doctors, it must be an optional component of CPD programs. It is mandatory for general registrants, most of whom are participating in the "bpac in practice" continuing professional development (CPD) program, but some of whom participate in ANZCA's CPD Program.

Submissions completed:

Australia:

- Australian Health Ministers' Advisory Council on the Review of the National Registration and Accreditation Scheme for health professions.
- Australian and New Zealand Intensive Care Society Statement on care and decision-making at the end of life for the critically ill.
- Medical Board of Australia on proposed guidelines for the regulatory management of registered health practitioners and students infected with blood-borne viruses.
- Thoracic Society of Australia and New Zealand on Oxygen Guidelines for Acute Oxygen use in Adults "swimming between the flags".
- Coroners Court of Victoria on:
  - Tramadal Oral Drops.
  - Opioid abuse.
  - Management of airways in the obese patient.

New Zealand:

- Australia and New Zealand College of Perfusionists, in support of its application for regulation under the HPCA Act 2003.
- Medical Council of New Zealand on:
  - Registration prerequisites for doctors who have obtained registration through NZREX Clinical.
  - Review of locum tenens approved qualifications list.
- Medical Sciences Council of New Zealand on *Guidelines for the professional relationship between anaesthesia technicians and anaesthetists*.
- Pharmac on the 2014/15 invitation to tender.
- Congratulatory letters to the incoming Minister of Health from the ANZCA New Zealand National Committee and the FPM New Zealand National Committee.

Jonathon Kruger
General Manager, Policy, ANZCA

Surveys inform key College decisions

ANZCA conducted two surveys in 2014 – the fellowship survey of all Fellows, which is done every three to four years, and the annual online graduate outcomes survey, conducted for the first time in 2013.

The surveys are critical in understanding what is important to Fellows. ANZCA Council relies on this information to prioritise and implement improvements and determine the strategic direction and policy developments it makes.

Thank you to all Fellows who participated in the surveys.

2014 ANZCA Fellowship Survey results – strengthen our College

Our College, your voice

The 2014 ANZCA Fellowship Survey has told us many things. While confirming we are on track as a professional and highly respected College, there are also areas that require our attention.

It is heartening to see so many Fellows are prepared to engage and contribute to the many functions of the College, that our experience with staff has been very positive and that our methods of communication are appropriate. It is appreciated that the services provided by the College are well supported and regarded highly.

The issues that will require our attention are continuing professional development (CPD), the training portfolio system (TPS) and workforce. We also are mindful the College can appear bureaucratic and we will be examining how to change this while maintaining high standards of safety and quality.

While these results are only a snapshot of the information collected, we will be studying the data and your comments in great depth to develop a plan of activities with measurable outcomes.

The ANZCA Council discussed the results at its November meeting and a working group has been established to discuss where to from here. The recommendations will be promoted in future *Bulletin* editions and the website.

Thank you again to everyone who took the time to complete the fellowship survey.

Dr Rowan Thomas
Chair, Fellowship Affairs Committee and ANZCA councillor

In 2014, ANZCA commissioned Acuity Research & Insights to undertake a quantitative research study among Fellows. This follows on from the benchmark ANZCA Fellowship Study conducted in 2010. After a long consultation period, new questions were introduced, a few removed and the scale was changed to a more conventional structure.

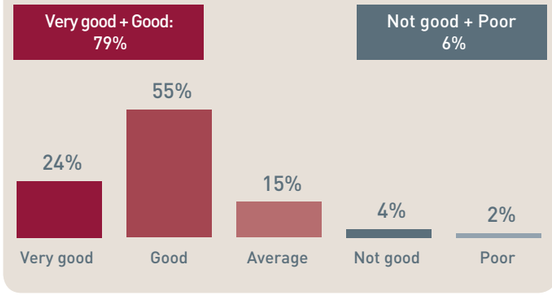
A total of 5561 surveys were delivered via email and 5841 by hard copy. Between August 11 and September 19, 2014, 2153 Fellows completed the survey – 1416 were completed online and 732 were completed hardcopy – resulting in more than a one in three response rate, representative of the membership across all demographic data. Acuity provided a very thorough report and the key points in each area surveyed are presented in the next few pages.

Overall satisfaction with ANZCA

Overall perceptions of ANZCA are positive (79 per cent rate it as good or very good); nonetheless, they could be improved (15 per cent rate ANZCA as average, 6 per cent give a negative rating). Increasing the perceived personal relevance of ANZCA to those who are less satisfied is a key. Some concerns about ANZCA's workforce management, strategy and direction have an impact on overall attitudes.

Perceptions of ANZCA across all Fellows

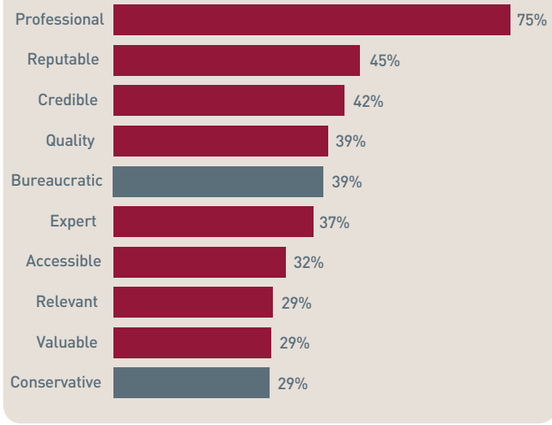
Mean score 4.0 out of 5.0.



ANZCA is overwhelmingly perceived to be a professional organisation, as well as reputable and credible. However perceptions it is bureaucratic have increased since the 2010 survey and could be addressed.

ANZCA's image: Word associations

Top 10 award associations with ANZCA.



Fifty-six per cent regard the annual subscription as acceptable or fair and reasonable. This has dropped slightly from 62 per cent in 2010.

ANZCA's annual subscription fee

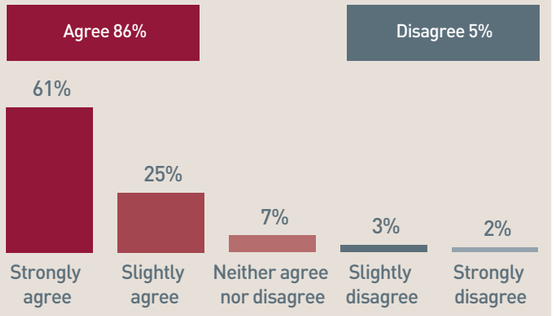
Indicitive trends within 2010 survey.

World-class training program

Most Fellows (86 per cent) strongly or slightly agree that ANZCA delivers a world-class training program. Only a small minority slightly/strongly disagree (5 per cent).

ANZCA delivers world class training program

2014 results across all Fellows.



Remainder is unsure.

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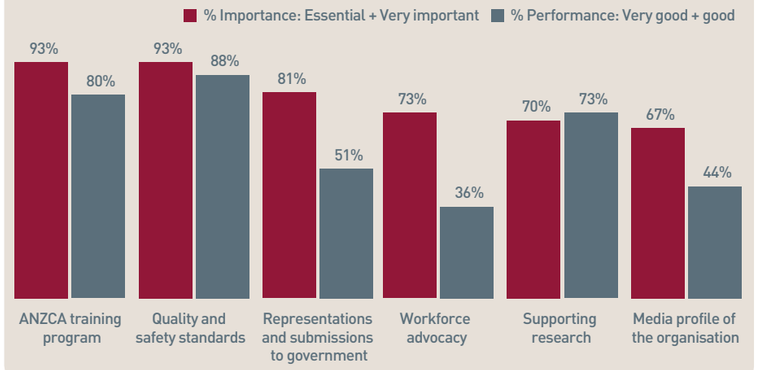
2014 ANZCA Fellowship Survey results – strengthen our College (continued)

Roles and services

Fellows clearly see core roles of importance as the "ANZCA training program" (93 per cent rate this as essential or very important to the profession) and "quality and safety standards" (also 93 per cent).

There are sizeable perceived importance-performance role gaps for "workforce advocacy", "representations and submissions to government" and "media profile of the organisation". Results suggest that given the degree of importance Fellows place on these ANZCA roles, there is room to improve their perceptions of ANZCA performance.

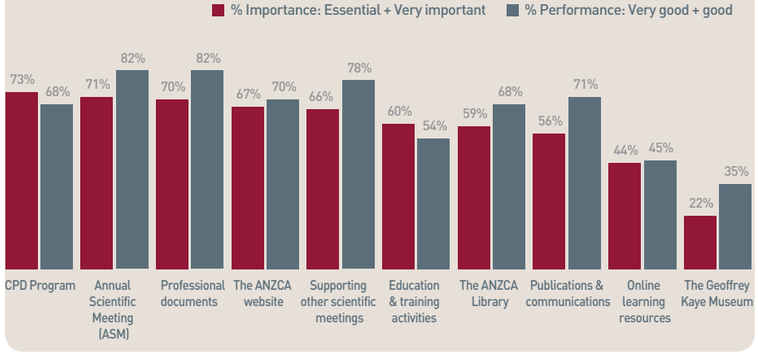
ANZCA roles: Importance versus performance



The top three perceived most important ANZCA services are the Continuing Professional Development (CPD) Program (73 per cent saying it is essential or very important), followed by the ANZCA annual scientific meeting (71 per cent) and then professional documents (70 per cent).

The results suggest ANZCA may be over-performing on some services, based on their perceived importance: the annual scientific meetings, professional documents, supporting other scientific meetings and publications and communications. There is no service where ANZCA is seen to be significantly under-performing, relative to its importance. However, satisfaction with the CPD program is one area that may need focus.

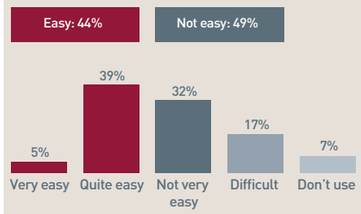
ANZCA services: Importance versus performance



Continuing professional development

Forty-nine per cent of Fellows do not find the revised CPD program easy to use, more than those who rate it as easy to use (44 per cent). In fact, 17 per cent of Fellows are rating the revised program as difficult. This needs to be addressed.

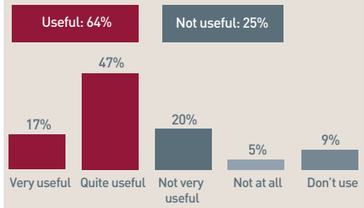
Ease of using revised CPD Program



Locally organised CPD events

While a majority (64 per cent) of Fellows find the locally organised continuing medical education/continuing professional development events useful, one in four rate them as not useful (25 per cent) – a sizeable minority.

Usefulness of locally organised events

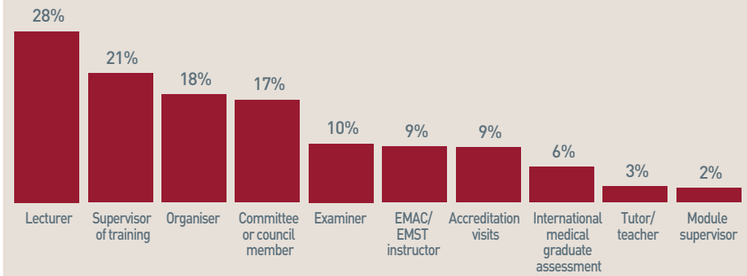


Voluntary roles

More Fellows have undertaken a voluntary role within ANZCA than seen in the 2010 survey (now at 59 per cent compared with 55 per cent in 2010). Among those who have undertaken voluntary roles, the most frequently reported involvement is as a lecturer (28 per cent), followed by as a supervisor of training (21 per cent), organiser (18 per cent) and committee or council member (17 per cent).

Voluntary roles undertaken within ANZCA

A total of 59% of Fellows indicate they have undertaken voluntary roles within ANZCA.



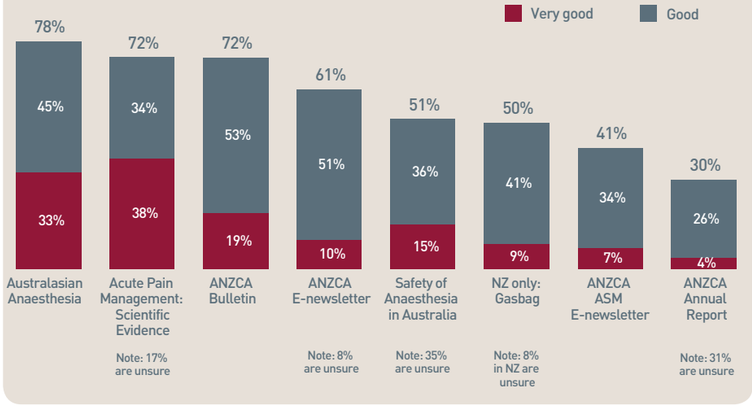
Forty per cent of Fellows indicate they are likely to take on voluntary roles in the future within ANZCA.

A good majority (78 per cent) of Fellows are involved in teaching trainees – this is strongest among newer Fellows.

Publications and communications

Among those able to rate each publication, satisfaction is highest with *Acute Pain Management: Scientific Evidence* (mean score 4.3), *Australasian Anaesthesia* (4.1), and *Safety of Anaesthesia in Australia* (4.0). When reach/readership is taken into account, satisfaction is relatively highest with *Australasian Anaesthesia* (78 per cent rate it as very good or good).

ANZCA publications and communications

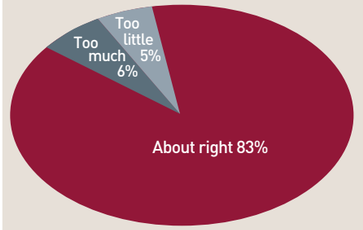


Email communication

A strong majority of Fellows (83 per cent) say the current amount of ANZCA email communications is about right – only small minorities say is it is either too little (5 per cent) or too much (6 per cent).

Forty-two per cent rate the ease of finding key information within ANZCA email communications as very good/good; few (7 per cent) give a negative rating.

Amount of email communications recieved from ANZCA



Sixty-six per cent of Fellows would like a separate email on continuing medical education/CPD events in their region: the most popular of the optional extra email topics provided. Thirty-eight per cent were interested in receiving emails about continuing medical education/CPD events not in their region/NZ.

Involvement in developing countries

Nine per cent of Fellows are currently involved in clinical/education work in developing countries; and in the past, 22 per cent have been involved. Pacific islands, South-East Asia and Indonesia are the three main areas where Fellows are or have been involved.

(continued next page)

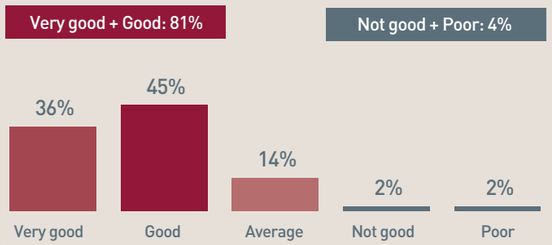
2014 ANZCA Fellowship Survey results – strengthen our College (continued)

Contact with staff

One in two Fellows has been in contact with College staff. More recent Fellows, researchers and academics are more likely to have had contact with College staff. Fellows' experience with College staff is generally positive.

Experience with College staff

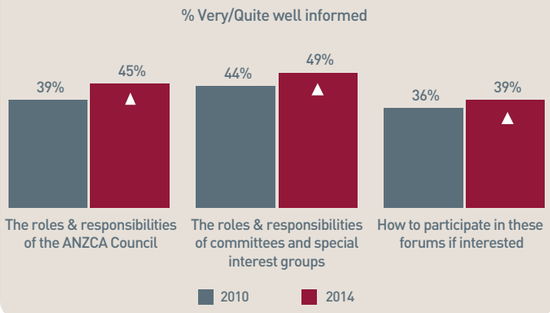
Among the 54% who have had contact. Mean score: 4.1 out of 5.



Understanding of College roles and responsibilities

There has been an increase in the proportion of Fellows who feel very/quite well informed about these issues, compared to 2010.

ANZCA roles and responsibilities: Trends



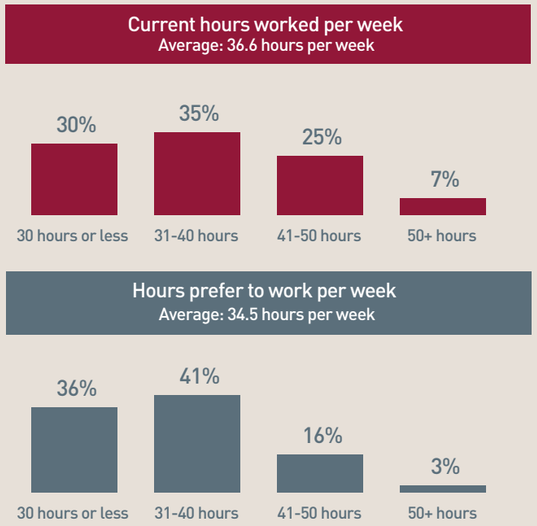
Awareness of the historical collection

A strong majority of Fellows (80 per cent) are aware the College holds significant historical collections. Awareness is highest among retired Fellows (97 per cent), those who have been Fellows for 30 or more years (94 per cent), and those based in Victoria (94 per cent).

Clinical practice

Non-retired Fellows are engaged on average 36.6 hours per week in anaesthesia service. Fellows prefer to work slightly fewer hours (34.5 hours per week) than the current average hours worked.

Hours worked per week – non-retired Fellows



Remainders are unsure, didn't answer.

Three in 10 Fellows (35 per cent) plan to work 20 years or more – not surprisingly, this is highest among those who acquired their fellowship more recently (at 77 per cent among those who have been Fellows for five years or less) – and lowest among longer term Fellows (at 2 per cent for those who have had their fellowship for 20 years or more).

Anaesthesia and Pain Medicine Foundation

Seventy-one per cent are aware of the Anaesthesia and Pain Medicine Foundation's purpose. Awareness of the foundation's purpose increases with length of time as a Fellow; those based overseas are less likely to be aware than those based in Australia.

About one in five Fellows indicated they are very/somewhat likely to donate in the foundation in the next 12 months. One in five say if the foundation provided more information about the research and donation, they would be more likely to donate.

"The majority of new Fellows enter the workforce within the first year of completing their training."

What is working now – and in the future

Most new Fellows are finding work soon after completing training but many are not working where they would like to be, the 2014 Graduate Outcomes Survey has told us.

The survey, established to help both ANZCA understand the needs of new Fellows when interacting with government, education and training providers and others, is also aimed at identifying how ANZCA can assist new Fellows with their training, practice and professional development.

While much information was obtained via the survey itself, New Fellow Councillor Dr Craig Coghlan also spoke to 100 randomly selected new Fellows and was able to gather qualitative data on workforce issues facing new Fellows in 2014.

This experience was also extremely helpful in correlating the "real world" with the data obtained through the survey. The quantitative data obtained on the phone and the data obtained and analysed through the survey complemented each other.

Some of the key conclusions that can be made from both the survey and phone calls were:

- The majority of new Fellows enter the workforce within the first year of completing their training.
- A significant number do not obtain employment of their choice initially but within three years this becomes less of an issue.
- Most believe there are adequate job opportunities now but there will be a problem in the future.
- A quarter of new Fellows grew up in regional or rural areas but fewer than one in 10 will return to a regional or rural area to work as a specialist anaesthetist.
- There is a consistent concern about job security associated with locum, short-term or visiting medical officer (VMO)-appointed positions.

ANZCA's next steps are to develop a plan of recommended actions and activities.

It will be through this plan that issues will be addressed and measurable outcomes put in place. New Fellows will be encouraged to influence solutions and to support recommendations. The plan and the recommendations will be promoted to the Fellows through ANZCA's publications and website.

Thank you again to all the new Fellows who participated in the 2014 Graduate Outcomes Survey.

Dr Craig Coghlan, FANZCA
New Fellow Councillor, ANZCA

Key findings

Below is a snapshot of the key findings from the 2014 Graduate Outcomes Survey:

- Satisfaction with all aspects of anaesthesia training is comparable to 2013 survey results – training relevance (86 per cent excellent/very good); practical experience (82 per cent); how well training prepared them for practice (76 per cent). Satisfaction with supervision received was 71 per cent and quality of ANZCA service 42 per cent.
- Similar to 2013, the great majority have entered the workforce and are regularly providing anaesthetic services – 89 per cent of graduates say they have entered the workforce and of these 95 per cent are providing services on a regular basis and most (92 per cent) are working in Australia.
- The reported average hours worked per week has increased slightly from 38.2 hours in 2013 to 39.5 hours in 2014.
- Satisfaction with hours worked has slightly increased from 66 per cent in 2013 to 70 per cent in 2014.
- There is still concern, yet some improvement about future employment opportunities – 81 per cent believe that there were more opportunities a decade ago; Australian graduates who feel confident that there will be enough career opportunities in Australia is up from 38 per cent in 2013 to 50 per cent in 2014; the proportion of graduates who feel confident that there will be quality options in locations they want to work increased from 43 per cent in 2013 to 48 per cent in 2014 (but 19 per cent strongly disagree with this) and 75 per cent would still recommend anaesthesia as a career.
- Very few graduates (8 per cent) plan to move to a rural or regional area.

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The 2014 Graduate Outcomes Survey was distributed by email on July 15 to 900 new Fellows within three years of graduation as a FANZCA (July 1, 2011 through to June 30, 2014). The survey response rate was 47 per cent, the same as in 2013.

This is the second time that this longitudinal survey has been undertaken. It is an important component of the ANZCA workforce action plan developed in 2013. There are three main areas that the College has identified through this plan; collecting high quality data to inform workforce planning, to ensure the College has an effective voice in decisions by policy makers and communicating with Fellows and trainees to understand their views and discuss the College's workforce activities.

What is working now – and in the future (continued)

Entered workforce

% Have entered workforce. 2014 versus 2013 survey results in more detail:

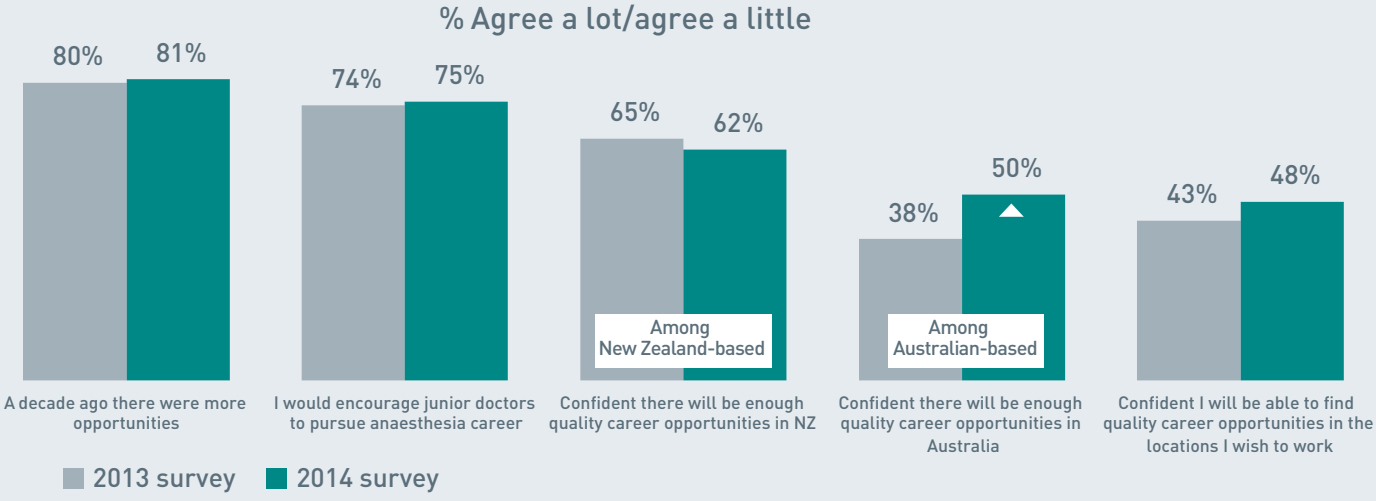
	Total	Anaesthesia training completed			Year completed training					Graduate age			Have other qualifications	
		Australia	New Zealand	Else-where	In 2014	In 2013	In 2012	In 2011	Longer ago	Under 35 years	35-39 years	40+ years	Yes	No
2014 Survey	89%	91%	76%	93%	67%	87%	97%	98%	96%	80%	91%	96%	95%	87%
2013 Survey	91%	91%	87%	91%	n/a	80%	93%	95%	95%	84%	93%	97%	96%	88%

Longitudinal analysis

Of the 432 participants of the 2014 survey, 197 had also completed the 2013 survey:

- In the 2014 survey more of these graduates had entered the anaesthesia workforce, that is, 97 per cent of these graduates had started working, up from the 2013 result (90 per cent). The increased proportion was particularly seen amongst those who completed their training in 2013 (96 per cent have entered workforce, up from 80 per cent).
- The reported average hours engaged in anaesthesia work per week increased slightly from 37.7 hours to 40.2 hours. There was a higher proportion of these graduates who were doing 41-50 hours (up from 23 per cent to 33 per cent) and significantly fewer working 31-40 hours (down from 42 per cent to 32 per cent).
- Satisfaction with hours worked was fairly comparable between the two surveys. There was a slightly increased number wanting fewer hours (up from 10 per cent to 14 per cent). Fewer graduates who completed training in 2012/2013 wanted more working hours.
- In regard to lower paid/unpaid clinical work; in 2014, 88 per cent stated they were not doing any low paid/unpaid clinical work, whereas in 2013 this was only 76 per cent. The shift has come from those who completed training in 2013 (73 per cent to 90 per cent) and 2012 (69 per cent to 83 per cent).
- There is improving confidence in Australian job opportunities. Among graduates practising in Australia, more felt confident there would be quality career opportunities within Australia in the future (up from 40 per cent last year to 50 per cent).

Attitudes to future employment prospects



What would you do?

Dr Peter Roessler explains ANZCA's professional documents using practical examples.

Ethics can be the final arbiter when judging patient safety and quality of care.

"Good morning doctor" is the greeting you get from your anaesthesia assistant as you enter the new endoscopy suite to start the all-day list with 22 patients booked. Having worked with the endoscopist at the local public hospital and developed a good relationship you have been invited to provide anaesthesia services for a regular new session every fortnight at his new endoscopy facility, which is registered but not accredited. He has a very busy practice.

Your anaesthesia assistant introduces you to the anaesthesia machine, which is an old "relic" (Anaes Lessaurus Rex) that is still in good working condition but is clearly not compliant with the current College statement.

What would you do?

While there are numerous "solutions" that could be considered, it is interesting to ponder the issues. At one end of the spectrum would be to proceed with the list despite the absence of a compliant machine with the tempting argument that there was a grace period before the introduction of the new requirements.

Another course of action would be to cancel the list until the problem was addressed. Maybe the ideal would have been to visit the facility in advance so as to review the anaesthetising location and recovery areas and provide guidance in the lead-up to ensure that anaesthesia requirements are met.

In the first case, invoking the rationale that there was an extended grace period to allow these machines to be used until such time that they could be replaced may be entertained by some as a reason to continue (temporarily).

What about the second option of cancelling all the patients? All 22 patients have had their bowel prep and are likely to get the gripes from being cancelled, as well as from their bowel prep. What action is in the patients' best interests? Rationalising on the basis that sedation is being provided and patients will be receiving oxygen by mask as opposed to the anaesthesia machine may be tempting.

In the third option involving a prior visit to the facility, there may be resistance or flat refusal to invest in the necessary equipment. What then? Patients may still be booked and another "seditionist" engaged. What is our responsibility in this case?

No doubt, there are multiple variations on the above themes but the final common pathway that should direct our actions will be based on ethics, and applying ANZCA's mission statement in regard to promoting safety and quality care. This article is not intended to provide the "right answer" but rather to guide Fellows to the relevant College documents designed to assist in coming to the most appropriate decisions, taking each case on its merits.

In the above scenario the relevant documents include:

- *Code of Professional Conduct* – with specific reference to sections 1, 2, and 8.
- *PS54 Statement on the Minimum Safety Requirements for Anaesthetic Machines and Workstations for Clinical Practice.*
- *PS55 Recommendations on Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations.*
- *PS26 Guidelines on Consent for Anaesthesia or Sedation.*

One might expect that a response to the above case would be fairly uniform and consistent, but that has not been the case.

Dr Peter Roessler
ANZCA Director of Professional Affairs (Policy)

Professional documents – update

The professional documents of ANZCA and FPM are an important resource for promoting the quality and safety of patient care for those undergoing anaesthesia for surgical and other procedures, and for patients with pain. They provide guidance to trainees and Fellows on standards of anaesthetic and pain medicine practice, define policies, and serve other purposes that the College deems appropriate.

Professional documents are also referred to by government and other bodies, particularly with regard to accreditation of healthcare facilities.

Professional documents are subject to regular review and are amended in accordance with changes in knowledge, practice and technology.

Definitive versions of the following documents are now available:

- *PS12 Guidelines on Smoking as Related to the Perioperative Period.*
- *PS31 Guidelines on Checking Anaesthesia Delivery Systems.*
- *PS42 Statement on Staffing of Accredited Departments of Anaesthesia.*
- *PS57 Statement on Duties of Specialist Anaesthetists.*

Queries or feedback regarding professional documents can be directed to profdocs@anzca.edu.au.

The complete range of ANZCA professional documents is available via the ANZCA website, www.anzca.edu.au/resources/professional-documents.

Faculty of Pain Medicine professional documents can be accessed via the FPM website, www.fpm.anzca.edu.au/resources/professional-documents.

ANZCA AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS | FPM FACULTY OF PAIN MEDICINE ANZCA

Supporting Anaesthetists' Professionalism and Performance – a guide for clinicians

What is professionalism? Is it what a good doctor does, how a good doctor behaves? And how do we know this? It used to be that it was assumed that we'd pick it up in our training by osmosis from our guides and mentors while we were being taught the medical expert roles, such as diagnosis of heart failure. However, teaching was sporadic, and our mentors and guides weren't always the best examples to follow.

The medical landscape is changing with increasing expectations regarding transparency and accountability regarding the performance of medical practitioners. We are required to demonstrate high standards of performance to our patients, colleagues, organisations with whom we work and the wider society in general.

To help our Fellows and trainees understand how a good doctor behaves, ANZCA has developed a framework for anaesthetists (the guide). The guide has been structured to mirror the ANZCA Roles in Practice. Four "patterns of behaviour" are identified under each role and each pattern of behaviour is illustrated by a set of eight "behavioural markers". These examples of good and poor behaviour are readily observable and can be used to describe standards of performance in the clinical workplace.

ANZCA's guide is based on the *RACS Surgical Competence and Performance Guide* and the *RACP Supporting Physicians' Professionalism and Performance Guide*, and was "anaesthetised" by an ANZCA working party, consisting of myself (chair, anaesthetist NZ and ANZCA Executive Director of Professional Affairs), Mr John Biviano (previous ANZCA General Manager, Policy), Dr Liz Feeney (anaesthetist, NSW), Dr Ian Graham (ANZCA Dean of Education), Dr Jodie Graham (anaesthetist, WA), Mr Oliver Jones (General Manager, ANZCA Education Unit), Dr Rod Mitchell (anaesthetist, SA), Dr Peter Roessler (anaesthetist, Vic and Director of Professional Affairs, Policy) and Ms Linda Sorrell (ANZCA CEO).

Dr Graham was involved in the development of the RACS and RACP guides, and his facilitation of ours was of great benefit to us. We're also grateful to RACS and RACP for agreeing to allow ANZCA to use their guides to help develop our own.

The RACS guide was described as a framework to assess the performance of practicing surgeons, either self assessment or assessment by colleagues and co-workers. ANZCA's guide has been developed with more general aims; while it can be used for assessing an anaesthetist's performance, it can be more properly considered as a very practical description of behaviours.

For example, if an anaesthetist is considering undertaking a new technique, such as a new nerve block, there is guidance under ANZCA Role in Practice *"Medical Expert"* pattern of behaviour *"demonstrating medical skills and expertise"*, in which good behaviour includes *"goes through appropriate processes when learning a new technique, for example, visiting an expert, training or mentoring"*, and poor behaviour includes *"introduces new technology or procedures without adequate consultation"*.

When considering what makes a good team player, there are multiple behaviours listed. In ANZCA role *"Collaborator"*, pattern of behaviour *"establishing a shared understanding"*, good behaviour includes *"encourages input from members of the team including junior medical staff and nurses"*, while poor behaviour includes *"fails to explain the rationale for decisions to other team member"*.

What makes a good leader? Leadership is covered under ANZCA role *"Manager"*, pattern of behaviour *"leadership that inspires others"*. Good behaviours include *"remains calm under pressure, working methodically towards effective resolution of difficult situations"*, and poor behaviour *"blames others for errors and does not take personal responsibility"*.

The examples above can be used as practical examples of how to behave, and serve as a focus for trainees' and Fellows' aspirations, educational meetings, as well as a focus for self assessment or assessment by others.

The draft document has been accepted by ANZCA Council, and is now being circulated for comment.

Dr Leona Wilson, FANZCA
Chair, Professionalism Expert Group

Fighting Ebola on the frontline

Brisbane anaesthetist Dr Jenny Stedmon urges Fellows to volunteer in West Africa to stamp out the deadly virus at its source.

Anaesthetists are highly skilled generalist doctors as well as specialists and uniquely placed to help confront and control the Ebola emergency in West Africa, says anaesthetist Dr Jenny Stedmon

The director of anaesthesia at Redland Hospital in Brisbane, Dr Stedmon returned from Sierra Leone in September. She spent one month volunteering with one of the first groups of Australian medical professionals to help with the Ebola effort, responding to a call-out for help issued by the International Federation of the Red Cross. She helped set up one of the first Red Cross Ebola treatment tent facilities.

While the international community's involvement in aid for the West African crisis has been varied, and some have criticised the Australian Government's early response as "begrudging", Dr Stedmon does not believe any person should be forced to go to into the hard-hit countries of Sierra Leone, Liberia or Guinea.

Nevertheless she believes that more ANZCA Fellows – "well-rounded doctors" – should be encouraged to volunteer a short stint of their time to help control the latest outbreak of the disease.

"They specifically asked for anaesthetists among the groups of volunteers they were looking for," Dr Stedmon said.

Anaesthetists, she said, were in demand because of their range of skills.

Dr Stedmon has worked as a volunteer with the Red Cross in countries affected by natural disaster and war for the past 20 years. Most recently she volunteered as part of the relief effort after the deadly Typhoon Haiyan devastated parts of the Philippines in November last year.

But all of Dr Stedmon's 20-plus years of Red Cross volunteer aid work did not prepare her for the storm of misinformation and controversy she found on her return to Australia in September.

"It wasn't like that before I left," Dr Stedmon said.

She likens "Ebola hysteria" in affluent countries such as Australia to the lack of awareness about Aids in the 1980s – where people were often cruelly and unnecessarily discriminated against if they were HIV positive, as were those who worked with them.

"With Ebola we are seeing all the stigma again and the lack of information that creates it," Dr Stedmon said.

The likelihood of an outbreak in Australia was "minimal" – Australia does not face the same desperate poverty as West African countries; the average person's health and immune system is not as compromised as those living in the developing countries worst hit by the Ebola virus.

"We need to stop Ebola in its tracks in Africa – it is spreading," she said. "We can do that by sending our experience and expertise to establish protocols to assist in isolation units and support local health care workers. But by treating people like lepers when they come home we are putting people off volunteering at all."

Each volunteer to a country with an Ebola outbreak is subject to a 21-day quarantine period when they return home and are released from quarantine when they show no symptoms after that period.

"Ebola is a pathetic virus, if it's on the skin it is killed by soap and water," Dr Stedmon said.

"Alcohol wipes, chlorine – the staple of antiseptics – are enough, it is easy to stop its spread.

"The problem in combating Ebola in African countries is lack of access to clean water and the overcrowding of hospitals – not only are they not treating anything else (but Ebola) but there isn't the room to allow the 1.5 metre separation needed to help contain the spread."

Dr Stedmon believes Australia could learn from Sierra Leone's example of spreading the word about Ebola – information and awareness to counter myth and promote safe practices.

"In Sierra Leone they have gone about education in a different way than we have – if they can do it why can't we?

"They have an Ebola song – it plays on the radio frequently which is a very effective way of reaching a significant number of people as most people have or can listen to a radio."

There also are posters pasted on to the bonnets of cars and a concerted effort to increase awareness of how every individual can reduce the spread of infection.

"You think that we would do that here."

The physical strain of working in an Ebola centre is not to be underestimated but the countries most affected by the virus need Australia's help. It is by offering that help we have the best hope of stopping the spread of the disease, Dr Stedmon said.

"I would observe that we haven't put much effort into a response here in Australia," she said.

"There is not much interest or discussion on what it's like on the ground – what is happening and what is needed. Setting up an isolation unit is easy, but understanding the issues and processes behind it isn't."

Because of a scarcity of volunteers, some health care workers were working up to six-hour shifts in their personal protective equipment (PPE) – even though it was understood the maximum contact should be no more than one hour.

Back at home Dr Stedmon has helped establish a dedicated Ebola team at her own hospital and believes every hospital in Australia needs a similar plan, a group of people who are trained in PPE and infectious disease control.

Ultimately, she said, Australia should be prepared – alert, not alarmed.

"Ebola has the potential to kill more people but we need perspective," she said. "If we want to stop Ebola killing more people or spreading outside of the African countries where it a problem we need to help those countries to stamp it out."

Ebru Yaman
Media Manager, ANZCA

Clockwise from top left: Dr Jenny Stedmon; Dr Stedmon (second from left) and fellow volunteers on a break; Volunteers collecting patients from the ambulance; Sterilised protective wear hangs to dry; Collecting breakfast to serve patients.

Fighting Ebola on the frontline (continued)

What is Ebola?

Key facts

- Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a severe, often fatal illness in humans.
- The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission.
- The average EVD case fatality rate is around 50 per cent. Case fatality rates have varied from 25 per cent to 90 per cent in past outbreaks.
- The first EVD outbreaks occurred in remote villages in Central Africa, near tropical rainforests, but the most recent outbreak in West Africa has involved major urban as well as rural areas.
- Community engagement is the key to successfully controlling outbreaks. Good outbreak control relies on applying a package of interventions, namely case management, surveillance and contact tracing, a good laboratory service, safe burials and social mobilisation.
- Early supportive care with rehydration, symptomatic treatment improves survival. There is as yet no licensed treatment proven to neutralise the virus but a range of blood, immunological and drug therapies are under development.
- There are currently no licensed Ebola vaccines but two potential candidates are undergoing evaluation.

Source: World Health Organization

Symptoms of Ebola virus disease

The incubation period is two to 21 days. Humans are not infectious until they develop symptoms. First symptoms are the sudden onset of fever; fatigue, muscle pain, headache and sore throat. This is followed by vomiting, diarrhoea, rash, symptoms of impaired kidney and liver function, and in some cases, both internal and external bleeding (for example, oozing from the gums, blood in the stools). Laboratory findings include low white blood cell and platelet counts and elevated liver enzymes.

Source: World Health Organization

How many have died?

Estimating Ebola numbers is both "art and science", a WHO spokesman has been quoted as saying and the figures the organisation releases vary. In October it was estimated there had been 9936 Ebola cases in 2014 and 4877 people had died from the virus this year. The actual figure, however, could be as much as three times higher, the organisation has stated.

Above right: A locally-made t-shirt raising awareness.

The race for drugs

BBC News Health reports that two Ebola vaccines have been rushed from promising animal studies into human trials. One is produced by GlaxoSmithKline (GSK) and the National Institutes of Health in the US, and the other was designed by the Public Health Agency of Canada and is being produced by Merck. GSK has inserted an Ebola gene into a weakened chimpanzee virus, which is unable to replicate in the human body. Initial tests on 20 volunteers in the US showed it was safe and that the tiny fragment of Ebola's genetic code was enough to generate an immune response. Further trials are taking place in the UK, US, Switzerland and Mali to see if the immune response is strong enough to fight off an Ebola infection and how long any such protection would last.

ANZCA awards $A1.4 million for research

The ANZCA Research Committee has awarded funding of $A1,446,618 through the Anaesthesia and Pain Medicine Foundation for research projects in 2015. The funding supports the Lennard Travers Professorship, one academic enhancement grant, 20 project grants, five continuing project grants; one simulation/education grant, four novice investigator grants and the pilot grant scheme. These important research initiatives will be carried out in leading hospitals and universities in Australia, New Zealand and Hong Kong and will continue to advance and maintain a high international standing in safety and quality patient care in anaesthesia, intensive care, perioperative medicine and pain medicine.

Research awards

Background

The Harry Daly Research Fellowship was established by the Faculty of Anaesthetists, Royal Australasian College of Surgeons, in 1981. The Harry Daly Research Award may be made in any of the categories of research awards made by the College provided the project is judged to be of sufficient merit. The award is made each year to the highest ranked grant assessed by the ANZCA research grant process.

The John Boyd Craig Research Award was established following generous donations from Dr John B Craig to the Anaesthesia and Pain Medicine Foundation to support pain related research by Fellows, particularly Western Australians.

The Dr Russell Cole Memorial ANZCA Research Award was established following a generous donation to the Anaesthesia and Pain Medicine Foundation from the family of the late Dr Russell Cole to support a highly ranked pain-related research grant.

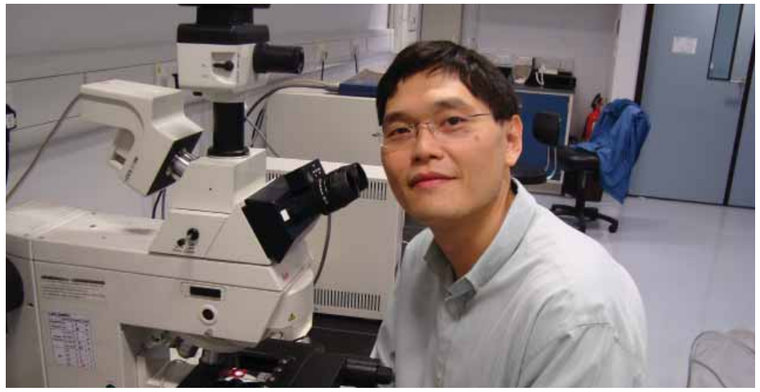
Pfizer is a major sponsor of the Anaesthesia and Pain Medicine Foundation. The Pfizer ANZCA Research Award was established to be awarded to a highly ranked pain-related project grant.

The following were awarded for 2015:

- The **Harry Daly Research Award** was awarded to **Dr Chris Bain** for his project "Analysis of the impact of pre-existing differential DNA methylation on inflammatory gene expression and the inflammatory response to major abdominal surgery" (page 36).
- The **John Boyd Craig Research Award** was awarded to **Dr Philip Finch** for his project "Clarifying the molecular mechanism of sympathetically maintained pain" (page 37).
- The **Dr Russell Cole Memorial ANZCA Research Award** was awarded to **Dr Susan Evans** for her project "Is estrogen stimulation of toll-like receptor pathways the missing link between dysmenorrhoea and later progression to chronic pain" (page 38).
- The **Pfizer ANZCA Research Award** was awarded to **Dr Paul Wrigley** for his project "Optimising the neurophysiological assessment of residual thermonociceptive sensation following spinal cord surgery" (page 40).

Above from left: Dr Chris Bain; Dr Philip Finch; Dr Susan Evans.

The 2015 Lennard Travers Professorship



Brain-derived neurotropic factor and chronic postsurgical pain: mechanisms and preventive strategy

ANZCA congratulates Professor Matthew Chan for the award of the quadrennial Lennard Travers Professorship for 2015. This prestigious award is open to Fellows of the College in Australia, New Zealand, Hong Kong, Malaysia and Singapore to work in an area of his/her choosing towards the advancement of knowledge in a nominated area of anaesthesia in those countries. The tenure of the professorship is one year and Professor Chan will hold the courtesy title "Lennard Travers Professor of Anaesthesia".

Professor Chan is a professor in the Department of Anaesthesia and Intensive Care, The Chinese University of Hong Kong and is an honorary consultant at the Prince of Wales Hospital and Tuen Mun Hospital, Hong Kong. He is also a visiting professor at the Capital Medical University in Beijing and visiting lecturer/tutor at the National University of Singapore, conducting MMed preparatory courses. His main research interests are clinical trials, anaesthetic pharmacology, neuroanaesthesia and critical care, anaesthetic simulation, neurophysiologic monitoring and mechanism of postoperative pain.

Professor Chan is an editorial board member and review articles editor for the *Journal of Neurosurgical Anesthesiology* and a member of the associate editorial board of the *British Journal of Anaesthesia*. He is a member of the ANZCA Research Committee and an executive member of the ANZCA Clinical Trials Network.

Professor Chan has delivered invited lectures at many international and national scientific meetings. He is a principal investigator of six research grants from national and international funding bodies. He has published 10 book chapters and more than 140 peer-reviewed articles. He supervises five PhD students.

The Lennard Travers Professorship emolument will assist Professor Chan in pursuing his study exploring the role of a promising target in the nervous system, brain-derived neurotrophic factor (BDNF), which has been shown to affect other neurological diseases. Preliminary research in Professor Chan's laboratory shows that BDNF is a key player in the development of chronic pain.

Professor Chan and his research team will use a transgenic mouse model to evaluate the role of BDNF in chronic postsurgical pain and will construct a novel blocking peptide that will regulate the secretion of BDNF in the spinal cord. Ultimately, he hopes the results of this study could be translated to clinical medicine where preoperative administration of this peptide will help to prevent disabling pain after surgery.

Professor Chan will deliver the Australasian Visitor's Lecture at the ANZCA Annual Scientific Meeting in Auckland in 2016 as part of the Lennard Travers Professorship.

Academic Enhancement Grant

New evidence-based ventilation guidelines for children

Professor Britta Regli-von Ungern-Sternberg, Princess Margaret Hospital for Children, WA.

$A99,753

Paediatric patients undergoing elective or emergency surgery, or who have been admitted to a neonatal/paediatric intensive care unit often require mechanical ventilation. During the perioperative period, these patients are at risk of lung injury, including atelectasis, pneumonia, collapsed lung, acute lung injury and acute respiratory distress syndrome. While a good lung-protective strategy will reduce the risk of these conditions occurring and may lead to improved outcomes, failure to tailor ventilatory support to each individual patient can result in ventilator-induced lung injury or may exacerbate any underlying lung conditions.

By measuring the respiratory resistance and pulmonary compliance of children undergoing surgery before and after anaesthesia, the investigators believe they will be able to develop robust prediction equations that define the optimal lung function for anaesthetised children receiving mechanical ventilation.

This study therefore aims to provide a scientific evidence-based tool for paediatric medical practitioners to use in order to tailor and offer lung protective strategies based on each patient's respiratory parameters, thus limiting ventilator-induced lung injury while improving patient safety and outcomes, particularly in the intensive care unit where efficient ventilation and oxygenation is paramount.

(continued next page)

ANZCA awards $A1.4 million for research (continued)

Simulation/Education Grant

Impacts of emotion on diagnostic decision-making in anaesthesiology

Dr Suyin Tan, Nepean Hospital, Dr Thomas Loveday, Dr Monique Crane, Professor Mark Wiggins, Professor Kirsty Forrest, Macquarie University, NSW

$A55,320

This study seeks to examine the impact of mood states, for example positive and negative affect, on diagnostic accuracy among practising anaesthetists. Positive affect has been found to promote flexibility in thinking, which in turn has been shown to facilitate problem-solving and innovation, efficiency and thoroughness in decision-making and to enable improved thinking, especially where tasks are complex. The consequence of these findings is that positive and negative affect may have important implications for clinical decision-making with flow-on effects to patient safety. However when considering diagnostic accuracy in anaesthetics, little consideration is given to the impact of transient emotional states. Consequently, anaesthetists now rely on their capacity to monitor both electronic and physical features as indicators of the patient's status. While technology is a major contributor to patient safety, the human aspect also needs to be considered. Few studies have examined how psychological factors, and in particular emotional factors, impact the monitoring and effective use of these technologies.

The overall goal of the study is to support understanding of the role of human emotions and wellbeing on performance outcomes. Specifically, the research will (i) develop a model of the role of human emotions and wellbeing on performance outcomes in anaesthetics practice, and (ii) develop recommendations and guidelines for the design of training in emotional management skills. Ideally, emotional management skills can be taught alongside the technical skills that typically comprise medical education.

Novice investigator grants

Post-exercise cardiac PET imaging: a pilot study of cardiac risk assessment in patients undergoing major cancer surgery

Dr Marissa Ferguson, Peter MacCallum Cancer Centre, Melbourne, Vic

$A19,871

Major perioperative cardiac complications such as myocardial infarction, cardiac arrest, and cardiac death account for a significant burden of disease, affecting over 900,000 patients worldwide after non-cardiac surgery. In particular, patients undergoing major cancer surgery are often at increased risk for cardiac complications due to advanced age, multiple comorbidities, and the effects of preoperative chemo-radiotherapy. Furthermore, the impact of cardiac complications after cancer surgery is particularly significant as delayed return to intended oncologic therapy (such as postoperative chemotherapy or radiotherapy) may affect cancer survival, in addition to effects on quality of life, symptom burden and length of stay.

Improved preoperative risk prediction is an essential component of the overall research effort directed towards reducing perioperative cardiac morbidity and mortality. However, currently available stress tests are limited by variable sensitivity and specificity for perioperative cardiac risk prediction. Therefore there is a need to prospectively evaluate the performance of novel cardiac imaging techniques in the perioperative period. This project will investigate the feasibility of post-exercise cardiac positron emission tomography (PET) imaging among a cohort of patients undergoing major cancer surgery. Secondary outcomes will include the diagnostic utility of cardiac PET imaging in the identification of myocardial ischaemia and in preoperative cardiac risk prediction. We hypothesise that cardiac PET imaging will be feasible and may provide additional diagnostic and prognostic information compared to conventional studies that more simply assess myocardial blood flow.

The novelty of this study is the direct assessment of myocardial metabolism at a cellular level. This is possible due to the preferential uptake of radiolabelled glucose in ischaemic myocytes, with myocardial ischaemia subsequently appearing as a "hot spot" on PET imaging. This innovative use of PET technology may facilitate more accurate quantification and anatomical localisation of regional myocardial ischaemia, taking into account supply-demand imbalance and cellular metabolic factors. This is in contrast to standard myocardial perfusion imaging in which ischaemia is detected indirectly by identifying reversible stress-induced defects in myocardial blood flow. By investigating this novel imaging technique, the investigators hope to contribute to improvements in the perioperative care of patients at risk for cardiac complications after major surgery.

A pilot study on the clinical significance of cerebrovascular autoregulation monitoring during non-cardiac anaesthesia

Dr Alwin Chuan, Liverpool Hospital, NSW

$A15,000

Cerebrovascular autoregulation (CVAR) is a mechanism which regulates the blood supply to the brain to prevent cell death and is affected by age, chronic disease, anaesthesia and surgery. Impairment of CVAR has been associated with increased rates of perioperative stroke, poorer outcomes after brain surgery and acute kidney injury. With an increased demand for surgery and anaesthesia by an ageing population, this represents a significant burden of disability, poorer recovery and an overall burden on the health system.

This study will extend the current understanding of the CVAR mechanism using near-infrared spectroscopy (NIRS), which can now be used to measure CVAR function. The CVAR in elderly patients, who are at higher risk of complications, undergoing major elective non-cardiac surgery, will be monitored using non-invasive NIRS. These patients will be followed up 12 months after their surgery to determine if impairment of their autoregulation mechanism resulted in worsening post-operative outcomes and recovery. This pilot study is designed as a sub study of the BALANCED clinical trial of the effect of depth of anaesthesia on patient outcomes after major surgery.

The results of this study will provide further evidence to improve care of patients during anaesthesia, allowing for determination of which patients are at risk.

Pre-warming of surgical patients to prevent hypotension on induction of anaesthesia

Dr Jai Darvall, Royal Melbourne Hospital, Vic

$A15,000

A decrease in mean arterial blood pressure is a commonly observed side effect of intravenous agents used for induction of general anaesthesia with propofol and remifentanil. The aim of this study is to determine whether pre-warming a patient attenuates the decrease in mean arterial blood pressure associated with the induction of general anaesthesia in patients presenting for elective neurosurgery.

Pre-warming is a simple therapy that has been shown to reduce surgical wound infections, blood transfusion requirements, cardiovascular complications and hospital length of stay after major surgery. This study will measure pre and post-induction mean arterial blood pressure in patients presenting for elective craniotomy who have been randomised to pre-warming or no pre-warming.

If this process helps in preventing the fall in blood pressure after anaesthetic induction in surgical patients, it may prove to be a non-invasive, low-risk strategy to address a commonly encountered side effect of general anaesthesia.

A prospective study of the relation between perioperative condition and disability after cardiac surgery

Dr Natalie Kruit, Dr Jeremy Field, Westmead Hospital, NSW

$A15,000

Morbidity and mortality associated with cardiac surgery has fallen and stayed low despite patients' increasing age and comorbidity. Subtle instruments are now required to assess the results of cardiac surgery focusing on functional status and patient satisfaction and quality of life following surgery.

This project aims to correlate perioperative variables with change in disability after surgery in patients undergoing cardiac surgery and cardiopulmonary bypass. Health-related quality of life (HRQL) has been recognised as an important and measurable dimension of health status and may be assessed using both generic and specific instruments. The investigators chose the World Health Organization Disability Assessment Schedule (WHODAS) 2.0 questionnaire for its general and practical nature and importantly its measurement of the effect of medical interventions on disability. The questionnaire will be administered to patients both before and six months following surgery. Data collection from clinical registries is instrumental in the process of quality improvement. Patient data will be collected from the Australian Society of Cardiothoracic Surgeons and the Perfusion Downunder Collaboration.

The likely benefits of this study will allow patients to be presented with a tailored description of the likely nature of their recovery after surgery, and will allow patients not achieving the expected changes in disability to be identified and provided appropriate treatment. It also will serve to generate hypotheses for future studies concerning perioperative optimisation and clinical decision-making.

(continued next page)

ANZCA awards $A1.4 million for research (continued)

Project grants

Analysis of the impact of pre-existing differential DNA methylation on inflammatory gene expression and the inflammatory response to major abdominal surgery

Dr Chris Bain, Alfred Health, Professor Andrew Shaw, Vanderbilt University, US; Clinical Professor Tomas Corcoran, Royal Perth Hospital, WA; Dr Kiymet Bozaoglu, Baker IDI Heart and Diabetes Institute, Melbourne, Vic

$A69,000

This research project will use DNA sequencing technology to examine how the human genome, the inherited DNA sequence and modifications around DNA (known as the epigenome) impact on cellular functions during the perioperative period.

RELIEF Genomics is a sub study of a large ongoing trial known as RELIEF (REstrictive versus LIbEral Fluid therapy in major abdominal surgery). The RELIEF trial is an investigation into the impact of different intraoperative intravenous fluid therapy on short and long-term outcomes in patients having major elective abdominal surgery. More specifically, the trial is assessing the long-term impacts of surgery on health and wellbeing, and includes patients who experience life-threatening complications that relate to infection and a marked systemic inflammatory response.

The genomic analysis will investigate the changes in the activity of the genes in circulating inflammatory cells, known as peripheral blood mononucleocytes, in a selection of patients in the RELIEF trial who have either a minimal or marked inflammatory response after surgery. This will reveal the genes whose increased and decreased activity is related to the stress of the surgery. This analysis will provide novel insights into the mechanisms by which altered patterns of gene expression distinguish a marked response from a minimal response.

The investigators will also look at the potential impact of chemical modifications of DNA, known as DNA methylation, on those genes whose activity or inactivity appears to be central to either a minimal or marked inflammatory response. Currently little is known of the role DNA methylation plays in the inflammatory response to surgery. However it is a form of epigenetic modification that has recently been demonstrated to play an important role in limiting gene expression in experimental models of the cellular immune response to infection.

The tranexamic acid in lower limb arthroplasty (TALLAS) pilot trial

Dr Thomas Painter, Royal Adelaide Hospital, SA; Dr Roman Kluger, St Vincent's Hospital, Melbourne, Vic

$A58,495

More than 85,000 lower limb arthroplasty procedures take place in Australia each year. Although tranexamic acid reduces bleeding and the risk of blood transfusion during, and immediately following hip and knee joint replacement, there is a theoretical concern that this action might also increase the risk of clots forming in other areas of the circulation leading to thrombotic complications.

To date, no study has been designed or sufficiently powered to examine for uncommon, but serious thrombotic complications. Any study that has included thrombotic complications has almost exclusively focused on deep vein thrombosis and pulmonary embolism, with few examining for myocardial injury after non-cardiac surgery. Similarly, the benefits of tranexamic acid in this setting have not been fully explored. None have studied patient-centric endpoints such as quality of recovery or quality of life following surgery.

Given the large numbers of patients undergoing lower limb arthroplasty annually, only a small increase in thrombotic risk may have a significant impact patient morbidity, mortality and cost to the community and thus potentially outweigh the benefits. This is especially important when taking into account the increasing age and comorbidity of arthroplasty patients. To properly understand the risk-benefit profile of tranexamic acid in lower limb arthroplasty, a large randomised controlled trial is required. The aim of this pilot study is to establish the feasibility of such a study, to define primary endpoints and to examine for associations between tranexamic acid use and other outcomes that will ensure that any future randomised controlled trial will prove definitive.

Investigation and prevention of fixation errors during airway management

Dr Stuart Marshall, Professor Michael Lenné, Monash University, Melbourne, Vic

$A58,000

Fixation error, also known as "loss of situation awareness", has often been identified as the cause of accidents and incidents in industries, most notably aviation. Attempts to solve fixation have included checklists, calling for help and broadening the team focus. However, fixation is a difficult problem to address, as the lack of ability to see other solutions to the problem is part of the problem. Often the magnitude of the problem can only be seen in hindsight.

A recent literature review has found there are few empiric studies of fixation errors in anaesthesia. This study will address this important gap in the literature by investigating normative decision-making in both elective and emergency airway situations and investigate why and how fixation occurs in airway management crises. The information will be collated and a model of fixation constructed and tested to ensure it is genuinely fit for use in clinical practice.

A successful cognitive aid for airway management with additional supports such as education and other potential devices would minimise the risk, morbidity and mortality of patients due to airway difficulties.

Clarifying the molecular mechanism of sympathetically maintained pain

Dr Philip Finch, Professor Peter Drummond, Murdoch University, WA

$A57,000

Chronic pain is a major cause of suffering worldwide. For many patients, the mechanisms that drive their pain are poorly understood and effective therapies are lacking. Identifying these mechanisms is crucial for the advancement of pain management.

Following tissue injury, inflammatory mediators are released from injured tissue, infiltrating immune cells, and keratinocytes, mast cells and Langerhans cells. The investigators hypothesise that the inflammatory mediators either directly, or through the induction of nerve growth factors, trigger increased expression of a key molecule, α1-adrenoceptor, in the plasma membrane of nerve fibres and other cells at the site of injury. In turn, the stimulation of this receptor may compound inflammation and pain and increase the likelihood of secondary changes that maintain chronic pain.

A cell culture approach will be used to identify abnormalities in cells harvested from patients with complex regional pain syndrome, and to establish whether α1-adrenoceptor expression increases after cell trauma and administration of nerve growth factor.

The investigators aim to clarify the molecular mechanisms that induce and drive up-regulation of α1-adrenoceptors on keratinocytes and dermal nerve fibres following nerve or tissue injury, and determine whether this can be prevented or reversed. They hope the findings could provide new therapeutic approaches to preventing and/or managing certain forms of chronic pain in vulnerable patients.

RELIEF - Natriuretic peptides sub study

Dr Edmond O'Loughlin, Fremantle Hospital, WA, Clinical Professor Tomas Corcoran, Clinical Associate Professor Kwok-ming Ho, Royal Perth Hospital, WA, Professor Paul Myles, The Alfred, Melbourne, Vic

$A57,000

There are more than 2.5 million anaesthetics given each year in Australia, all of which are associated with the administration of fluid. With an ageing population, most with comorbidity, major surgery commonly leads to serious post-operative complications, with some leading to permanent disability and early death. All surgical patients receive fluid during and after their surgery, yet it is not known whether the amount of fluid administered can influence how well patients recover. There is some data to suggest that by limiting the amount of fluid administered, patients may have an accelerated recovery. The RELIEF study is a large, multi-centre trial in high-risk patients undergoing abdominal surgery and is designed to either confirm or refute the possible benefits of a restrictive versus a liberal intravenous fluid regime in terms of patient-centred outcomes.

One reason patients may do poorly when fluid is administered is that damage may result due to the excessive stretch of the heart caused by the fluid. Such damage can be detected by measuring a compound, brain natriuretic peptides (BNP) and its precursor, N-terminal fragment (NTproBNP). This sub study will explore whether fluid strategy alters these biomarker compounds and whether they can identify differences in the incidence of postoperative major adverse cardiovascular events in high-risk patients when comparing restrictive versus liberal fluid management strategies. Hence, these biomarkers may represent a potentially modifiable risk target.

(continued next page)

ANZCA awards $A1.4 million for research (continued)

Project grants (continued)

Is estrogen stimulation of toll-like receptor pathways the missing link between dysmenorrhoea and later progression to chronic pain?

Dr Susan Evans, Professor Paul Rolan, Associate Professor Mark Hutchinson, Royal Adelaide Hospital, SA

$A56,000

Chronic pelvic pain is a common disorder which can markedly disrupt the lives of young women. Traditionally, chronic pelvic pain has been associated with the presence or absence of a medical condition called endometriosis. However there is no reliable correlation between the amount of endometriosis present and the severity of pain. There also is also no explanation for the presence of pain in women without endometriosis.

Extensive evidence has accumulated from animal models that persistent neuropathic pain may be due to a pro-inflammatory environment in the peripheral and central nervous systems, with pain sensitivity driven by the activation of the connective tissue surrounding the nerve cells. Research at the University of Adelaide suggests that estrogen amplifies this process via activation of Toll-Like 4 receptors.

This study will progress the already established evidence from animal studies to women with dysmenorrhoea or chronic pelvic pain. Patients will complete a questionnaire to establish pain history and severity. Two novel biomarkers, developed at the University of Adelaide, will be used to assess the activation of the neuroimmune system in participants and to determine whether a blood-based biomarker of Toll-like receptor sensitivity distinguishes participants with pain from those without.

While the proposed study is directly relevant to women with pelvic pain, the demonstration of a novel pathway for chronic pain would have major clinical translational potential.

Cognitive decline after anaesthesia and surgery - the role of inflammation

Associate Professor Brendan Silbert, Associate Professor David A Scott, Associate Professor Lisbeth Evered, St Vincent's Hospital, Melbourne, Vic

$A54,000

Postoperative cognitive dysfunction (POCD) represents one of the greatest challenges to anaesthetic and surgical practice, mainly affecting the elderly who now comprise more than a third of all anaesthetic and surgical cases in Australia. POCD interferes with cognition, affecting quality of life, is associated with longer hospital stays and has the potential to cause further cognitive deterioration over time.

Current evidence supports the systemic inflammatory process as directly leading to downstream effects on the central nervous system. The study seeks to elucidate the role of inflammation as a cause of POCD by investigating the inflammatory response resulting from anaesthesia and surgery by analysing the blood for specific proteins, which rise during and after surgery. By also measuring cognitive function both before and after surgery, the investigators hope to relate the levels of these inflammatory proteins to any subsequent cognitive decline. Identifying which inflammatory proteins are associated with POCD is the first step in instituting preventative strategies.

Cerebral NIRS monitoring in infants during the perioperative period: a prospective observational cohort study

Associate Professor Andrew Davidson, Murdoch Children's Research Institute, Melbourne, Dr Justin Skowno, The Children's Hospital at Westmead, NSW

$A39,000

Surgery and anaesthesia in infants is associated with a small, but definite increased risk of brain injury. Determining the cause and searching for ways to prevent this injury is a clear priority for paediatric anaesthesia. One mechanism for the injury may be cerebral ischaemia due to intra-operative hypotension. Little data are available to determine the optimal blood pressure in infants during surgery and in particular the lower limit of autoregulation is largely unknown.

This study will use a new and emerging technology, near infrared spectroscopy (NIRS), for measuring brain oxygenation to try and establish the incidence of cerebral deoxygenation during surgery in infants and the factors associated with this. Data will also be used to calculate the lower limit of autoregulation. The investigators plan to also perform neuropsychological assessment of children to identify any association between intra-operative NIRS and neurobehavioural outcome.

This study is part of a collaborative project investigating NIRS in infants involving centres across Australia, the US, Switzerland and the Netherlands.

Correlation of bone marrow iron stores with blood markers of iron deficiency in trauma

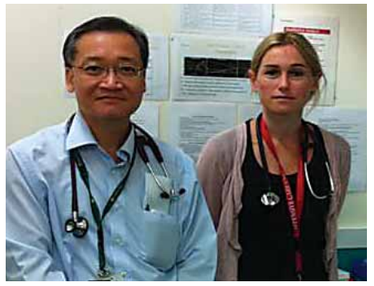
Dr Edmond O'Loughlin, Dr Eva Ferreres Albert, Professor Debbie Trinder, Fremantle Hospital, WA

$A33,000

Anaemia, lack of red blood cells, is common and associated with poor outcomes and death in patients undergoing surgery. At least 20 per cent of elderly patients presenting to hospital with a major fracture have anaemia caused by a lack of iron in the body. However the diagnosis of iron deficiency is difficult in the context of inflammation or acute trauma.

This research study aims to define the relationship between plasma markers of iron deficiency and bone marrow iron stores (the current gold standard) in the setting of acute trauma. By using existing and novel blood tests to identify anaemia and comparing the results with bone marrow iron stores present in samples retrieved during surgery for a fractured hip, the investigators aim to better define iron deficiency in the setting of the inflammatory response caused by acute trauma that currently makes diagnosing iron deficiency difficult.

By accurately identifying anaemic patients with iron deficiency, treatment to improve their anaemia can be better targeted and lead to improved patient recovery and outcomes. In addition, this could reduce the need, and therefore the risks and costs of blood transfusion and ultimately translate into improved mortality and morbidity.



Incidence and risk factors for increased thrombotic tendency in critically ill patients with acquired coagulopathy

Clinical Associate Professor Kwok-ming Ho and Dr Oonagh Duff, Royal Perth Hospital and University of Western Australia, WA

$A20,000

Omission of pharmacologic venous thromboembolic (VTE) prophylaxis for patients who have abnormal clotting blood tests (such as a low platelet count or prolonged coagulation time) is common. This practice is based on the belief that these patients do not need pharmacologic VTE prophylaxis because they are already "auto-anticoagulated" with a low risk of VTE events, and that any additional pharmacologic VTE prophylaxis will only increase the risk of bleeding. There is a paucity of data to support this belief.

The proposed study aims to identify whether there is an increased thrombotic tendency in critically ill patients with acquired coagulopathy. If the proposed study shows an increase in in-vitro thrombotic tendency is common in patients with acquired coagulopathy, it has the potential to shift the paradigm in how we manage critically ill patients who have acquired coagulopathy but without signs of active bleeding. Transfusing blood products or omission of pharmacologic VTE prophylaxis in critically ill patients with asymptomatic abnormal coagulation time or thrombocytopenia may not only be ineffective in reducing bleeding but may possibly be harmful. The results may potentially change clinical practice by encouraging clinicians to use thromboelastography to guide VTE prophylaxis in patients with acquired coagulopathy, and this may reduce omission of pharmacologic VTE prophylaxis and incidence of VTE in critically ill patients.

Perioperative ketamine to reduce postoperative delirium and depression

Associate Professor David A Scott, Associate Professor Brendan Silbert, Associate Professor Lisbeth Evered, Dr Reuben Slater, St Vincent's Hospital, Melbourne, Vic

$A53,000

Cognitive impairment and delirium in older individuals following surgery and anaesthesia is common, serious and distressing. Those with pre-existing cognitive deficits are at the greatest risk. Post-operative delirium and depression are acute events which frequently follow major surgery in older patients and which can have significant impact on short and longer-term outcomes. Post-operative cognitive dysfunction (POCD) is well recognised and may persist for many months after surgery. With an ageing population, these issues are taking on an even greater significance.

Ketamine is a potential neuroprotective drug, and is currently used clinically as an anaesthetic and analgesic agent. In low doses, ketamine has been shown to reduce the incidence of post-operative delirium and has an emerging role in treatment of some forms of depression. If these benefits are borne out in a more rigorous investigation, short and long term outcomes such as POCD may also be mitigated.

The primary aims of this project are to compare the incidence of delirium, depression and cognitive decline in the perioperative period, and at three months after cardiac and major vascular surgery in elderly patients with baseline cognitive impairment randomised to receive either ketamine or placebo. A secondary aim will be to measure the circulatory mediators of inflammation sequentially in patients given ketamine compared to placebo and identify any associations with delirium, depression and POCD.

Any intervention that could decrease the incidence or severity of these adverse outcomes would be of significant benefit to individuals, and offer considerable reductions in associated healthcare costs.

(continued next page)

ANZCA awards $A1.4 million for research (continued)

Project grants (continued)

Heparin low dose protocol versus standard care in critically ill patients undergoing extra-corporeal membrane oxygenation

Dr David McIlroy, Associate Professor David Pilcher, Dr Vincent Pellegrino, The Alfred, Melbourne; Professor Jamie Cooper, Dr Cecile Aubron, ANZIC Research Centre, Melbourne, Vic

$A37,000

Extra-corporeal membrane oxygenation (ECMO) is a therapy increasingly used to provide adequate oxygen to end organs and tissues in critically ill patients with severe cardiac and/or respiratory failure. The ECMO circuit can perform the work of the patient's heart and lungs until the injured organs recover sufficiently to wean ECMO or, in some cases, ECMO may provide an essential bridge to organ transplantation. However it remains associated with substantial morbidity and mortality, with a recent cohort study indicating that bleeding is the most frequent complication while on ECMO. High-quality evidence to guide the management of anti-coagulation is urgently required to facilitate optimal evidence-based practice and improve patient outcomes.

This pilot randomised study is part of a program of research into haemorrhagic complications and anti-coagulation management in critically ill patients undergoing ECMO. The study aims to determine the feasibility to implement a low anti-coagulation protocol with low dose of heparin in critically ill patients on ECMO where there is no other indication for full systemic anti-coagulation. The outcome of this study will provide essential data to support and guide a subsequent large multi-centre study that will provide definitive evidence for this practice.

Optimising the neurophysiological assessment of residual thermonociceptive sensation following spinal cord injury

Dr Paul Wrigley, Pain Management Research Institute, New South Wales, Professor Philip Siddall, Greenwich Hospital, HammondCare Health, NSW

$A29,000

Over 350 new cases of spinal cord injury (SCI) occur in Australia every year. Injuries occur more commonly in younger people with profound lifetime consequences for health and productivity.

Neuropathic pain remains one of the most difficult consequences of SCI to manage, is a major cause of suffering and adds to the physical, emotional and societal impact of the injury. Improvements in treatment continue to be held back by a lack of understanding as to why some people with SCI develop pain and others do not.

Progress in SCI pain research is limited by the inability to fully assess the extent of sensory damage following SCI. Trauma to the spinal cord rarely results in complete division of the cord with surviving nerves sometimes remaining silent or failing to carry out their normal function. Clinical examination has a limited capacity to detect partial fibre tract preservation following SCI. While neurophysiological tests are more sensitive, none are routinely available that assess temperature and pain transmission.

This study will evaluate a promising neurophysiological technique able to assess the connections between peripheral nociceptors and the brain. The project aims to determine whether contact heat evoked potentials (CHEPs) are able to detect surviving pain and temperature nerves in the spinal cord following SCI. This test measures brain activation following a computer driven heat pulse to the skin. The presence of a brain wave indicates communication between the skin and brain and intact temperature and pain pathways in the spinal cord.

This research will improve clinicians' capacity to assess more objectively the neurophysiological pathways affected by SCI, particularly those associated with the development of neuropathic pain. It has the potential to identify individuals at greater risk of developing pain. It may also assist in the assessment and management of nerve pain associated with other conditions.

Malignant hyperthermia and exertional heat stress: the genetic and molecular connection

Dr Neil Pollock, Palmerston North Hospital, NZ, Associate Professor Kathryn Stowell, Massey University, NZ

$A42,000

Malignant hyperthermia is a potentially fatal genetic disorder triggered by inhalational anaesthetics. As malignant hyperthermia can be managed if diagnosed prior to general anaesthesia, it is critical that the molecular basis of the syndrome is determined. In their groundbreaking research over many years, the investigators have solved the genetic basis of malignant hyperthermia in more than half of the susceptible families in New Zealand, which has made it possible to offer DNA-based diagnostic tests to many families. As a result of this, many individuals can now avoid the invasive and morbid muscle biopsy test for malignant hyperthermia. In the course of the research, it has become clear that not all malignant hyperthermia is created equal. There is a range of clinical severity both within susceptible families with the same genetic variants and also between families with different genetic variants.

Of recent interest is the potential link between malignant hyperthermia susceptibility and exertional heat stress. While some patients exhibit exertional heat stress, which can have similar clinical presentation to malignant hyperthermia, they do not all carry variants in the most common gene known to be associated with malignant hyperthermia.

The accessibility of new, rapid and relatively inexpensive DNA sequencing technologies provides novel molecular tools to investigate the connections at the gene level of variants associated with either or both malignant hyperthermia and exertional heat stress.

Obesity: alterations in lung mechanics – impact on the incidence of perioperative respiratory adverse events (OPRAE)

Professor Britta Regli-von Ungern-Sternberg, Princess Margaret Hospital for Children, WA

$A30,000

In paediatric anaesthesia obesity is a significant problem with obese children not only having anaesthesia-relevant co-existing diseases such as asthma or hypertension, but also having a higher incidence of anaesthesia-related complications. Many factors during general anaesthesia, such as supine positioning, anaesthetic agents and the type of surgery, affect the functioning of the respiratory system and in particular lung volumes and respiratory mechanics. The anaesthesia-related changes in lung function are expected to be even more significant in obese patients. Despite the development of anaesthesia management guidelines, perioperative respiratory adverse events (PRAE) are among the most common complications observed in this population.

This study aims to assess the incidence of breathing problems of overweight and obese children compared to children with a healthy weight in the perioperative period. It also will aim to assess the changes in lung function between the awake and anaesthetised states. A better understanding of lung health and the changes in lung function caused by anaesthesia and the impairment of respiratory mechanics by obesity will help improve the management of these high-risk patients.

Haemodynamic changes and preload responsiveness in restrictive compared to liberal fluid therapy in major abdominal surgery. "PreRELIEF"

Dr Tuong Phan, Dr Vivian Nguyen, St Vincent's Hospital, Melbourne, Associate Professor Philip Peyton, Austin Health, Melbourne, Vic

$A30,000

Disability-free survival after major abdominal surgery is the desired outcome for clinicians and patients. Replacement fluid given to patients during surgery is likely to make a difference to this outcome. The RELIEF study (Restrictive versus Liberal Fluid Therapy in major abdominal surgery) compares a low and a high-volume fluid replacement technique to determine which results in the best patient outcome. However what is relatively unknown is how these two different fluid replacement techniques change the cardiovascular signs that are monitored as part of general anaesthetic care.

This study aims to answer the question of whether there is a difference in the haemodynamics, and specifically, if there is a difference in preload responsiveness in patients randomised to the restrictive and liberal arms of the RELIEF trial. This will add a mechanistic dimension to any differences in outcome that may be found in within RELIEF. The results from this study will help determine the usefulness of these cardiovascular signs for the specialist anaesthetist and will assist the clinician to tailor appropriate fluid resuscitation for the patient.

Pre-hospital assessment of noninvasive tissue oximetry monitoring - the PHANTOM study

Dr Andrew Weatherall, Dr Alan Garner, CareFlight, NSW, Professor Nigel Lovell, Dr Stephen Redmond, University of New South Wales, Professor Anna Lee, The Chinese University of Hong Kong, HK, Dr Jonathan Egan, Dr Justin Skowno, The Children's Hospital at Westmead, NSW

$A42,000

Traumatic brain injury (TBI) is a significant cause of death and severe disability. Yet despite advances in hospital care of patients with TBI, minimal improvements in outcome have been evident over the past 20 years. Current research on optimal monitoring and management following TBI occurs in a hospital with no technology being used to provide direct information on the brain in the period immediately after the trauma. This is a vital period where further injury may be caused by low oxygen levels or blood pressure.

Near infra-red spectroscopy (NIRS) tissue oximetry can show real-time information about blood flow and oxygen delivery within the brain tissue as it only requires the application of probes on the forehead and can be used immediately at the site of an accident. To evaluate whether NIRS can provide new real-time information about the acute evolution of TBI, the investigators will conduct a prospective observational study in which NIRS tissue oximetry will be commenced in the earliest stages after TBI, well before the patient reaches hospital. As well as comparing NIRS tissue oximetry signals with pathology on cerebral imaging, patients will be assessed at six and 12 months following TBI to establish any association between NIRS monitoring parameters and the long-term recovery after TBI. Establishing these associations would be a significant first step towards better evidence-based patient care and will confirm the role of this technology in the pre-hospital setting.

(continued next page)

ANZCA awards $A1.4 million for research (continued)

Project grants (continued)

Safety of sedation for endoscopy in University of Melbourne-affiliated hospitals

Professor Kate Leslie, Melbourne Health; Dr Megan Allen, Melbourne Health and Peter MacCallum Cancer Centre; Dr Elizabeth Hessian, Western Health, Melbourne, Vic

$A39,000

Gastrointestinal endoscopy is the highest volume medical procedure performed under sedation in Australia, and is likely to increase with growth related to an aging population and need for colon cancer surveillance. Therefore, the incidence of significant unplanned events is important for patients, providers and funders.

Sedation for gastrointestinal endoscopy is provided by a range of health professionals in a range of settings using a range of drugs and monitoring techniques, although specialist anaesthetist-administered sedation dominates current practice. Australian governments are driving health workforce innovation, and programs to introduce alternative sedation providers are inevitable. The safety of sedation for gastrointestinal endoscopy in specialist anaesthetist-based Australian practice has not been assessed.

The study will take place in nine Victorian public hospitals affiliated with the University of Melbourne in patients presenting for elective or emergency gastrointestinal endoscopy with planned care by a specialist anaesthetist. The investigators will determine the risk profile of patients presenting for gastrointestinal endoscopy, the incidence of significant unplanned events and the risk factors for significant unplanned events.

The results of this study will provide a baseline for further multi-centre or nationwide studies on the impact alternative practice models and innovative sedation techniques on safety outcomes and fitness for independent discharge after sedation for gastrointestinal endoscopy.

Is fluid resuscitation pro-inflammatory?

Dr Shay McGuinness, Dr Rachael Parke, Auckland City Hospital, New Zealand, Professor Andrew Bersten, Dr Shailesh Bihari, Flinders Medical Centre, SA, Dr Dani-Louise Dixon, Flinders University, SA.

$A36,000

Administration of intravenous fluid for the purpose of resuscitation is ubiquitous in pre-hospital and hospital practice and is considered fundamental in the management of critically ill patients. However, recent evidence from the investigators, and others, suggests that rapid or bolus intravenous fluids may have negative effects that are particularly manifest in the lung.

Studies by the research team investigating the mechanism by which large doses of intravenous fluids may adversely affect the lung have indicated the importance of inflammation and the movement of inflammatory white blood cells into the lung. The movement into the lung of large numbers of these cells can lead to a condition called acute lung injury or acute respiratory distress syndrome (ARDS). ARDS remains a common problem in intensive care units with a high mortality rate worldwide, which is often attributed to multiple organ failure due to a systemic inflammatory response.

The aim of this study is to investigate whether the administration of intravenous fluids can lead to inflammatory lung injury by examining inflammatory mediators in the blood of patients undergoing cardiothoracic surgery who have been treated with either standard or restricted fluid interventions. Identification of the mechanism by which intravenous fluids may contribute to the inflammatory response in ARDS may provide potential targets for therapeutic intervention and the safe administration of fluid resuscitation to critically ill patients. This study is a trans-Tasman collaboration incorporating clinical and laboratory research.

Obesity and the risk of septic complications in major abdominal surgery

Dr Usha Gurunathan, Dr Ivan Rapchuk, The Prince Charles Hospital, Qld; Professor Paul Myles, The Alfred, Melbourne, Vic

$A3000

Obesity is known to be associated with medical problems such as diabetes, increased blood pressure, sleep disorders and increased cardiovascular risk. Body mass index (BMI) has been the most popular measure of obesity, however it cannot discriminate between body fat mass and lean body mass and hence may not be a sufficiently accurate measure of cardiometabolic risk.

Waist circumference is a simple clinical measure associated with total body fat mass and the amount of abdominal visceral tissue. Measures of central obesity such as waist circumference and waist to hip ratio have been shown to be directly associated with mortality and cardiovascular events in patients with coronary heart disease. However waist circumference alone cannot distinguish between visceral and subcutaneous adiposity. Waist circumference along with the level of serum triglycerides is likely to give a more accurate estimate of a patient's metabolic risk.

This study will measure obesity in patients by BMI, waist circumference and waist to hip ratio to assess which of these measures best predict the occurrence of septic complications at 30 days following major abdominal surgery.

The benefits of this study will be to identify a very simple, yet accurate measure of body fat that will assist clinicians to predict the risk of post-operative adverse outcomes in patients undergoing major abdominal surgery. This will identify high-risk patients and enable the perioperative team to target the patients most likely to develop post-operative complications.

CPD made easy

This is the first in a series of articles offering practical advice on how to get the most out of the ANZCA CPD Portfolio System.

"It's as easy as attaching a document to an email."

Uploading evidence – stop the paper chase

Let's face it, not everyone is "tech savvy".

Coming to grips with ANZCA's new online CPD portfolio is one area that some participants have baulked at, but feedback has shown that the system is user-friendly and intuitive once users take the time to log in and navigate around it.

Uploading evidence to the system is one area that is easy-to-use and will save hours of time if participants are audited (at least 400 are audited each year).

Uploading evidence is as easy as attaching a document to an email.

To use this feature, participants need to log into their portfolio. Go to the ANZCA homepage – www.anzca.edu.au, click on the CPD quick link on the right, log in and save the log in so you only have to log in once in future. Many participants have saved their portfolio access as a short-cut on their smartphone or tablet.

Each CPD participant has a dashboard where they can see at a glance how they are progressing within their three-year CPD period (triennium).

Once logged in to your portfolio, to add an activity, click on the "add activity" button located towards the top right of the dashboard page.

On the "Select activities" page, choose the activity you would like to record.

To add, for example, evidence of attendance at a lecture, you need to click on "learning sessions" in the knowledge and skills category.

Fill in the session information (date, hours and details) then click "add additional evidence". This opens the usual window on your computer (Microsoft or Apple) that allows you to locate and upload your evidence, for example, a scan or pdf of a receipt or a certificate of attendance. You can take photos of evidence using your tablet or smart phone and this can also be uploaded using the photo gallery.

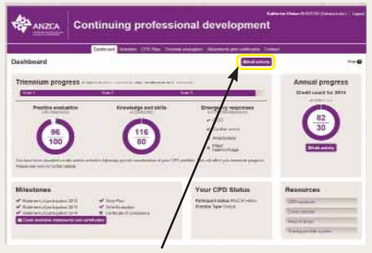
Once uploaded, the evidence will appear on the activity screen. Press save.

To review all activities, click on the "activities" tab at the top of the page and a list of all your completed activities will be displayed. If evidence has been uploaded, the last column will have a tick in it. ANZCA events attended will be automatically in the list. A final point – beware the hospital firewall – it may prevent you from saving activities.

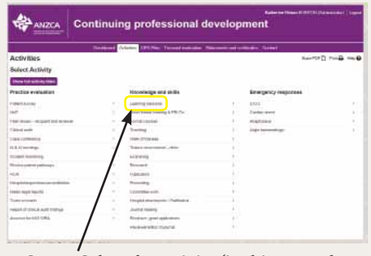
- ANZCA staff are more than happy to help if you get into difficulties. Just phone +61 3 510 6299 during office hours (AEDT) or email cpd@anzca.edu.au.

Dr Vanessa Beavis,
Chair, ANZCA CPD Committee

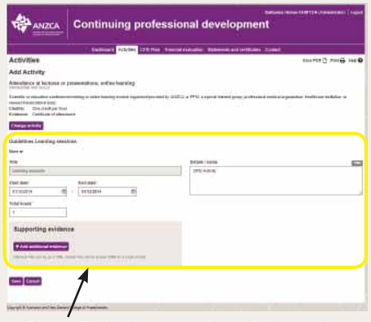
Uploading a document on your PC



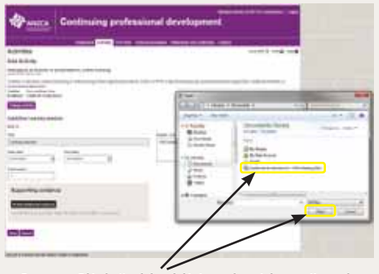
Step 1. Click the "add activity" button.



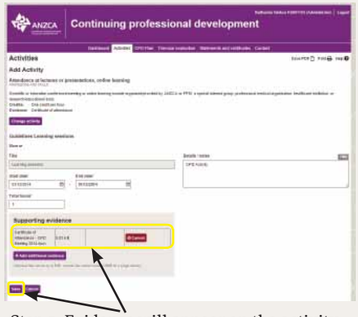
Step 2. Select the activity (in this example, "learning sessions").



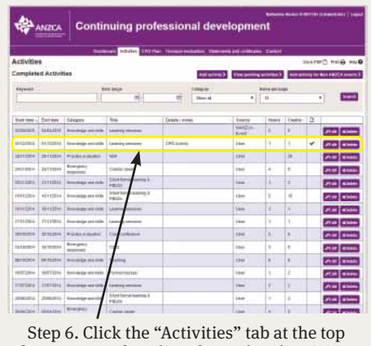
Step 3. Fill in the compulsory information, then click "supporting evidence".



Step 4. Click "add additional evidence" and locate your evidence for uploading.



Step 5. Evidence will appear on the activity screen. Press save.



Step 6. Click the "Activities" tab at the top of your screen for a list of completed activities. Uploaded evidence will have a tick in the last column.

CPD tips

Many Fellows are discovering innovative ways to evaluate their practice that are not only professionally useful, but comply with continuing professional development requirements too.

Snooze News – a lunch gathering that pays dividends

Practice evaluation – case discussions/ conferencing

Around five years ago, our informal lunching group of Fellows was formalised as a group called Snooze News, which was registered and accredited with the College, for continuing professional development (CPD) points.

We meet about five times a year in the private dining room of a good suburban cafe. These get togethers are a little like the popular problem-based learning discussions held at the annual scientific meetings. Topics discussed include anaesthetic cases (prospective and retrospective), ethics, issues of interest and short presentations on areas of individual expertise.

We now have a member list of just under 30, although work commitments tend to limit numbers at each lunch to eight to 12. (A minimum of three participants is required for this activity to comply).

The activity can be claimed at two points per hour under the practice evaluation – case discussions/ conferencing component of CPD. (See www.anzca.edu.au/fellows/continuing-professional-development/breakdown-of-cpd-activities).

We have a secretary who records the necessary details; the date, the time, the attendees, the topics/issues discussed (this needs to be de-identified information), plus who introduced the topic and who participated. This has been printed and then distributed at the next meeting but now is emailed to the participants. Each can then save the document and upload it to their online CPD portfolio, noting the date and time. Doing this three or four times a year for three years (the length of time of a CPD triennium) gives each participant 20 to 25 of the 100 points required in the practice evaluation component of the CPD.

Snooze News has evolved into a valuable ongoing education group centred on clinical anaesthesia. The lunch format allows anaesthetists across age groups to discuss relevant clinical issues informally. It is a most successful group.

Dr Nanette Crimmins FRCA FANZCA
Queensland

Have you got a CPD tip? Please send suggestions in 300 words or less to communications@anzca.edu.au.

Online portfolio makes it easy

In April this year I was selected for audit of my continuing professional development (CPD) triennium, which ended on December 31, 2013. I had to find "supporting evidence" for the minimum activities required for each of the three years. I printed off my portfolio summary and started hunting! Six hours later I had almost all the required bits of paper, the last being a statement from my department confirming the departmental CME and QA meetings I had attended.

In September this year I was notified I had been selected for audit again, this time just for 2014, year one of my current triennium. (The information will be due for submission in early 2015).

This time it will be effortless – I need to provide evidence for 30 credits. Evidence for more than that has already been uploaded into my portfolio (by photo or scanning) and ANZCA staff will be able to sign off my audit just by inspecting my online portfolio.

Dr Genevieve Goulding
ANZCA President

From this...

To this...

In the past, ANZCA has audited continuing professional development (CPD) particiants in the year following the end of their triennium. Supporting evidence was required to confirm enough activities to satisfy the minimum credits required for each category over the three years.

Now participants are notifed in September that they will be audited for the one, two or three year period ending December 31. This gives plenty of time to accumulate all the evidence required.

Note: All activities and evidence must be entered by December 31, 2014.

Tribute to retiring Frank Moloney

After many years of extraordinary contribution, Francis Xavier Moloney retired from anaesthetic practice six months ago and has now retired from ANZCA Council.

I first met "Cranky Franky" at St John's College at the University of Sydney, me a fresher and Frank a sophomore in 1968. I've had the great privilege of being a colleague of Frank's at the Orange Health Service, in NSW, since 1985.

Frank was a valuable and popular member of college, showing his leadership qualities and determination early, especially on the sporting field, and was elected house president in 1970. Frank married Cate, a skilled paediatric nurse, at the end of that year and I remember seeing them at inter-hospital sporting fixtures, twins David and Sarah in tow. Jock was born in 1978, the year Frank gained his fellowship. From working for lifelong friend and mentor Fred Berry (who now lives in Orange) at Sydney Hospital, Frank became Ross Holland's first senior registrar at Westmead Hospital.

Frank began anaesthetic practice in Orange in 1980 with the late Graeme Worsley and Tony Burrell and with the advent of formalised structures in 1982, Frank became director of the department and Tony became director of the intensive care unit.

The three made a formidable team and services at the Orange Base Hospital expanded rapidly. Richard Wansey joined them from private practice and Frank established the format of anaesthetic practice – a shared roster, rotating through surgical lists both public and private. This practice remains in place today and has enabled us to attract very good people as they got an equal share of the work from day one. The fact that seven of the 14 anaesthetists in Orange have been registrars of ours is testament to Frank's vision in establishing rural rotations for registrars from the Royal Prince Alfred and Concord hospitals in Sydney.

In the early 1980s Frank saw a need and pushed for formalised training for GP anaesthetists. He established a program in Orange where rural GP trainees had six months training with us. This was not necessarily looked upon favourably by the "ivory towers". With Frank's dogged determination, quirky humour and considerable powers of "gentle persuasion", this evolved over time into a national program supported by the Joint Consultative Committee on Anaesthesia (JCCA). Frank was a founding member of the JCCA, examiner from 1992 and chaired this committee from 2006-14.

In 1991 Frank was co-opted as rural representative onto the NSW Regional Committee of ANZCA. He served on the committee until 2004 (including chair from 2000-03). He became inaugural chair (1993-1995) and ongoing member of the Rural Special Interest Group. He was a ministerial appointee to the Institute of Rural Clinical Services from 2004-10. His extraordinary contribution to anaesthesia in Australia was recognised in 2004 when he was awarded ANZCA'S prestigious Robert Orton Medal. The citation that accompanied the Orton Medal said in part: "No other individual in the rural medical setting has achieved more than Frank for his specialty and for rural medicine".

Frank was co-opted onto the ANZCA Council in 2005 and elected 2006-14. His commitment and contribution to the College has been impressive. During his eight years service he has been a member and chair of the Training Accreditation Committee, chair of the Continuing Professional Development (CPD) Committee, member of the Education and Training and Quality and Safety Committees, MOPS officer and member of the GP anaesthesia working group as well as several other College committees. "On joining the ANZCA Council ... I was suddenly the adopting father of Teik Oh's new brainchild – the CPD Program. MOPS was undergoing serious transformation ... I was the 'herder of the cats' ".

I have given a chronological, incomplete account of Frank's myriad achievements. What of Frank the colleague, mentor and man? Orange anaesthetist Paul Birrell and fellow member of a practice subgroup defined by Frank as the "dinosaurs" has said over the years "every town needs a Frank". How true. We have all benefitted greatly from Frank's leadership and generosity – he volunteers for everything! When Frank is "on song" he is great company. Frank's lateral thinking made him a master of the cryptic crossword. His bestowing of nicknames or his quirky sense of humour or turn of phrase meant he was revered by many registrars and operating room nurses; not to mention his teaching and mentoring – if one didn't score a nickname it meant you weren't trying hard enough – whatever that entailed.

Frank also played a full role in all hospital activities, particularly with clinical training for junior doctors, and was director of anaesthetics from 1982-2013. He has been active in community affairs, was judge at the Orange Turf Club for 10 years, a member of Orange Golf Club and involved in amateur dramatics and the Orange Men's Choir.

Frank's loving wife Cate has supported him through all of this, along with raising three children of their own and fostering 24 young children between 1987-2011. No wonder Frank was appointed a Member of the Order of Australia (AM) in the Queen's Birthday honours in 2013, an honour richly deserved by them both. Orange Citizen of the Year, Cate says being foster parents greatly enriched their lives.

Dr Anthony J Kirkwood, FANZCA

The Palestine experience

"I later discovered that the arrest was due to hypoxaemia following an accidental extubation, a common occurrence in this hospital – I saw two on that day."

Derek Rosen recently returned from an intense, fascinating month working as a foreign anaesthesia consultant in East Jerusalem and the West Bank.

In October this year I participated in the Palestinian Anaesthesiology Teaching Mission with the World Federation of Societies of Anaesthesiologists (WFSA).

This program arranges for a foreign anaesthesia consultant to spend a month in East Jerusalem and the West Bank, working in theatre with the anaesthetists-in-training and giving a series of lectures in the evenings.

Palestinian anaesthesia residency is a five-year English language program after a one-year internship. There are two local medical schools, one in Jerusalem and one in Nablus, but these are competitive and expensive, resulting in several doctors choosing to study abroad. Most studied as far away as Russia and the Ukraine, some studied in Tunisia and Algeria, and the luckier ones in Pakistan, Jordan or Palestine itself, where the degrees are high quality and in English.

The specialists had undergone similarly diverse global training. This makes language a problem for visiting instructors, most of whom do not speak Arabic or Russian. Outside of Jerusalem, fewer than half of the trainees spoke fluent English (many of them with a heavy Russian accent).

There are four training hospitals for the Palestinian residents (registrars): One in East Jerusalem and three in the West Bank (Ramallah, Nablus and Hebron). The West Bank is governed by the Palestinian Authority (PA), which has its own ministry of health. The East Jerusalem Hospitals (which are all privately run), fall within the State of Israel, yet serve a predominantly Palestinian population and I was not sure I completely understood their relationship with the Israeli Ministry of Health.

Political discussions can be a sensitive subject in this region; I set myself a purely educational objective for the trip and swore not to enter into any political dialogues with locals. However, just asking a Palestinian about the geography of the region becomes political.

My first week was spent in Al-Maksed Hospital in East Jerusalem, established in 1966 and considered the best hospital in Palestine*, even though it lies within Israel. It is the main quaternary referral centre for the Palestinian Territories, with the remainder of the difficult cases going to Israeli Hospitals.

Their patients are usually from Gaza and the West Bank, since the Palestinians living in Israel can be treated in Israeli hospitals. They had a full sub-specialty service including paediatric cardiac surgery. The hospital sits high on the Mount of Olives and the walk to work each morning afforded spectacular views of the Old City of Jerusalem, the Temple Mount and the Dome of the Rock.

The first few days of my mission coincided with Eid al-Adha, a major Muslim holiday, which meant theatres were performing emergency cases only. On entering the hospital, the first thing I smelt was cigarette smoke. This would be a perpetual odour for the duration of my stay in the Middle East – smoking is still a majority pastime.

I spent these days with the on-call residents who seemed to split their time between doing anaesthesia and "putting out fires" in the rest of the hospital. Whilst there is a separate ICU team, the anaesthesia doctors provide all the airway and central venous access support for the hospital.

Our first case was a patient with 60 per cent burns booked for an examination and dressing change. Fortunately they were mostly superficial. The residents had decided to start with ketamine and this worked well ... until the surgeon touched the patient. His examination turned into more of a debridement and scrub resulting in screams of pain coming from the patient. We were able to replace these screams with hallucinations by giving more ketamine.

After a second plastics case we were called to obstetrics for an urgent caesarean section. Most patients choose general anaesthesia, despite the protestations of the anaesthetists. The anaesthetic residents usually have no help at all for these cases. The standard intravenous induction is propofol and atracurium, with few anaesthetists in Palestine using suxamethonium or rocuronium.

In fact, despite having both of these drugs available in two out of the four hospitals I worked in, they were rarely used. Suxamethonium, due to its side effects, and rocuronium, due to the perception that it is longer acting than atracurium. Because most hospitals don't have the ability to assess depth of neuromuscular blockade and recovery care is minimal to non-existent, there was considerable reluctance (for safety reasons) to use anything other than atracurium. They told me they had not had issues with aspiration in this patient population.

After a lunch break I found myself performing chest compressions in the ICU on a young man who had arrested. He had been intubated for poisoning and as we arrived the ICU resident was trying to reintubate the patient who had a heart rate of 40 and no output. I suggested we start CPR to circulate the adrenaline and atropine that had been given. After a few rounds of CPR and some oxygenation and further adrenaline, we achieved return of spontaneous circulation. I later discovered that the arrest was due to hypoxaemia following an accidental extubation, a common occurrence in this hospital – I saw two on that day.

Some practices are very similar to our own; the importance of the morning coffee break was not to be underestimated. Others were quirkier. The paediatric theatre in Ramallah contained the only neonatal Resuscitaire in theatres, so several times during a case a paediatric resident would burst into the room with a fresh newborn to do his neonatal resuscitation, while our theatre team continued unphased.

The anaesthesia equipment is not bad by Australian standards, however the condition of much of it was capricious. In most hospitals no two anaesthetic machines were alike, end tidal gas and CO_2 monitoring availability was inconsistent, and prone to malfunction at crucial times.

Pre-induction checking of equipment was uncommon. One hospital would have insulated nerve block needles but no nerve stimulator, whilst another would have a stimulator but no needles. Transient drug shortages are common and post-operative analgesia is very much in its infancy. Surgical co-operation in this regard was again variable, depending on the age and training of the surgeon. I assisted a colleague to insert two paediatric thoracic epidurals for major subcostal incisions that worked well, however one was removed the next morning by the surgeon. This was a lesson on the importance of clearly communicating post-operative plans and performing effective surgical ego massage.

While most of the residents were technically proficient and several were extremely well read, major patient safety issues exist – and this is something that the WFSA program sees as an important area of focus. There is a chronic shortage of consultants to supervise residents, occasionally less than one resident per theatre, and a phenomenon I termed "resident drift", whereby residents would start a case and drift into another theatre, off to have a cigarette, off to pray, or off completely without handing over to anyone, usually leaving a technician, sometimes no one, in the room. Recovery nursing is rudimentary or absent, and the awareness of the importance of this aspect of care was inconsistent among the trainees.

Overall it was an intense and fascinating month, one that allowed me to see some of the most ancient cities on earth and to work with a group of talented professionals whose needs have been obscured somewhat in the narrative of constant conflict in the region. For more information please visit www.wfsahq.org/palestinian-anaesthesia-teaching-mission-patm.

Dr Derek Rosen, FANZCA
Mater Children's Hospital, Brisbane

* For the purpose of simplicity (but not partisanship) in this article I will refer to the region I worked in as Palestine, however I acknowledge the differing views on what parts of this area should be called.

Above from left: Dr Derek Rosen's view on the way to work, Jerusalem; The Tomb of the Patriachs, Hebron; Al Ahli Hospital entrance, Hebron; Often improvisation is necessary – note the fluid warmer bottom left.

New committee to be the voice of Fellows

Professional and fellowship issues will be the focus of a new ANZCA committee, which will meet for the first time in February 2015.

The establishment of the Professional Affairs Executive Committee (PAEC), which replaces the Fellowship Affairs Committee, is one of the major changes that followed a review of Fellow-related ANZCA committees and sub-committees, and the ANZCA Trainee Committee.

PAEC will have strategic oversight for three areas – fellowship, community development and policy.

Another result of the review, which commenced earlier this year, is the renaming of the Quality and Safety Committee to the Safety and Quality Committee, reinforcing the College's commitment to patient safety.

This committee will report to PAEC, as will the Overseas Aid Committee, the Continuing Professional Development Committee and the Indigenous Health Committee.

This means a decrease in the number of committees directly reporting to the ANZCA Council, enabling it have a clearer strategic role.

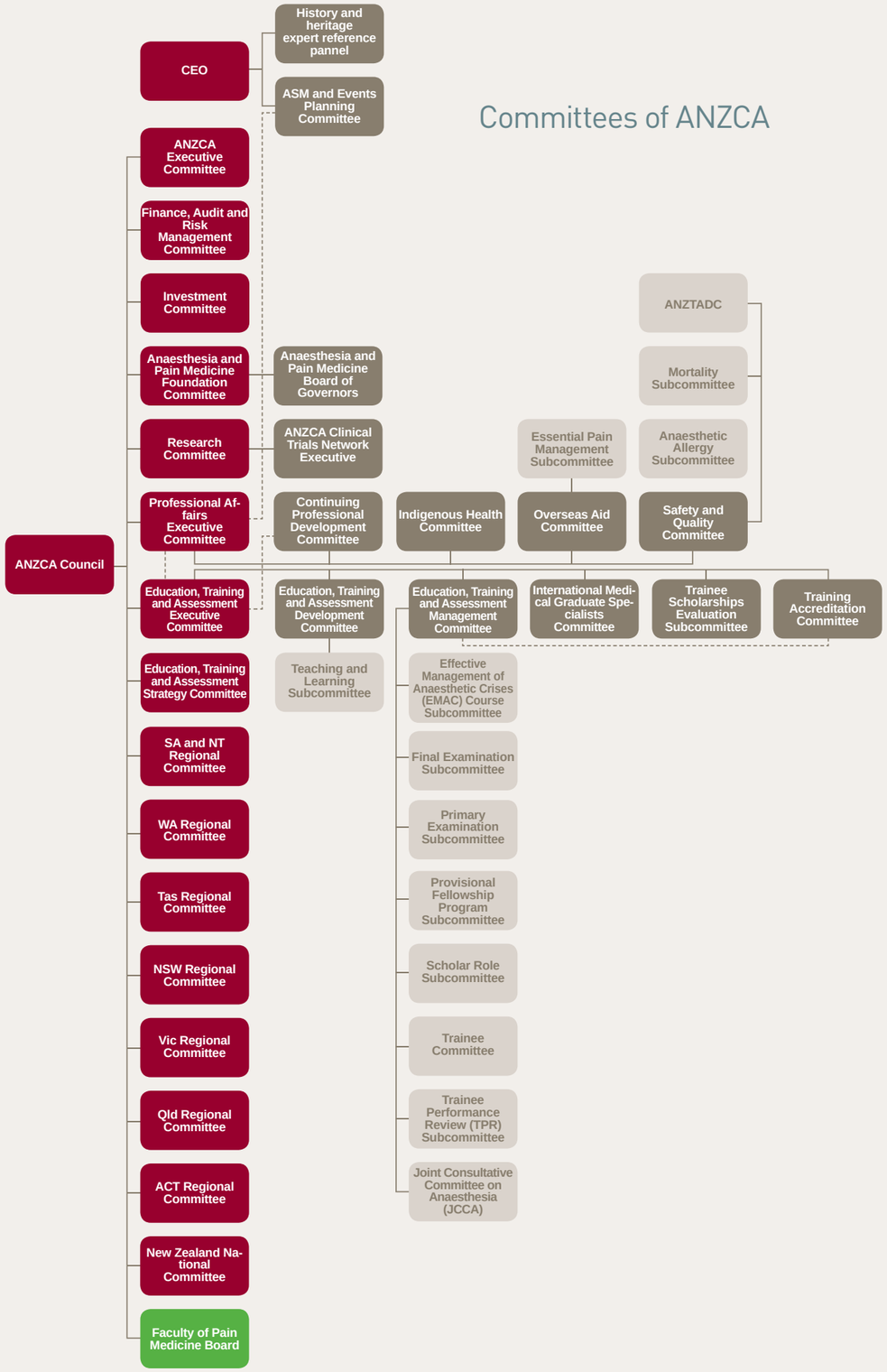
Another change is the establishment of an ASM and Events Planning Committee, which will report to ANZCA CEO, Ms Linda Sorrell, on operational matters relating to the ANZCA annual scientific meeting and other educational events run by ANZCA.

The International Medical Graduate Specialist Committee and Trainee Committees will report through the educational governance structure to provide them with educational specialist input alignment.

The Review of Committees Working Group included Dr Vanessa Beavis (chair), Dr Genevieve Goulding, Dr Rodney Mitchell, Associate Professor David Scott and Dr Leona Wilson. Ms Linda Sorrell, Ms Carolyn Handley, Ms Elaine Jenkins and Ms Veronica Haslam provided support.

Terms of reference for the new and restructured committees have been written and the new structure will be formally launched early next year.

Committees of ANZCA



Safety of Anaesthesia in Australia and New Zealand

The latest edition of the ANZCA mortality report, *Safety of Anaesthesia: A review of anaesthesia-related mortality reporting in Australia and New Zealand 2009-2011*, has now been finalised. Edited by Associate Professor Larry McNicol, this triennial report is produced by the Mortality Sub-Committee which reports to ANZCA's Safety and Quality Committee. The executive summary and clinical aspects of category one anaesthesia-related deaths sections are reproduced here.

Executive summary

1. This is the ninth triennial report of anaesthesia-related mortality in Australia (the first being for the triennium 1985-1987). The format is similar to previous reports, and contains data from five states (New South Wales, South Australia, Tasmania, Victoria and Western Australia). The ANZCA Mortality Subcommittee has supported these states in their collection of data and encouraged the establishment or re-establishment of anaesthetic mortality reporting in other Australian states and territories and in New Zealand. The South Australian Mortality Committee was re-established in 2010 and has been able to provide mortality data for 2009-2011.
2. While this report contains data from only five states, these five states include more than 70 per cent of the population of Australia. The report is therefore likely to provide a reasonable estimate of anaesthetic mortality across Australia for this period.
3. The Australian Capital Territory (ACT), the Northern Territory and Queensland did not provide anaesthetic mortality data for this report because they did not have functioning anaesthetic mortality committees during the 2009-2011 triennium. However, the Queensland Perioperative and Peri-procedural Anaesthetic Mortality Review Committee was re-established in 2012 and will be able to provide mortality data for the next triennial report (2012-2014). The ACT Regional Committee of the Australian and New Zealand College of Anaesthetists (ANZCA) is working with the ACT Audit of Surgical Mortality (RACS) to develop anaesthesia mortality reporting similar to the model that has been established in Tasmania. It is possible that the South Australian committee could receive data from the Northern Territory, as has occurred previously. New Zealand has established a multi-disciplinary perioperative mortality committee, and although this committee is unable to provide specific anaesthesia mortality data using the Australian classification system, the report is informative.
4. As with all anaesthesia mortality reporting, it should be appreciated that classification of anaesthesia-related deaths relies on expert opinion or consensus, and therefore remains subjective to some extent. It is also possible that the state mortality committees may vary in their interpretation of the categorisation of anaesthesia-related deaths. The methodology for identifying potential anaesthesia related deaths is variable across the jurisdictions and therefore it must be recognised that some anaesthesia-related deaths may be missed despite the efforts made at individual, state, and national levels. Nevertheless, due to the comprehensive processes in place in all five states reporting, it is unlikely that many cases were missed or classified incorrectly.
5. During the triennium, the number of anaesthesia-related deaths (categories one, two and three) reported from the five states was 156. However, in only 22 cases were the deaths classified as category one (where it was it considered "reasonably certain" that death was caused by anaesthesia factors alone). In 15 cases there was "some doubt" (category two), and in the remaining 119 cases, "medical, surgical and anaesthetic" factors were implicated (category three). This demonstrates a continued reduction in the percentage of category one deaths in recent triennial reports. In 2003-2005, category one deaths were 21 per cent of the total anaesthesia related deaths, and this reduced to 15 per cent in 2006-2008 and 14 per cent in 2009-2011.
6. During the triennium, the combined population for the five states was about 17.3 million (Australian population statistics). Using this figure, the anaesthesia-related mortality rate for these five states was 3.01 deaths per million population per annum. This is slightly higher than the figure (2.79) for the four states (NSW, Tasmania, Vic, and WA) in the previous triennium (2006-2008). It is however very similar to the anaesthesia mortality rate per million population per annum in all triennial reports since 1997-1999.
7. During the triennium there were about 9.05 million individual episodes of anaesthesia care in the five states. This figure was obtained from the Australian Institute of Health and Welfare (AIHW). The data was obtained from coders at all public and private hospitals. A coding hierarchy was used to ensure that only one anaesthesia item number was counted per episode of anaesthesia care. Using this denominator, the anaesthesia-related mortality rate was 1:58,039 for the five states included in this report. This is similar to the figure for the four states (NSW, Tasmania, Victoria, WA) for the previous triennium (2006-2008; 1:55,490).
8. The accuracy of the number of episodes of anaesthesia care (the denominator) obtained from the AIHW is supported by the relatively constant ratio between the number of episodes of anaesthesia care identified for each state and the population of each of the five states. The ratio was consistent across all five states (NSW 0.16, WA 0.17, SA 0.18, Tasmania 0.18, Victoria 0.18).
9. Most anaesthesia related deaths (84 per cent) occurred in older patients (age over 60 years). Fifty-one per cent of cases were female. It is of some interest that 70 per cent of anaesthesia-related deaths occurred when surgery was either urgent or emergent. This is a significant change from the previous report (2006-2008) when only approximately a third were urgent or emergent. Only a very small proportion (7 per cent) occurred in patients considered low risk (ASA P 1-2). Hence 93 per cent of anaesthesia related deaths occurred in patients assessed as higher risk (ASA P 3-5). The types of surgery most frequently associated with anaesthesia-related death were orthopaedics (48 per cent), cardiothoracic (14 per cent), vascular (10 per cent) and abdominal surgery (10 per cent). An emerging trend is the increased frequency of anaesthesia related deaths in gastro-intestinal endoscopy and interventional procedures in cardiology/radiology (10 per cent). Of note, some of these did not involve an anaesthetist at all.
10. For the first time information has been included regarding the location of the event leading to death as well as the location of death. Most fatal events, 96 per cent, occurred in the operating or procedure room (139 cases out of 145, excluding WA, from which data was unavailable). The most common location of death was ICU (39 per cent), followed by the operating or procedure room (27 per cent), the general ward (19 per cent) and the post-anaesthesia care unit (10 per cent).
11. As in previous reports, most deaths occurred in metropolitan teaching hospitals and larger regional teaching hospitals (55 per cent), as would be expected with the acuity of the cases in these hospitals. By far the majority of deaths (83 per cent) involved specialist anaesthetists (121/145 as data for WA was not available). Twelve cases involved non-specialist/GPs, seven were anaesthesia trainees, and in at least four cases there was no anaesthetist in attendance.
12. An interesting trend over the past decade has been a progressive reduction in the ratio of the number of anaesthetic causal or contributory factors per death. This was 2.42 in 2000-2002, 1.58 in 2003-2005, 1.30 in 2006-2008 and 1.01 in 2009-2011. Over the same period, there has been a progressive increase in the percentage of deaths in which the patient's chronic medical condition (H) was deemed to have contributed to the death. This was 28 per cent in 2000-2002, 58 per cent in 2005-2005, 72 per cent in 2006-2008 and 81 per cent in 2009-2011. These data are consistent with the likelihood that there has been a progressive reduction in preventable anaesthesia-related mortality over this period, and that the most important factor is the severity of the patient's underlying medical condition (H). It is also noteworthy that the number of deaths in which no correctable factor could be identified (G), has also progressively increased, from 20 percent in 2000-02, 33 per cent in 2003-05, 49 per cent in 2006-08 to 58 per cent in 2009-11. As in the previous report, these figures were heavily influenced by a large number of cases from NSW that were classified 3GH. This classification typically describes extremely high-risk patients, in which the stress of surgery and anaesthesia most likely contributed to or hastened death, but in which the death was assessed as non-preventable, other than by withholding the surgery and anaesthesia.
13. For the first time, this triennial report includes a brief clinical summary of the causes of death in those classified as category one (where it is "reasonably certain" that death was caused the anaesthesia or other factors under the control of the anaesthetist). Of the 22 category one deaths, seven were due to anaphylaxis, five involved management of the airway, five involved pulmonary aspiration, three deaths involved cardiac arrest attributed to inappropriate choice or application of anaesthesia technique and there were two fatal outcomes resulting from invasive cardiovascular procedures. Of note: *(i) anaphylaxis remains one of the less preventable causes of anaesthesia-related deaths, but early diagnosis and appropriate crisis management with escalating doses of adrenaline and aggressive fluid replacement are paramount; (ii) in more than one of the airway-related deaths, there was an inappropriate choice or application of anaesthesia technique and inadequate monitoring; and one case involved a non-anaesthesia trained practitioner; (iii) in four of the five aspiration related deaths, aspiration risk was high and no airway protection was provided; in two of these cases, no anaesthetist was involved; (iv) the three deaths due to cardiac arrest all involved inadequate preoperative assessment or management and inappropriate choice or application of anaesthesia technique and were deemed to have been preventable; and (v) both the deaths due to invasive procedures involved uncertainty about the anatomical position of the vascular access device.*
14. Notwithstanding the effect of jurisdictional differences in methodology for case reporting and classification, this report indicates that anaesthesia mortality rates in modern Australia are low, whether assessed by the number of anaesthesia deaths per million population per annum (3.01) or by the number of anaesthesia-related deaths per number of anaesthesia procedures per annum (1 in 58,021). The emerging pattern is that anaesthesia risk is now extremely low in patients who are basically fit and well (ASA-P 1 – 2). However most anaesthesia related deaths occur in older, sicker patients having non elective surgery. Further reductions in mortality could perhaps be achieved by reviewing the timing of surgery to allow better optimisation of such patients. Of course it is important to maintain the high standards of anaesthesia training, enhanced by continuous professional development using interactive workshops and simulation training in airway management, resuscitation and other crisis management scenarios. However, the fact that some deaths, such as those due to drug anaphylaxis, are currently deemed unpreventable reinforces the ongoing need for research to develop better, safer alternatives.

Associate Professor Larry McNicol, FRCA, FANZCA
Report editor and Chair, ANZCA Mortality Sub-Committee

(continued next page)

Safety of Anaesthesia in Australia and New Zealand (continued)

Clinical aspects of category one anaesthesia related deaths

For the first time, in the ninth triennial anaesthesia mortality report, we have included clinical information from the 22 deaths (category 1) where it is reasonably certain that the death was caused by anaesthesia or other factors under the control of the anaesthetist. The inclusion of this information was deemed appropriate in order to highlight the major clinical issues involved in the deaths directly related to anaesthesia and it is anticipated this has been achieved without compromise to confidentiality. There were seven deaths due to **anaphylaxis**, five involving **management of the airway**, five involving **pulmonary aspiration**, three deaths involving **cardiac arrest** attributed to inappropriate choice or application of anaesthesia technique and two fatal outcomes resulting from **invasive cardiovascular procedures**.

Anaphylaxis (seven)

There were seven deaths from anaphylaxis due to drugs administered by the anaesthetist. Five of them involved profound hypotension and cardiac arrest and in the other two the major initial presentation was severe bronchoconstriction and hypoxaemia, with subsequent cardiac arrest. In four of the cases, the trigger agent was a neuromuscular blocker (atracurium, rocuronium x two, suxamethonium). In another case, although atracurium had been given earlier, the likely trigger was cephazolin. Of the remaining two cases, one involved administration of vecuronium as well as both cephazolin and gentamicin, and the other was due to ampicillin. In at least one of the cases, initial crisis management did not take account of possible anaphylaxis and in five other cases, there were significant co-morbidities which were likely to have contributed to the failure of resuscitation.

Note: Anaphylaxis remains one of the less preventable causes of anaesthesia related deaths, but early diagnosis and appropriate crisis management with escalating doses of adrenaline and aggressive fluid replacement are paramount.

Airway related deaths (five)

There was one death in which the airway was lost during maxillofacial surgery performed with the use of a submentally placed endotracheal tube. Airway obstruction from tube malpositioning resulted in hypoxic cardiac arrest prior to the difficult replacement with an oral endotracheal tube. Another death was attributed to airway obstruction which occurred immediately after extubation in a patient who had undergone prolonged emergency surgery. The initial laryngscopy had been rated as grade 3 and endotracheal intubation involved the use of a bougie. Emergent repeat direct laryngoscopy noted oedema and bleeding and there were two unsuccessful attempts at re-intubation, prior to hypoxic cardiac arrest. During CPR, endotracheal re-intubation was established via a blind technique through a Fastrach LMA, but hypoxic encephalopathy ensued. Another patient had a cardiac arrest (presumed to be due to hypoxia from airway obstruction) during spontaneous respiration under intravenous anaesthesia for a minor procedure administered by a medical practitioner without anaesthesia expertise. A patient with obstructing malignant pathology of the upper airway died from the sequelae of barotrauma complicating jet ventilation used during anaesthesia for the endoscopic procedure. Another death was attributed to loss of the airway during anaesthesia with spontaneous respiration with a supraglottic airway, resulting in hypoxic cardiac arrest prior to successful endotracheal intubation.

Note: In more than one of these cases there was an inappropriate choice or application of anaesthesia technique and inadequate monitoring; and one case involved a non anaesthesia trained practitioner.

Aspiration (five)

There were five deaths due to pulmonary aspiration, four of which occurred in the setting of endoscopy with an unprotected airway. One case involved a patient who 12 hours previously had been administered anaesthesia for gastroscopy which was abandoned due to limited mouth opening and failure to intubate. In the setting of ongoing bleeding, and in the absence of any anaesthetist, the endoscopist administered sedation for the repeat attempt gastroscopy. The patient had a cardiac arrest which was attributed to aspiration of blood, hypoxia, hypovolaemia and underlying cardiac disease. There were also three other cases of aspiration in which high risk upper G/I endoscopy was performed under anaesthesia without protection of the airway. In an elderly frail patient with an incarcerated umbilical hernia, an emergency physician trainee attempted to reduce the hernia under intravenous sedation, but abandoned the procedure due to apnoea and aspiration.

Note: In four of the five cases, aspiration risk was high and no airway protection was provided. In two of these cases, no anaesthetist was involved.

Cardiac arrest (three)

There were three deaths involving cardiac arrest resulting from inappropriate choice or application of anaesthesia technique. There were two patients with multiple co-morbidities who suffered cardiac arrest after induction of anaesthesia, both of whom received excessive doses of induction agents. One of them was also scheduled for emergency surgery and was hypovolaemic. Another patient with severe cardiac disease died during intravenous sedation/anaesthesia for a very minor procedure that was either not required at all or could have been performed under local anaesthesia alone.

Note: These three deaths all involved inadequate preoperative assessment or management and inappropriate choice or application of anaesthesia technique and were deemed to have been preventable.

Invasive procedure related deaths (two)

There was a death associated with the use of a pulmonary artery catheter (PAC) used for monitoring during cardiac surgery. Pulmonary artery rupture was attributed to uncertainty regarding the position of the PAC and inappropriate advancement. Another death resulted from inadvertent misplacement of a central venous device inserted to provide access for parenteral nutrition. There were issues associated with the type of catheter used and the monitoring of its position after insertion.

Note: Both these cases involved uncertainty about the anatomical position of the vascular access device.

Mortality reports can be found on the ANZCA website at www.anzca.edu.au/resources/college-publications

webAIRS news

The Australian and New Zealand Tripartite Anaesthetic Data Committee (ANZTADC) has had a successful year with an increase in the number of sites registering and incident reporting rate.

Sites registered	Nov 13	Nov 14
Australia	39	56
New Zealand	22	24
Total	**61**	**80**

There are 80 registered sites as of November 1, a 31 per cent increase since the same time last year. Fifty six of the sites are in Australia and 24 are in New Zealand. One of the barriers to registering a site in Australia is the need for ethics approval. However smaller hospitals, private practices, day surgeries and individual practitioners may accept the ethics approval of another human research ethics committee (HREC). ANZTADC plans to simplify the process by allowing this to be accepted online. Where a hospital has its own ethics committee, then the advice of that committee should be sought regarding the best avenue for ethics approval. There is also a requirement for an agreement for the data to be used for analysis by ANZTADC. While this might seem obvious, a formal process is still required. This has previously been conducted by a signed agreement but in future versions of the program this agreement will also be able to be completed online.

Incident reporting summary	Sep 13	Sep 14	Nov 14
Respiratory/airway	485	732	768
Other organ	32	48	48
Neurological	107	160	167
Miscellaneous/other	126	187	194
Medical device/equipment	304	377	389
Medication	323	456	475
Infrastructure/system	124	174	178
Cardiovascular	329	462	480
Assessment/documentation	127	176	183
Total	**1957**	**2772**	**2882**

ANZTADC received 2772 incident reports and 815 for the 12 months to September 2014. This represents a 41.6 per cent increase since September 2013. This may be attributed to the successful promotion of webAIRS, the increased recruitment of sites and to the use of WebAIRS as a tool to facilitate practice evaluation and obtain CPD credits. This trend continued to the beginning of November, with a further 4 per cent increase.

Presentations at national and international meetings this year have included the Asian Australasian Congress of Anaesthesiologists (AACA), Australian Symposium on Ultrasound and Regional Anaesthesia (ASURA) and the New Zealand Society of Anaesthetists (NZSA) combined meeting (February 2014), the Airway SIG Meeting (May 2014), the Combined Scientific, Meeting for ANZCA (May 2014) and the Australian Society of Anaesthetists National Scientific Congress (October 2014).

During the interim analysis of the data by ANZTADC, one of the interesting points that have been noticed is that in some cases there is an initial difficulty in reaching the correct diagnosis. At the time an incident is evolving, the clinical signs observed may vary and the anaesthetist may be performing other routine tasks. There is a natural tendency to treat the most likely cause of the initial sign before formally looking for alternative diagnoses. The anaphylaxis data presented at the recent ASA NSC supported this conclusion.

First sign of anaphylaxis	
Not stated	1
Desaturation	2
Arrythmia	7
Rash	12
Respiratory event	15
High vent. pressure	11
Hypotension	34
Total	**82**

The first sign of anaphylaxis was stated in 81 of the 82 incidents that were analysed. The most common sign was hypotension but it was interesting to note that this was observed first in less than half the cases. Respiratory events, which included desaturation, bronchospasm and high ventilation pressures, were noticed as the first sign in 27 cases, which is almost as frequent as hypotension. A rash was noticed first in 12 (14.6 per cent) cases and arrhythmia, which included two cases of cardiac arrest, in seven (8.5 per cent) cases. This resulted in other interventions such as salbutamol, steroids or alternative vasopressors being used before adrenaline in many cases. However, vasopressors were used first in 56 of the cases and adrenaline was used first in 32.

The final outcome of the cases was generally good: 58 cases were admitted to either ICU or HDU, but CPR was required in nine cases and unfortunately the outcome was fatal in two cases. The take home message from this interim analysis was that while anaphylaxis is an uncommon event, the unexpected falls in blood pressure, the development of difficulty in ventilation or the occurrence of arrhythmias should trigger a search for other signs of anaphylaxis. The observation of a rash is also important, but in general this does trigger an immediate search for other signs of anaphylaxis. It should also be noted that in severe anaphylaxis the rash may not emerge until the blood pressure has been restored.

ANZTADC thanks everyone who has submitted incidents and who are contributing to the wealth of data that is being collected. Contributing incidents or analysing incidents is eligible for 2 CPD credits per hour. If you wish to register, then register online at www.anztadc.net , or if you would like to be involved in the analysis of incidents already collected, please contact ANZTADC at anztadc@anzca.edu.au.

webAIRS
Anaesthetic Incident Reporting System from ANZTADC

News

Coronial findings

Coroner's recommendations following an undiagnosed aortic laceration during laparoscopy

A 62-year-old woman with a BMI of 37 and past history of ischaemic heart disease and hypertension presented for laparoscopic band surgery and hernia repair. She became hypotensive early in the procedure and her blood pressure remained difficult to measure during the ensuing four hours. This was not initially communicated to the surgeon. Anaesthesia and intensive care assistance was sought towards the end of the procedure and a femoral arterial line inserted which confirmed hypotension. Insertion of a central line revealed low central venous pressure despite fluid resuscitation and the diagnosis became one of acute haemorrhage rather than a cardiac event despite the initial lack of intraperitoneal blood. A second laparoscopy revealed an aortic laceration with retroperitoneal bleeding. The patient subsequently died of multi-organ failure.

The coroner highlighted the importance of the following:

1. Communication between anaesthetist and surgeon.
2. Consideration of the differential diagnosis and appropriate management of persistent hypotension.
3. Timely establishment of invasive monitoring when other forms of monitoring are proving to be inadequate.
4. Recognition of retroperitoneal blood loss as a cause of hypotension in any case where there may be aortic injury and specifically during a laparoscopic procedure.

He also recommended mandatory training in dealing with emergency situations. This is consistent with the emergency response activities required in ANZCA's CPD Program.

Updated ACHS Clinical Indicator Set – Anaesthesia and Perioperative Care Clinical Indicators

The Australian Council on Healthcare Standards will publish its revised clinical indicator set for anaesthesia in January. ANZCA's professional documents are acknowledged and used to underpin the revision. The changes will be of interest to anaesthetists, as well as to other clinicians who contribute to perioperative care.

ANZCA's CPD program places increased attention on practice evaluation, which includes audit. Clinical audit can address structure, process or outcome measures.[1] Interestingly, facilities have struggled to demonstrate compliance with mandatory accreditation standards in Australia.[2]

In part as recognition of the expanded role of the anaesthetist as perioperative physician, the indicator set has been renamed the Anaesthesia and Perioperative Care Clinical Indicators (Version 6.1). The working party deleted one clinical indicator and introduced four new clinical indicators, which reflect that quality perioperative care relies on well functioning teams, with good communication skills and processes for task allocation, delegation and handover.[3] Where available, the new clinical indicators relate to a relevant ANZCA professional document.

"Quit smoking" advice has been identified by ANZCA in PS12[4] as an important component of pre-operative care, and a new clinical indicator has been introduced to reflect the proportion of smokers who are offered such advice and support. Irrespective of the challenges of day of surgery admissions and private practice, it is possible to incorporate such advice and support and this aligns with National Standard 3.

Wrong side regional anaesthesia blocks have been reported in a number of countries,[5,6] and anecdotal evidence suggests the same problems have occurred in Australia[7]. The working party considered that laterality errors for regional anaesthesia should be preventable with processes such as team "time out", which aligns with National Standard 5. A new clinical indicator reflects the proportion of patients receiving regional anaesthesia who have a documented "time out" procedure before block insertion.

Handover processes are important for safe perioperative patient care, and include handovers that may occur between anaesthetists, from anaesthetist to recovery nursing staff, and from recovery to postoperative ward staff, as documented in ANZCA PS 53.[8] Two new clinical indicators reflect these processes, aligning with National Standard 6.

Australian anaesthetists have a long record of mortality reporting, which has produced a number of landmark articles, and recommendations for practice change[9,10]. But anaesthesia-related mortality (as defined as death within 24 hours of anaesthesia) is but a tiny proportion of all adverse outcomes associated with modern anaesthesia and surgery. In order to further improve the already high clinical standards for which Australian anaesthetists are renowned, it will be necessary to continue to define, measure, report and reflect on perioperative outcomes that matter to patients, to their families and carers, as well as to the profession. ANZCA's professional standards will continue to define best practice for anaesthetists. Rather than simply the technical aspects of the work of anaesthetists, ANZCA's professional standards are already reflecting a broader approach to health and integrated perioperative care – including primary community care (PS12), pre-hospital care (PS52) and care shared with (WPI14) or delivered by clinicians other than anaesthetists (PS09).

One possibility is that standards of care, and indicators that reflect those standards, may in future be devised jointly between professional groups, with shared outcomes and accountabilities as the responsibility of teams, rather than of individuals as currently, in professional "silos". An example could be anaesthetists, surgeons and intensivists (as well as other clinicians) working together to audit extended (e.g. 30-day) postoperative mortality, or unplanned ICU admissions. As ANZCA fellows continue to provide leadership in the identification of perioperative outcomes of importance to patients, relevant clinical indicators such as those devised through collaboration with organisations such as ACHS will follow. With appropriate reporting and benchmarking of relevant indicators and outcomes, the opportunities for improvement in patient care, and experience of care, should also follow.

Dr Joanna Sutherland, FANZCA
Chair, ACHS Working Party 2014
Anaesthesia and Perioperative Care Clinical Indicator Set (Version 6)

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Alerts

Cognis Cardiac Resynchronisation Therapy Defibrillator and Teligen Implantable Cardioverter Defibrillator

It has been identified that affected models of Cognis CRT-Ds and Teligen ICDs manufactured before March 2010 may experience diminished low voltage capacitor performance, causing increased current drain that can lead to premature battery depletion.

Patients who have an affected device implanted should schedule a visit as soon as possible, but within three months, to upgrade their device's software using the updated programmer software (Model 2868, version 3.04) to improve Safety Architecture effectiveness. Once the device has been upgraded, resume normal monitoring as described in device labelling.

If this issue occurs, one or more Safety Architecture alerts will be triggered, which will be accompanied by beeping from the implanted device. The most common alert is a yellow screen displayed on the programmer upon initial interrogation saying, "Voltage is too low for projected remaining capacity. Contact Technical Services with Code 1003". In other instances, this issue can result in an unanticipated "Explant" ('ERI') battery status alert and a replacement window that may be less than three months.

All devices that experience unanticipated alerts and replacement indicator messages should be investigated. All devices that have been identified as having diminished low voltage capacitor performance must be replaced. If not replaced, increased current drain could deplete the battery and compromise therapy and telemetry

Go Medical Industries V-set multi-lumen extension

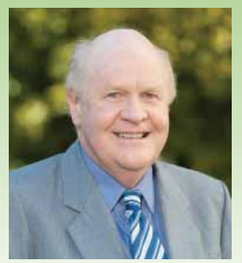
The Go Medical Industries V-set multi-lumen extension set (often called a "chook's foot') includes a large bore line reinforced with a spring to prevent kinking, and one or two small bore side lines. If placed directly onto the hub of a cannula, this system provides a large bore line with 2 infusion lines with almost no dead space. The arm in which it is placed may on occasions be covered or difficult to access during surgery. The product website states that: "And includes a unique non-kink design, allowing fixing of the V-Set to the patient's limb with a 180 degrees loop without fear of obstruction".

However, there have been recent reports of several instances of the large bore channel kinking. This occurs because the spring is fixed only at the distal end. At the proximal end, it freely disengages from the hub, leaving the tubing exposed and prone to twisting and kinking, particularly if warm fluids are used. In its kinked state, the IV does continue to work but at a greatly reduced rate. See attached photo of a displaced spring and kinked channel.

To prevent this from occurring, the large bore channel and connected giving set need to be secured in a straight line at two points distal and proximal to the point of connection, placing the line in a degree of tension to prevent kinking.

Dr Peter Roessler
Communication and Liaison Portfolio
Safety and Quality Committee

Dean's message



As the end of the year approaches it is time to reflect on the progress made by our Faculty and to consider our wider strategic plan and direction. Our accomplishments over the past 12 months have been immense. I will touch on a few here.

Curriculum Redesign Project

Training and education of specialist pain medicine physicians lie at the heart of the Faculty's role. The revised FPM curriculum and training program was launched in September and will create a first-class training program, leading the world in its structure and philosophy.

The revised curriculum is competency-based and focused on particular CanMEDS roles, especially the Pain Medicine Roles in Practice of clinician, professional, scholar, communicator, collaborator manager/leader and health advocate. It focuses on the patient's perspective rather than be driven by the skills of the doctor, incorporating ongoing work-based formative assessment and progressive summative assessment, completed in two stages, the core training stage and the practice development stage.

The core training stage is a mandatory 44-week period of structured training spent in a Faculty-accredited training unit. During this stage there are two streams of integrated teaching and learning.

Stream A will be delivered centrally with a knowledge focus. Selected clinical areas, known as essential topic areas (ETAs) will be studied and completed as e-learning modules. There will be two weekend face-to-face courses for the development of clinical and interpersonal skills.

Stream B will be delivered in accredited training units, with a skills focus. Workplace-based assessments (WBAs) will consist of clinical skills assessments (CSA), management plan assessments (MPA), case-based discussions (CbD), professional presentations (PP) and multi-source feedback (MSF). A clinical case study would need to be completed before admission to the practice development stage. Trainees will be required to keep copies of all in-training assessments (ITAs) and workplace-based assessments within an electronic or hard copy folder known as a "learning portfolio". There will be a long case assessment in each training stage conducted in accredited training units.

The second year is the practice development stage. This is a mandatory 44-week period of approved activity chosen by trainees, and directly relevant to pain medicine. Examples include chronic pelvic pain, consultation liaison psychiatry, paediatric pain medicine, pain medicine in aged care, palliative care, physical interventions, rehabilitation medicine or a research project. Trainees will be required to submit their learning plan for approval by the Faculty assessor and the supervisor will be a Faculty Fellow (exceptions may be considered). There will be a long case assessment and summative assessments, including the fellowship examination with written and viva voce sections.

New Zealand trainees will start the revised training program in December 2014 and Australian trainees will start in January 2015. My grateful thanks go to Dr Meredith Craigie and the FPM Curriculum Redesign Steering Group for all their hard work in this regard.

Better Pain Management

Better Pain Management – Pain Education for Professionals is an interactive online education program that aims to foster consistency and excellence through a multi-disciplinary approach to the management of pain. Development is underway on a further six modules and Fellows will soon be approached to join the authoring groups. The updated original six pain management education modules are ready for use by the allied medical disciplines.

Pain device implant registry

A high-level business plan seeking industry support for this Faculty initiative was presented to key stakeholders, including industry, Medical Technology Association of Australia and the Australian Commission on Safety and Quality in Health Care and there is strong support with an appropriate governance structure. Medtronic provided seed funding to allow the project to progress in its early stages and Monash University won a tender as a university partner to develop, maintain and manage the registry. Once contractual arrangements are finalised, a steering committee will be formed. The longer term aim is to get the government to facilitate a funding system where industry is charged per device to fund it.

Electronic persistent pain outcomes collaboration (ePPOC) project

The Electronic Persistent Pain Outcomes Collaboration (ePPOC) project involves the systematic collection of patient treatment outcomes using a standard set of data items and assessment tools by specialist pain services in Australia and NZ. It aims to inform the development of national benchmarks to generate better outcomes for patients experiencing chronic pain.

Roll-out of this initiative continues to expand across NSW and other states. Queensland, Western Australia and New Zealand are at various stages of recruitment and implementation of this program. The first benchmarking report has been distributed to the 12 services who submitted data and the ePPOC manager is currently visiting these sites to get feedback on the report. The initial benchmarking report for paediatric services is underway. The Faculty was represented at November meetings of the Management Advisory Group (MAG) and Scientific and Clinical Advisory Committee (SCAC) of ePPOC by Dr Chris Hayes and Associate Professor Carolyn Arnold, respectively.

Quality and safety standards for pain management

The board nominated Dr Chris Hayes and Dr Jane Trinca to represent the Faculty on an expert panel that will work with the Australian Commission on Safety and Quality in Health Care (ACSQHC) to develop national standards for pain management in collaboration with Painaustralia, the Australian Pain Society and other stakeholders, under the chair of the president of the Australian Pain Society.

A brief submission to ACSQHC has been made for further consideration of pain management issues in the next iteration of the Australian standards document.

FPM examination

Forty-two candidates registered for the FPM examination. The clinicals and vivas are being held at Royal Adelaide Hospital on November 29-30 under the auspices of Dr Penny Briscoe, a past dean and former chair of the Examinations Committee.

Acute Pain Management Scientific Evidence 4th Edition:

This working group continues to make good progress led by Professor Stephan Schug and his team. The mammoth task is much appreciated. It is anticipated the publication will be launched at the 2015 annual scientific meeting in Adelaide.

Conclusion

Thank you to all those who have contributed to our Faculty's success this year. There are too many people to name but they include the many Fellows who work hard on our committees (in education, examination, hospital accreditation, research, professional development and scientific meeting oversight) and sub-committees, our assessor, deputy assessor, and treasurer, my fellow board members, the chairs of all our portfolio committees, regional committees, and the NZ National Committee of FPM. Thanks also to Professor Milton Cohen, our director of professional affairs, and our general manager, Helen Morris, and her team, our ANZCA President Genevieve Goulding, the ANZCA CEO and her staff.

I am constantly amazed at the hours our Fellows donate to developing our Faculty. Thanks to you all. I wish all our Faculty Fellows and trainees a well-deserved rest and good health over holiday period.

Professor Ted Shipton
Dean, Faculty of Pain Medicine

News

Admission to fellowship of the Faculty of Pain Medicine

By examination:

Dr Gavin WEEKES, FCARCSI (Ireland)
Dr Chi Wing CHAN, FANZCA (Hong Kong)

This takes the total number of Fellows admitted to 386.

Foundations of Pain Medicine Examination

Trainees entering the 2015 training program undertook the first sitting of the Foundations of Pain Medicine examination on November 7. All 17 candidates were successful in this examination.

Faculty of Pain Medicine examination 2014

The 2014 Faculty of Pain Medicine clinical examination was held from November 29-30 at the Royal Adelaide Hospital, South Australia. The written examination was held on November 7. Thirty-two of the 42 candidates were successful. The Barbara Walker Prize for Excellence in the Pain Medicine Examination was awarded to Dr Martine O'Neill (NSW). Merit awards went to Dr Suzanne Cartwright (Vic); Dr James Jarman (WA) and Dr Wei Chung Tong (Vic).

The significant contributions of retiring examiners Professor Milton Cohen, Dr Matthew Crawford and Professor George Mendelson were gratefully acknowledged.

Trainees face life and death in simulation scenario

Experience mimics real life in hospital simulation training program

It's the ultimate theatre of theatre. Improvisation calls on your sharpest skills and under the hot operating lights, you're on a stage, and you're on your own. The mannequin is life-like; its chest rises and falls with "breath". Blood pressure and heart rate are monitored. The machine beeps. You're on. Intubate.

Simulation training is an effective, engaging way of allowing anaesthesia trainees to confront scenarios they may encounter in their careers, says simulation training (SIM) supervisor Dr Adriano Cocciante.

In a mock-operating theatre at Sunshine Hospital, part of Western Health in Melbourne, Dr Cocciante and his colleagues Dr Navroop Johal and Dr Zoe Wake are enacting their third simulation exercise of the morning with a group of 12 anaesthesia trainees, two anaesthetic nurses and a surgical registrar.

Every exercise is structured in the same way – the trainee walks in, ready for their patient, but with no warning of their "condition" until briefed by the handover anaesthetist. They must proceed as they would outside of the training exercise – check vital signs, respond to them, let the surgeon know when they are ready for the procedure to begin.

At the end of the room is a reflective glass partition hiding a small space where the controls, microphones and dials are operated by Dr Cocciante, Dr Johal, Dr Wake and a technician. They manipulate the mannequin and call action.

The Tuesday morning the *ANZCA Bulletin* visited the training exercise, the 5'8" simulated patient was to undergo an apparently straightforward and low-risk gynaecological procedure. Somehow, though, the surgeon cuts through a blood vessel and unanticipated "bleeding" begins. Although the bleeding is clearly visible on the laprascopic monitor, with an ear piece receiving prompts from Dr Cocciante, the surgeon underplays his mistake. Still backstage, the trainers dip the mannequin's blood pressure, increase its heart rate and the dummy shows signs of early distress.

The trainee must make the next call – do I ask for back up? The surgeon insists he has the surgery under control. A tweak of the monitors in the control room and the "patient" is critical. Simulated blood is leaked through a catheter which has been prepared ahead of the exercise and within 10 minutes the trainee is facing life and death of their patient.

"We do everything we can to make the scenario as realistic as possible," Dr Cocciante says.

He says the training has the strong support of the anaesthetic and surgical teams at Western Health so all anaesthetic nurses and surgical registrars are able to attend the sessions and help recreate a "real life" theatre team.

"Thanks to the support of the anaesthetic and surgical departments here at Western Health, our anaesthetic nurses and surgical registrars all attend these sessions, which enable us to recreate a real life theatre team. Getting to know and understanding the points of view of other members of the theatre team assists in creating an efficient, relaxed environment which allows us to do our jobs better, thereby providing better patient care.

"It tests the resourcefulness and communication skills, as well as technical skills of our trainees."

A group of other trainees is called, unaware of the scenario they are entering, and they must operate as a team to get the patient under control. They must be briefed quickly and they must find a solution to a recalcitrant surgeon and a patient who is now bleeding out.

How do they cope if the mannequin dies?

"That's still one of the controversies in simulation education – letting the patient die. We try to ensure that this doesn't happen," Dr Cocciante says.

"It's our view that the emotional stress of that situation – you must remember we make this as realistic as possible and the participants get very involved, we all do – would greatly outweigh any educational benefit of the session.

"We don't want to traumatise the participants, we want to expose them to a controlled hypothetical scene and support them to use their problem-solving skills – to put their theory into practice."

Dr Cocciante is a passionate advocate of simulation training but it is a labour and resource-intensive model of education.

Funding has been allocated through ANZCA's Specialist Training Program (STP) to enable Dr Wake to work as SIM coordinator for 50 percent of her full-time anaesthesia workload. Dr Cocciante and Dr Johal, who write the scenarios and roster the training, run the program while each carrying their own full-time clinical load.

"Having Zoe is a great privilege because the training is very time-consuming," Dr Cocciante says.

"The planning, scheduling, the set up, and the documentation use a lot of resources. We're very lucky to have the support and I know we are training a group of more empathic anaesthetists."

Key to this high-fidelity training experience is the detailed debrief after every scenario – an hour is spent with Dr Cocciante and Dr Johal drawing out of the trainees what it felt like, how the scenario evolved, how planning is important and what they might take away from the exercise.

"In medical school, we learn how to 'do stuff', how to treat conditions, but nowhere, as yet, are the emotive, non-technical aspects of our work covered and simulation training gives us the opportunity to do that.

"The best learning happens at the edge of your comfort zone."

Ebru Yaman
ANZCA Media Manager

From left: Dr Zoe Wake, Dr Adrian Cocciante and Dr Navroop Jahal with a simulation mannequin; the simulated procedure underway; the mock operating theatre.

New institution, new beginning for anaesthesia in WA

Fiona Stanley Hospital brings challenges, risk – and significant opportunities.

Setting up a new anaesthetic department? With the potential to get everything as we want it from the very beginning? That sounds like an exciting, appealing opportunity, right? And of course it is, but not without the odd challenge and a few extra grey hairs along the way ...

This opportunity to start a new anaesthetic department was presented to the anaesthetists of the South Metropolitan Health Service in WA as part of the commissioning of Fiona Stanley Hospital – the largest tertiary facility to be built in the state. The opening of the hospital is a key component of a major reconfiguration of South Metropolitan Health Service within the WA Department of Health. The hospital is the largest building project ever undertaken by the state government, covering the equivalent of four city blocks, and is on track to become the major research and teaching institute for the area.

The reconfiguration of clinical work involves the movement and amalgamation of several services around the city. The hospital will house new adult and paediatric emergency departments. There will also be new services in obstetrics, the State Burns Unit, cardiac surgery, heart and lung transplants, and rehabilitation, to name but a few.

For the first time in healthcare in WA, facilities management services will be provided in partnership with a private company (Serco Australia) under the direction of the State Government. Serco provides a range of non-clinical and support services within the hospital including security, building and grounds maintenance, transport, procurement, sterilisation, linen and cleaning.

Much of the clinical care and services at the hospital are co-ordinated via innovative information and communication technology systems. This includes a new digital medical record; automated guided vehicles to deliver linen and food; a pharmacy robot and automated medication units to replace anaesthetic drug trollies.

And so the challenges were set: new services and movement of old ones; a new building and new equipment; different systems and modes of operation; the partnership between a private company and healthcare professionals; new people and new teams. At the consumer end of this would be patients and their relatives. Our task was to ensure that high-quality, safe and efficient care was borne out of the former and delivered to the latter.

We needed a way to decide that we were ready. Not just us and our department, but every clinical area in which we would potentially work. In fact the whole hospital as a team needed a process through which we could say that we were ready for patient care to occur. So how do you define readiness?

There is no simple formula. Corporate behaviours associated with good outcomes during large institutional change frequently involve some form of operational readiness assessment. There is little in the medical literature, however, describing this in a clinical context.

Discussions about the new hospital within the department of anaesthetics at Fremantle Hospital highlighted the importance of preparedness and safety as core values for our profession. Contingency planning and familiarity with both environment and equipment are strong themes in our training curriculum. The dynamics of teamwork, the principles of good communication and mitigating risk are reinforced in crisis resource management training.

It was these skills, attitudes and behaviours that placed the department of anaesthetics in a central role from the earliest stages at the hospital. These principles provided the foundation for the development of our own program, which became known as Clinical Readiness Assessment (CRA).

The CRA plan used for the hospital is a detailed map of clear objectives against key performance indices. A structured method of reviewing and documenting assessment processes places emphasis on implementing change where necessary.

A three-stage process of table-top discussions, "walk-throughs" of clinical areas and simulated scenarios (Clinical Scenario Testing or CST) provides an innovative and robust method to ensure quality, safety and efficiency. The CRA plan has embedded a governance structure for clinical care from the beginnings of the hospital.

CRA was not only critical to the provisioning and design of perioperative systems. It was adopted hospital wide by the executive committee as a template of good practice. Individual clinical areas used our template to determine their own CRA, ensuring that it remained appropriate, relevant and achievable.

Simulation was integral to the delivery of the CRA program at both departmental level and for the hospital as a whole. CST involved the use of high-fidelity manikins and immersive scenarios with professionals from healthcare, Serco and outside agencies such as the police and fire services. Multiple areas and systems were tested, often simultaneously, as the complex process of patient care was simulated.

Every CST was designed around detailed multi-disciplinary objectives. Extensive de-briefs proved invaluable in highlighting potential systemic issues. Undoubtedly, we have unlocked the potential application of simulation way beyond clinical training and into the planning of whole hospitals.

Although we have focused so far on processes and systems, the potential challenges to developing effective teamwork are just as critical. FSH is a new service with a mix of staff from several institutions and blending these cultures presents some unique issues.

Developing a single team approach is the core philosophy of the service. FSH describes a "CARE" model (Commitment, Accountability, Respect & Excellence) upon which it has been founded. The CRA process was pivotal in building teams and reinforced engagement of staff members from all areas. It highlighted potential issues in a very clear format; provided an open forum for discussion and drove the implementation of change by working together.

All of this describes a small part of what has occurred in the past 12-18 months. We now find ourselves in the first part of our phased opening process, attending medical emergencies and offering an Acute Pain Service to the State Rehabilitation Service. At the time of writing we are a few days away from receiving the first elective surgical patients and soon after that our obstetric service will commence. In February the emergency department doors will open for the first time and the hospital will be fully operational. These are exciting and unique times ahead.

The challenges of starting a new anaesthetic department are manifold. There is great risk as well as great opportunity. Every challenge, however, presents us with an opportunity to affect change and make a difference. For that reason, no matter how insurmountable individual problems can seem in a project as big as this, we view it as a privilege to be involved in the beginnings of a new department that will last for decades to come.

Dr Adam Crossley MBBCh FRCA FANZCA (simulation Fellow Fremantle and Fiona Stanley hospitals)

Dr Alex Swann BSc (Hons) MBBS FRCA FANZCA (head of department Anaesthesia & Pain Medicine, Fiona Stanley Hospital)

Dr Matt Harper MBBS FRCA FANZCA (consultant anaesthetist & commissioning lead, clinical scenario testing, Fiona Stanley Hospital)

Dr Alison Corbett MBBS FRCA FANZCA (head of peri-operative care, consultant anaesthetist, Fiona Stanley Hospital)

Above from left: The new Fiona Stanley Hospital; theatre equipment; automated guided vehicles with and without trollies that deliver linen and food; at the hydrotherapy pool.

Foundation news

Board of Governors

The Board of Governors will review recently compiled lists of organisations and individuals with a strong interest in improving community health outcomes, and develop contact strategies, during its December meeting. These lists will be used in approaches to prospective partners to present the Anaesthesia and Pain Medicine Foundation's case for support.

The board has identified organisations from a wider spread of industry sectors than previously approached by the foundation, including leading corporations and foundations in health, health insurance, general insurance and banking and financial services.

The foundation greatly values the long-term support it already receives from the healthcare industry, and hopes this strategy will further diversify its supporter base.

The board also will discuss its strategy and criteria for identifying new member candidates and extending the geographic representation on the board during 2015.

In October, four board members joined hospital visits arranged by the foundation. Associate Professor David Scott hosted Ms Kate Spargo and Mr Rob Bazzani on a tour of Melbourne's St Vincent's Hospital, including the operating suites, intensive care unit and recovery room. Professor Paul Myles, head of anaesthesia and perioperative medicine at The Alfred in Melbourne, hosted an excellent tour for Ms Priscilla Bryans and Mr Bruce Brook.

The visits aim to give board members an inside view of the roles of anaesthetists and pain specialists, their influence on patient outcomes, and the importance of research in improving such outcomes.

To donate, or for more information on supporting the foundation, please contact Rob Packer, General Manager, Anaesthesia and Pain Medicine Foundation on **+61 3 8517 5306** or email **rpacker@anzca.edu.au**. Gifts can be made via **www.anzca.edu.au/fellows/foundation**

Pfizer Australia

Pfizer Australia will continue as a major sponsor of the foundation during 2015. The sponsorship supports the pain medicine research support program, and will now be provided through the Pfizer Pain Care brand.

Pfizer Pain Care's support will provide financial support for the general pain medicine research program and will not be linked to a specific project.

As part of new sponsorship arrangements, Pfizer Pain Care will promote the foundation's fundraising and research grants program through its national field force. This will greatly assist in spreading the foundation's message about the urgent need to increase donor support research.

The program will place promotional posters in healthcare locations nationwide.

Rotary Club of Glen Waverley dinner

A combined foundation and Glen Waverley Rotary Club dinner was held at ANZCA House on Monday October 20. At the request of ANZCA Fellow, past ANZCA Medallist, and active Rotarian Dr Peter Lowe, foundation general manager Rob Packer spoke about the foundation and its work. The presentation included reflections on international health-related fundraising and development experiences, and the generosity of donors in the Asia region.

Members were invited to consider supporting the foundation, and the club included the evening's speech notes in its newsletter.

Thank you to the many Fellows and donors who have given so generously. Your support has helped the foundation more than triple its private fundraising growth since 2012, supplementing the continuous growth in funds available to distribute as grants.

The foundation team wishes all donors, supporters, Fellows and other readers a safe and happy festive season. As usual, gifts can be made through the foundation's online donation page, by mail or by calling Rob Packer on +61 3 8517 5306.

$A4.6 million NHMRC grant awarded

Largest NHMRC project grant

Perth anaesthetist Professor Tomás Corcoran, and the ANZCA Clinical Trials Network (CTN) investigators and Monash University, have been awarded the largest National Health and Medical Research Council (NHMRC) project grant in the 2014 grant round for the Perioperative Administration of Dexamethasone and Infection trial (PADDI). This study was endorsed by the CTN Executive and will be co-ordinated through the network's office at Monash University under the leadership of Professor Corcoran.

The success of this $A4.6 million grant application in a climate of increased competition for a reduced pool of funds (overall funded rate of 14.95 per cent) again demonstrates that ANZCA CTN investigators are world leaders in clinical research. It recognises the importance of anaesthesia in determining the outcomes of patients following surgery, and highlights the commitment of the ANZCA CTN to delivering high-quality evidence to support common anaesthesia interventions. This success also underscores the importance of network's endorsement process, which involves rigorous peer-review of the protocol at the network's annual strategic research workshop. This large grant builds on the success of the RELIEF and BALANCED trials in securing NHMRC funding in 2012.

Perioperative ADministration of Dexamethasone and Infection - The PADDI trial

Millions of patients undergo surgery each year worldwide. Surgical site infections (SSI) occur in up to 12 per cent of these patients. Complications resulting from SSI lead to increased morbidity and mortality, and extended hospital stays, with an associated cost of up to US$10 billion per annum.

Dexamethasone is widely used by anaesthetists perioperatively, principally as an effective antiemetic to prevent postoperative nausea and vomiting (PONV). While the underlying molecular mechanisms of dexamethasone's action are not fully understood, it is hypothesised infections may occur as a result of hyperglycemia and immunosuppression, in particular in diabetic patients who are already at increased risk of complications. How dexamethasone impacts blood glucose levels, and its association with surgical site and other infections, has not been definitively established. This is an important health priority as in Australia alone up to one million patients will receive dexamethasone as part of their anaesthesia care annually.

The study aims to definitely establish the safety profile of dexamethasone in the perioperative setting. Specifically, it will address the impact of dexamethasone on surgical site infection (primary outcome) and will be stratified according to diabetic status.

Summary

Study size
8800 adult patients worldwide.

Study design
International multi-centre prospective, double blind, active control, parallel assessment, stratified, non-inferiority safety and efficacy study.

Primary outcome
Surgical site infection within 30 days.

Secondary outcome
Infection from other sources, including pneumonia, systemic sepsis at 30 days and one year, quality of recovery, acute and chronic pain, hospital stay and disability-free survival up to one year, cancer recurrence, WHODAS score, association between diabetic status and infective outcomes.

Study population
Adult patients, ASA physical status 1-4, undergoing non-urgent or time critical, non-cardiac and non-neurosurgical surgical procedures using general anaesthesia with or without regional block, post-op stay of minimum of one night.

Study duration
Final follow-up at one year post procedure.

We look forward to getting this study underway and having your site onboard in 2015. For up-to-date information visit www.anzca.edu.au/fellows/Research and to register your interest, please email the ANZCA Clinical Trials Network at ctn@anzca.edu.au

Pilot grant funding

The ANZCA Clinical Trials Network pilot grant has been awarded to Dr Joreline van der Westhiuzen for her project "The effect of upfront administration of Fibrinogen concentrate in obstetric haemorrhage – a pilot study". Professor Alan Merry received CTN endorsement for his study "Apprehending micro-organisms injected during anaesthesia: The Zbugs randomised controlled trial to reduce surgical site infection" (Z-bugs). The CTN Executive congratulates and thanks both Dr van der Westhiuzen and Professor Merry for presenting their studies at the annual strategic research workshop this year.

7th Annual Strategic Research Workshop 2015 – save the date

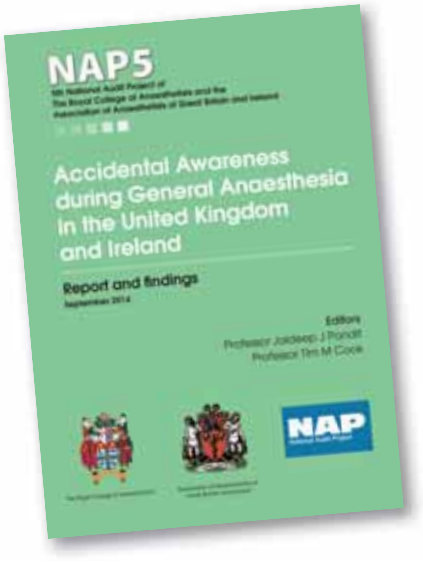
The ANZCA Clinical Trials Network is pleased to host its seventh annual strategic research workshop at Sanctuary Cove, Queensland from August 14-16, 2015. This meeting will feature discussions on new research ideas, keynote presentations from Professor David Vaux and Dr Jessica Kasza, research co-ordinators and early career researchers workshops, and plenty of opportunities for social interactions with fellow researchers. Lock in the dates for what will be another enjoyable meeting, filled with thought-provoking ideas for clinical research. For up-to-date information, visit www.anzca.edu.au/fellows/Research/anzca-clinical-trials-network-events.html

Name change announcement

The ANZCA Trials Group is proud to announce its name change to the ANZCA Clinical Trials Network (CTN). The name change brings our name into alignment with other clinical trials networks locally and internationally. The name change also represents the growth in the size and extent of our collaboration with ANZCA Fellows and trainees and other healthcare professionals here and around the world. The CTN Executive will continue to operate under the same structure and report to the Research Committee. The new general inquires email address is ctn@anzca.edu.au. All other contact details remain the same.

Karen Goulding
ANZCA Clinical Trials Network
Co-ordinator

Study highlights prevalence of accidental awareness



The Royal College of Anaesthetists' National Audit Projects investigate anaesthesia-related problems with low incidences, such as complications arising from neuraxial blockade and failed endotracheal intubation. The latest project, NAP5, was conducted in collaboration with the Association of Anaesthetists of Great Britain and Ireland, and investigated accidental awareness during general anaesthesia in the UK and Ireland. The results were published in September 2014[1].

Awareness during general anaesthesia continues to be reported despite increased "awareness" of the issue and improved monitoring, and so was a suitable topic for NAP5. A network of study co-ordinators was established in all UK and Irish public hospitals. All new reports of awareness in these hospitals were collected over one calendar year. Data included the nature of the event, details of anaesthesia and any sequelae. Reports were entered into a central database and were categorised by a multidisciplinary panel. It is important to note that a history of awareness was not systematically sought from every patient – only spontaneous reports made by patients to their carers were recorded. A parallel national anaesthetic activity survey provided denominator data (nearly three million patients).

The incidence of certain/probable and possible accidental awareness cases in NAP5 was 1:19,600 anaesthetics, with a higher incidence reported during relaxant general anaesthesia (1:8200) and caesarean section (1:670). Most cases of awareness occurred during induction and emergence. Risk factors for awareness included rapid sequence induction, obesity and difficult airway management. Depth of anaesthesia monitors were used only in about 3 per cent of the general anaesthetics in the UK and 9 per cent of the general anaesthetics in Ireland. Interestingly, these monitors were more likely to be used in patients who ultimately reported awareness, an association almost certainly due to selection bias (with high-risk patients being monitored). NAP5 reported that most patients found their awareness distressing and many suffered debilitating sequelae.

NAP5 was praised for the high degree of engagement of public hospitals in the UK and Ireland, and for the wealth of detailed information about patients' experiences of awareness that were collected[1,2]. However it was widely acknowledged that the project's reliance on spontaneous reports probably led to a significant underestimate of the true incidence of anaesthetic awareness. This would explain the difference in the reported incidence of awareness between NAP5 and studies in which awareness is systematically sought: these studies more often report incidences of awareness around 1:1000[3]. On the other hand, the awareness episodes in NAP5 did not necessarily have to occur during the study period – some episodes occurred prior to commencement of the study. This means the timeframe of the numerator was larger than that of the denominator leading to an overestimate of the incidence of spontaneously reported awareness[2,3].

What does NAP5 mean for anaesthetists in Australia and New Zealand? The study has shown that anaesthetic awareness continues to be a problem in a healthcare system very similar to our own, and that certain patients are more at risk than others (those receiving muscle relaxants, with difficult airways and having caesarean section in particular). The study does not provide any reliable data about the utility of depth-of-anaesthesia monitors in preventing awareness, and so existing guidelines should be followed[4].

Perhaps the most important message is that when UK and Irish hospitals, departments and individual anaesthetists worked closely together towards a common goal and were supported by college-funded co-ordination, important new information was produced that advances the cause of safe and high quality anaesthesia care. This also is the goal of our own ANZCA Clinical Trials Network (please contact Ms Karen Goulding, ANZCA CTN co-ordinator at ctn@anzca.edu.au for information about participating in our studies).

Professor Kate Leslie, FANZCA
Royal Melbourne Hospital

References:

1. Absalom AR, Green D. NAP5: the tip of the iceberg, or all we need to know? Br J Anaesth 2014; 113: 527–30.
2. Avidan MS, Sleigh JW. Beware the Boojum: the NAP5 audit of accidental awareness during intended general anaesthesia. Anaesthesia 2014; 69: 1065–1077.
3. Ghoneim MM. Awareness during anesthesia: risk factors, causes and sequelae: a review of reported cases in the literature. Anesth Analg. 2009; 108: 527-35.
4. Australian and New Zealand College of Anaesthetists. Professional document PS18: Recommendations on Monitoring During Anaesthesia. Melbourne: ANZCA, 2014. Accessed on November 9, 2014 at http://www.anzca.edu.au/resources/professional-documents

Successful candidates

Primary fellowship examination August/September 2014

One hundred and twelve candidates successfully completed the Primary Fellowship Examination at this presentation and are listed below:

AUSTRALIA

Australian Capital Territory
Julia Elanor Hoy

New South Wales
Adi Pavan Prabhala
Brenton Sanderson
Christopher Wai Keng Yong
David Brian Reid
Deegala Niranjali Anuradha Keerthisinghe
Gabrielle Papeix
Gregory James Britton
Jessica Anne Gray
Jessie Kowhai Maulder
Joshua Wesley Campbell
Laura Joan Eastman
Leonard Richard Conrad
Lorna Ann Workman
Marcus David Kornmehl
Phoebe Mills
Renee Dianne Burton
Rustin John Quin
Sahil Kumar Mathur
Simon Gomes-Vieira
Tomasz Dzioba
Victor Chan

Northern Territory
Louisa Alice Kippin

Queensland
Adam Lindsay Bacchi Keys
Andrew Godfrey Wright
Angela Rachel Tognolini
Boon Tsien Chang
Chloe Lauren Butler
Iain Doherty
Kavindri Rashmi Jayatileka
Lucas Dugdale Edwards
Maryann Cristina Turner
Nevin Mark Fernandez
Scott Martin Popham
Shannon Lyndsay Morrison
Simone Lauren Fagan
Tiffany Ellen Holmes
Timothy D. Rance

South Australia
Alister Mark Mathieson
Divahar Sudhandhira Kumar
Kian Chiat Lim
Phuong Lam Markman
Rebecca Jeffery
Yeap Phak Hor

Tasmania
Ryan Patrick Hughes
Subramanian Parameswaran

Victoria
Adam Daniel John Sutton
Adriana Mira Bibbo
Alison Tjhia
Anday Altas
Andrew Alexander Campbell
Andrew Christopher Jarzebowski
Andrew William Downey
Elliot Marcel Schulberg
Evan James Thompson
Fleur Roberts
Helen Kim Hong Nguyen
Hieu Minh Lam
Hosim Prasai Thapa
Jonathan Andrew Galtieri
Joseph William Speekman
Liam Colm O'Doherty
Kellie Louise Brick
Meghan Frances Cooney
Michelle Andrea Haeusler
Miranda Holmes
Tejinder Kaur Mettho
Tom Callahan

Western Australia
Arya Gupta
Christopher McGrath
David Forbes Hamilton
Grace Yee-Hua Ho
Johnny Lester Burston
Milena Wilke
Paris Alexandra Dove
Samuel James Fitzpatrick
Steven Michael De Luca
Thomas James Ryan

NEW ZEALAND

Alastair John Proud
Anna Waylen
Ashvini Maduka Nanayakkara Kahawatta
Cara Wanda Thomson
Catherine Louise White
Charlotte Emily Adamson
Connor Patrick Hughes
Elizabeth Rose Dunn
Emily Charlotte Buddicom
Emily Elizabeth Morton
Felicity Judith Dominick
Galina Andrea Gaidamaka
Gareth Shivantha Ansell
George Rowell
Grant Mathew Frow
James Richard McAlpine
Jee Young Kim
Jonathan Ashley Panckhurst
Lora Borislavova Pencheva
Martin Guy Hurst
Matthew Paul Musker
Matthew Stephen Kirk-Jones
Natalie Rose Jarvis
Nicola Smith
Nip Ken Ka Kin
Orla Helena Ryan
Petra Maria Van Der Linden-Ross
Richard Paul Renew
Sai Venkata Raja Rao Palepu
Samantha Seelawathie Paul
Samuel Poriana Wall
Stephanie Laura Pettit Clark
Thida Ching
Timothy Patrick O'Brien

Renton Prize

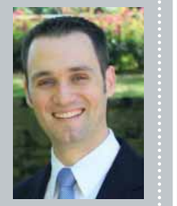
The Court of Examiners recommended that the Renton Prize for the half year ended December 31, 2014, be awarded to:

Steven Michael De Luca, Western Australia

Dr Steve De Luca, from Royal Perth Hospital in WA, studied medicine and sports science at the University of Edinburgh and is a dual anaesthetic and emergency department trainee. He also has worked in Bunbury and Joondalup. His sub-specialty interests include trauma, toxicology and rural and remote medicine and he plans to pursue a career in anaesthesia and emergency medicine, working towards collegial patient care and shared learning between specialties.

The Court of Examiners recommended that the Renton Prize for the half year ended May 31, 2014, be awarded to:

Dr Adam Mahoney, Tasmania



Dr Adam Mahoney, from the North West Regional Hospital in Burnie, Tasmania, won the Renton Prize, awarded for the highest marks in the ANZCA primary examination, in July. Dr Mahoney studied at the University of New South Wales before working in Hobart and rural Tasmania. He is interested in medical education and perioperative medicine and plans to pursue a career in the Australian Army.

Merit cerificates

Merit certificates were awarded to:

Gabrielle Papeix, New South Wales
Kellie Louise Brick, Victoria
Samuel Poriana Wall, New Zealand

Final fellowship examination August/October 2014

One hundred and nine candidates successfully completed the Final Fellowship Examination at this presentation and are listed below:

AUSTRALIA

Australian Capital Territory
Christopher Harold Van Leuvan

New South Wales
Amardeep Singh
Andrew John Arrowsmith
Arjun Sido
Claire Louise Goldsbrough
Dammage Hasith Vipashavith Wickramaratne
David Dao
David Sai Wo Cheng
David Ziggy Fyfe
Hee-Sun Kim
Jessie Ly
Joshua Frank Rijsdijk
Karina Simone Berzins
Margot Elizabeth Heaney
Neelam Bhala
Robert John Scott
Sivapathasundaram Achuthan
Wei-Jie Zhuo

Northern Territory
Jonathan James Nicholson

Queensland
Adam Richard Storey
Chia Yee Jen Jane
Christopher James McMahon
Christopher Scott Lack
Daniel Hyde
Dominic Peter Ormston
Edney Richardson
Eliza Jane Doneley
Holly Jayne Rowell
Jim Hao-Chun Yen
Julia Elizabeth Day
Megan Anne Walmsley
Patrick J. Glover
Rebecca Helen Kamp
Ritu Arora
Roland Bartholdy
Sachin Verma
Timothy Rose
Tobias Paul Trinks
Vedharathnam Balsubramaniyam
Wayne Russell Shipton

South Australia
Melissa Jusaitis
Rachelle Anh Augustes
Richard Peter Champion
Richard Samuel Lumb

Tasmania
Benjamin Laurence Snow
John James Carney

Victoria
Abdullah Saji G Alharbi
Arturo Gomez De Castro
Bernadette Jane White
Divya Ann Abraham
Dorothy Wai Lin Chan
Harriet Clare Beevor
Julie Anne Isaksson
Karl Alan Ruhl
Laurie Anne Dwyer
Michael Conor Bulman
Sang Yee Lee
Sharanjeet Kaur Sidhu
Sophia Cotton Bermingham
Vanita Mohan Bodhankar
William Murray Ross

Western Australia
Adam Isaac Mossenson
Andrew Jin Meng Lee
Andrew Peter Challen
Anna Michelle West
Christine Siang-Yin Ong
Duncan Bunning
Graeme Howard Johnson
Rajiv Menon

Successful candidates (continued)

HONG KONG
Cheng Wai Hui
Chung, Chun Kwong Eric
Si Ning Zhao
Tan Olivia
Ying Chee Lun Aaron
Yuen Henry Jeffrey

NEW ZEALAND
Abhishek Jain
Alison Jackson
Amanda Catherine Gimblett
Anthony James Carrie
Antony Sione Aho
Beau Curby Klaibert
Chen Seong Ong
Damien Archbold
Daniel Lien Chuan Chiang
David Samuel Prior
Elizabeth Alexandra Louise Maxwell
Gareth David Collins
Gemma Anne Malpas
Ghassan Talab
Heather Louise Short
Jeremy Stephen Young
Joseph Raoul McKerras
Julia Kate Taylor
Katherine Zoe Wills Shute
Katia Vanya Hayes
Kim Mary Phillips
Laura Wei Shaan Kwan
Linda Xue Zhou
Madison Rosanna Elaine Goulden
Mahmoud Mohamed Samir El-Bably
Mark Patrick Woolley
Philip Garbutt
Phillipa Mary Jerram
Reuben John Miller
Sophie Caroline Van Oudenaaren
Tobias Michael Betteridge
Victor Victorovich Birioukov

SINGAPORE
Anusha Kannan
Haoling Hilda Hu

IMGS examination
Twelve candidates successfully completed the International Medical Graduate Specialist Exam at this presentation and are listed below:

AUSTRALIA
New South Wales
Kavitha Shetty B
Lone Rasmussen

Queensland
Amandeep Singh
Izak Perold
Stefanie Gubbay

South Australia
Ashok Dharmalingam
Gurvinder Kaur

Western Australia
Buddhika Widyaratna Peiris
Habaragamuwa
Christina Drmed Stuke
Jan Hruby
Stanojlovic Predrag

NEW ZEALAND
Wolf Kremer

Merit certificates
Merit certificates were awarded to:

Patrick J. Glover, Queensland
Adam Richard Storey, Queensland
Anna Michelle West, Western Australia

Neil Christopher Greensmith, NSW
Jolyon Jay Bond, Queensland
Peter Michael Casey, Queensland
Kiew-Chai Law, NZ

Cecil Gray Prize
The Court of Examiners recommended that the Cecil Gray Prize for the half year ended December 31, 2014, be awarded to:

William Murray Ross, Victoria

Dr Will Ross studied medicine at the University of Melbourne, Victoria, and trained in anaesthesia with the Northwestern Rotational Training Scheme, working in Victoria and remote Queensland. He has professional interests in teams, resuscitation, and critical care. Grateful for the support of colleagues, he is also thankful for friends and family for tolerating him through months of study.

The Court of Examiners recommended that the Cecil Gray Prize for the half year ended June 30, 2014, be awarded to:

Dr Greg Bulman, Victoria

Dr Gregory Bulman, from the Alfred Hospital in Victoria, won the Cecil Gray Prize, awarded for the highest marks in the ANZCA final examination, in May 2014.

Dr Bulman studied at Nottingham University, UK, and worked in the National Health Service for two years before moving to Melbourne and commencing his anaesthesia training. He is interested in maintaining a broad skill set as a generalist and plans to undertake fellowships in paediatric and regional anaesthesia.

Evaluating the curriculum – quality improvement and seeking feedback

Two-years have passed since the introduction of the 2013 curriculum and ANZCA is committed to its ongoing improvement. This includes looking at the learning outcomes, the learning and assessment tools and processes, the training portfolio system (TPS) and the information available in the handbook for trainees, supervisors and tutors.

Evaluation is overseen by the Education, Training and Assessment Development Committee (ETADC), chaired by Dr Damian Castanelli (Victoria) and a series of activities have been under way throughout the year. The activities are running according to the five-year evaluation plan developed by the former Assessments Committee, chaired by Associate Professor Jenny Weller (New Zealand). They are being completed in accordance with both the Australian Medical Council and the Medical Council of New Zealand requirements ANZCA adheres to, and also requests of the Education Training and Assessment Management Committee (ETAMC), chaired by Dr Rick Horton, which ensures the quality and feasibility of delivery of the curriculum is continually monitored and reviewed.

A series of evaluation activities have been completed throughout the year, including:

- Visits to hospitals and local committee meetings in every state and New Zealand by Education, Training and Assessments and Strategic Projects and Technology Office staff.
- Interviews with trainees, tutors and supervisors.
- Collation, review and analysis of feedback and inquiries via training@anzca.edu.au.
- Collation, review and analysis od director of professional affairs (DPA) (assessor) requests.
- Specific project groups established to analyse and review key areas of the curriculum in detail based on feedback triggering further investigation.

The focus of the evaluation has been on numerous areas, and on November 17 a group of key stakeholders including the ETADC and ETAMC chairs, a DPA (assessor), supervisors of training, trainees and staff attended a day workshop to review all feedback and decide where changes might be required or where other specific monitoring and evaluation is required.

Key areas being monitored this year include the analysis of feedback relating to introductory training, volume of practice requirements including cases and procedures minimum requirements and the workplace-based assessment run rate, the TPS functions, workload for supervisors, intensive care training and the curriculum in rural and metropolitan training.

The TPS is the tool that is crucial for effective training recording and monitoring. In 2015, a modular review of the TPS will be occurring in addition to the development of a product roadmap – this is a phased, feature-based approach to achieve the total state of TPS for the future.

Recording cases and procedures and time
From December 8, trainees will need to record training time (based on the number of weeks trainees complete at each placement/training site) within four weeks and all cases and procedures within 13 weeks of the experience occurring into the training portfolio system (TPS). Those who do not comply will be deemed to be on leave or to have applied for interrupted training. It is essential that trainees ensure their records are kept up to date to enable College assessors to evaluate training records and provides advice to trainees. As outlined in the annual training agreement, it is the trainee's responsibility to maintain accurate and timely records of their training experiences in the TPS.

The modular review due in 2015 will ensure gaps in functionality and improvements in usability are all reviewed comprehensively. Throughout the second half of 2014, a TPS strategic alignment activity has occurred to seek the desired features of the TPS from users – this occurred at local sessions with trainees and supervisors. This strategic planning combined with findings of the modular review will inform the TPS product roadmap.

Olly Jones
ANZCA General Manager, Education

Above: ANZCA staff present in New Zealand.

New approach for training site accreditation

A revised online system will simplify evaluation methods and be paper free.

In order to offer ANZCA's training program, a site needs to be accredited according to the approved standards and guidelines. ANZCA's accreditation process is manual and fragmented, resulting in labour intensive and sometimes inefficient practices. It also does not allow for insight into a hospital's performance during the seven-year accreditation period unless issues are raised and reported. Due to the manual nature of the existing process, hospital data often has to be re-collected, reviewed and re-validated, resulting in process overheads that can cause frustration among Fellows, trainees and ANZCA staff.

A new approach to training site accreditation will be launched in 2015. This approach combines a new online accreditation system, a revised datasheet supported by, and comprehensive reports based on, logged information from the training portfolio system. The revised process simplifies the evaluation of a training site with focus on the imperative aspects of ANZCA's training program. The technology is an easy-to-use, cohesive, online system that has been tailor made for training site accreditations and will enable the entire process to be paper free. In addition to revising the process and technology, the reports based on the information logged by the trainees will provide an insight into the culture and quality of training offered by the training site between accreditation visits, removing the need for trainee workload surveys from accreditation visits.

Fellows interested in going on hospital training accreditation visits on behalf of ANZCA are encouraged to apply to tac@anzca.edu.au.

The role involves being part of a training site accreditation team that undertakes on site visits under the direction of a team leader and contributing to reports for the Training Accreditation Committee. It also involves the participation in training workshops and keeping up to date with relevant ANZCA policy and processes. Fellows undertaking this role are eligible for continuing professional development points.

There will be a workshop held at ANZCA House on April 10 next year.

For more information on requirements or details of the workshop please visit the website or email tac@anzca.edu.au.

New education resources coming to Networks

The Education unit is launching three new learning resources in Networks, coming this month and early 2015.

Primary examination preparation resource

This new eLearning resource for the primary examination provides trainees with:

- **Insights into the exam process.**
- **Useful tips for preparing for the exam.**
- **Information about what happens on the day.**

The primary examination is a major milestone in a trainee's career and can involve months of study leading up to sitting the examination.

The resource will offer a series of videos showing simulated vivas with trainees and examiners, so trainees can watch example vivas but also see examples of some do's and don'ts.

Other videos present trainees and examiners sharing their personal insights about the examination and advice to trainees on how to best prepare.

To complement the online resources there will also be two webinars in 2015 for trainees, delivering practical advice and tips for the examination during a one-hour interactive session with a facilitator.

The resources will be an invaluable tool for trainees preparing for the examination. The resources were launched in Networks on December 8. Access the resources in the curriculum teaching and learning network under "Basic training".

Trainee orientation and support resources

These new resources for trainees will offer a range of tools, including:

- **Simple, practical advice and tips for trainees in each training period.**
- **An overview of the important training milestones.**
- **Advice on balancing work and life.**

The project group developing this resource is chaired by Dr Noam Winter, Co-Chair ANZCA Trainee Committee, Victoria. The resources are planned to launch in Networks early next year. Look out for them!

Supervisor orientation and support resources

Just some of the resources that will be available include:

- **Tips on co-ordinating your team.**
- **Information on providing support and education for team members.**
- **Easy-to-use checklists for staying on track with requirements.**
- **Advice on looking after yourself and trainees.**

Supervisors are vital to the ANZCA training program. The College is developing online resources to provide support for supervisors, in a simple and accessible format.

The resource will offer a wealth of information and also provide an online collaborative network for supervisors to share their experiences.

The project group developing this resource is chaired by Dr Emily Wilcox, Supervisor of Training, NSW. The resources are planned to launch in Networks early next year.

Maintaining the business records of the College in a digital world

ANZCA holds a substantial collection of records created since its foundation in 1992 and a rich collection of historical records accumulated by its forebear, the Faculty of Anaesthetists, Royal Australasian College of Surgeons, established in 1952.

For many years a professional archivist has managed ANZCA's business records and the historical records of the College. The recent review of the College archives has identified potential improvements, including the development of a new archival strategy, the separation of the ANZCA business and historical archive functions, and the updating of policies and procedures. As the College produces more information and records, particularly electronically through systems such as the training portfolio system and continuing professional development portfolio system, more attention is being given to the business records and archives.

Part-time College Archivist Fraser Faithfull is now focusing on the business records of the College and working with Monica Cronin, the Curator of the Geoffrey Kaye Museum of Anaesthetic History, to hand over responsibility for historical records. ANZCA's Honorary Archivist, Dr John Paull, and Dr Christine Ball, the Honorary Curator of the Geoffrey Kaye Museum of Anaesthetic History, also provide valuable assistance. The ongoing contribution of the members of the ANZCA History and Heritage Expert Reference Panel is gratefully acknowledged.

The review's recommendations were reinforced when Fraser attended the Australian Society of Archivists conference in Christchurch, NZ, which included presentations from organisations in a similar position. Today many organisations keep corporate records in electronic form and archivists work more to facilitate management of electronic records by the staff and business units that create and continue to access them.

The "digital archive" of the near future is likely to be a system for managing electronic records over time within an enterprise, rather than a physical entity in its own right. ANZCA is adjusting to these changes by engaging consultants to review the College archives, maintaining awareness of initiatives taken by other medical colleges, and keeping up with best practice in the archival sector.

The ANZCA Archives service is operating almost as usual while we implement changes:

- Several hundred boxes of archival records were sent to secure offsite storage this year. The space freed in the archive storeroom at ANZCA House has been used by the ANZCA Library, which in turn provided extra space for the new heritage centre in Ulimaroa. Staff in the Records Management unit can obtain Fellow records directly from the offsite facility while trainee records are updated and maintained onsite.
- The ANZCA Archive is now focused on managing the business records of the College while the management of the historical collection is moving to the Geoffrey Kaye museum. Examples of historical records include photographs held by the College of past events and people, biographical information relating to deceased Fellows, old College and Faculty documents and letters, and anaesthetic records created by significant people. Questions about historic records can be directed to Monica Cronin, Curator of the Geoffrey Kaye Museum of Anaesthetic History, at museum@anzca.edu.au.

Examples of ANZCA business records include ANZCA Council and committee deliberations, information about past College initiatives, and information about College prizes and awards. Contact ANZCA Archivist Fraser Faithfull, at archivist@anzca.edu.au.

- During late 2014 contractors assisted in developing a new business records-focused strategy and update our policies and procedures relating to the management of business records and historical records. Our focus is on creating practical business solutions, which respond to the ways ANZCA staff create, store and search for their electronic documents.

Fraser Faithfull,
ANZCA Archives

Ultrasound training in Papua New Guinea

"Their flexibility was evident when the chickens used to practise needle technique... later wound up in a massive cauldron to be served for dinner."

PNG training a study in enthusiasm and flexibility

"More information about the ANZCA Overseas Trainee Scholarship and past recipients is available from www.anzca.edu.au/fellows/community-development/overseas-aid.html"

On August 25 we started our long anticipated journey to attend the 29th annual meeting of the PNG Anaesthetic Society held in the highland city Goroka.

Joining me on the flight were PNG veteran and difficult airway specialist Dr Chris Acott, recognised researcher and anaesthetist Professor Andre van Zundert, his wife Vera Meussen, and Storz representative Jayne Thompson, who has visited PNG numerous times and has supported multiple airway workshops in her effort to help out the local medical community.

Also on board was roughly 100 kilograms of excess luggage, mostly thanks to Sonosite, which generously provided three M-Turbo Ultrasound machines and Blue Phantoms for workshops, but also because of the countless medical supplies contributed by donors.

To understand the significance and importance of our support for the local anaesthetic society I would like to draw your attention to the following facts: In a country with a population of 8.1 million only 22 (!) are trained anaesthetic specialists while a further eight (!) are employed as registrars. This alone might shock any anesthetist in the western world, however it gets even more challenging for this brave group of 30.

According to PNG Health Minister Michael Malabag, quoted in an issue of Island Business in October 2013, "Papua New Guinea has the highest incidence of mouth cancer in the world." (25 per cent of all cancers in PNG are oral cancers). But the world does not end here for anesthetists in PNG. Questions such as: "How would you anaesthetise a patient with a spear sticking out of his chest vibrating in a sinus rhythm?" might sound like something from a Monty Python movie but reflects the day-to-day life in PNG, where fights to death between rival tribes – there are more than 500 tribes speaking an astonishing 800 identified languages – are a regular occurrence. (Ask Pauline Wake for the video should you ever meet her).

After living in PNG in the 1970s, Dr Acott has revisited many times to work with the PNG Anesthetic Society in their efforts to become experts in anaesthesia and, in particular, airway management. Considering the high number of oral and throat cancers, often caused by excessive chewing of betel nut, now banned in Port Moresby, this is key to helping as many people as possible.

I joined Dr Acott in 2013 to hold presentations and workshops on difficult airway management. I quickly learnt the anaesthetists in PNG are not only very dedicated and creative in their approach, but also driven to progress. It was easy for me to commit to organise and lead the first ultrasound-guided workshops on PNG soil.

Working with the team was great fun. I can hardly imagine a better audience than one that is as enthusiastic, driven to learn, inquisitive and, by the nature of their daily lives, all for hands-on experiences. Their flexibility was evident when the chickens used to practise needle technique and during the first round of workshops using ultrasound machines later wound up in a massive cauldron to be served for dinner.

Of course, as it goes in PNG, many other topics were discussed and we are already in the planning phase for 2015.

I warmly thank everyone who has supported our journey, especially to the ANZCA Overseas Aid Committee, which supported my trip through the ANZCA Overseas Aid Trainee Scholarship.

Yasmin Endlich
Overseas Aid Committee 2014 Trainee Scholar

Clockwise from top left: Dr Harry Aigeeleng, Dr Nora Dai practicing ultrasound on a volunteer at Goroka Hospital with Dr Yasmin Endlich; Daisy Sibun, Anaesthesia Scientific Officer, practicing intubation at Goroka Hospital; Chicken cooking on open fire; Dr Chris Acott, airway lecture for Anaesthetic Scientific Officers at Goroka Hospital.

25 years of dedicated service

This year, Dr Christine Ball celebrates 25 years of involvement with ANZCA. She was appointed assistant honorary curator of the Geoffrey Kaye Museum of Anaesthetic History in 1989 and is now the honorary curator.

Below from left: Dr Christine Ball; Dr Kester Brown, Brazilian anesthesiologist and equipment developer Kentaro Takaoka and Carlos Parsloe – past president of WFSA and the only South American Honorary fellow of ANZCA; masks and inhalers.

All historians must receive the spark of interest from somebody or somewhere to initiate their interest. Maybe it is a visit to the museum, such as Dr Rod Westhorpe organised for 25 years for the registrars at the Royal Children's Hospital, or making a presentation or attending a tutorial or journal club which we encouraged since at least 1968. It is fortunate that Dr Christine Ball was inspired to participate and help Dr Westhorpe with the Geoffrey Kaye Museum of Anaesthetic History since 1989. They prepared photographs of items from the collection to illustrate the front cover of *Anaesthesia and Intensive Care* and wrote cover notes for them. This was a major task requiring research on each subject for every issue for 22 years. It culminated in the publication of a beautiful book *Historical Notes on Anaesthesia and Intensive Care* (2012). Chris made a major contribution to this work.

Dr Ball has made a major study and created a web page about one of the early greats of anaesthesia, Joseph Clover. Imagine the excitement when they found a whole diary of Clover's from 1846-53 in a frame they thought contained a couple of pages of faded notes in the Geoffrey Kaye museum collection. Apparently this was gifted by Professor Robert Macintosh (Oxford) to Geoffrey Kaye. This sparked an intense interest for Dr Ball which she pursued in Britain and the US. She has met Joseph Clover's great grandson in England and was awarded a Paul M. Wood Scholarship to research four of Clover's diaries (1850-52 and 1867) and lecture notes from 1846 at the other major anaesthetic history collection in the Wood Library Museum in Park Ridge, Illinois (Chicago). The local diary shows his beautiful hand written notes which illustrate the work of a close observer of the early days of anaesthesia.

Another interest of Dr Ball's was the Forreger Company and the anaesthetic equipment and machines which they made. This company was founded in a barn in Long Island, New York a century ago, in 1914, and became a leading equipment company for the next half century. I used one of their machines in Vancouver when I was training there - they had a wide variety of equipment so that their trainees would be versatile with the use of different equipment. Gwathmeys water depression flowmeter and Water's soda lime canister were among their products. One of their midget machines found its way to Western Australia.

Historians can generate international good will which became evident at the time of the World Congress of Anaesthesiology in Buenos Aires in 2012. Dr Ball was in attendance with Dr Westhorpe. They were presented with two inventions of a famous Brazilian anesthesiologist, Kentaro Takaoka – one of his compact ventilators and a universal vaporizer. In addition, they received one of two remaining original copies of Revista Argentina - Anestesia Y Analgesia (April 1939) and a copy of what was probably the first ever film made of an anaesthetic in 1899. These are immensely valuable additions to the Geoffrey Kaye museum and are examples of how advanced some of the South American anesthesiologists were in earlier years of the specialty. On one of my lecture tours in South America in 1995 (where I had my slides and videos in Spanish) I had the privilege of meeting Takaoka with Carlos Parsloe, a former president of the World Federation of Societies of Anaesthesiologists (WFSA).

Dr Ball did most of her anaesthesia training at the Alfred hospital. She was also a registrar at the Royal Children's Hospital. In 1987, she presented her first paper at the International Symposium on the History of Anaesthesia in London. She gained her FFARACS in 1988. In 1989 she was appointed assistant honorary curator of the Geoffrey Kaye museum, the beginning of, so far, 25 years working with the College. She was appointed honorary curator of the Geoffrey Kaye Museum in 2013. During this time, Dr Ball also held the position of honorary archivist from 1999-2005, and then from 2010-2013. She also gained her MD at Monash University in 2013 for her thesis "A History of Anaesthesia". The same year she contributed to the success of a fascinating "Geoffrey Kaye Workshop "following the International Symposium in Sydney. Many items of interest were displayed including Clover's notebook and an amazing array of anaesthetic delivery systems.

Over the past years, Dr Ball has interviewed a number of Australian and New Zealand Fellows who have made a significant contribution to anaesthesia and pain medicine. What started with informal recordings using her own video camera has now developed into the high quality "Anaesthesia stories" series of oral histories, displaying her fine interview skills.

We are very fortunate to have such a dedicated person as Dr Ball, who has already made a great contribution, to be honorary curator of the museum. We congratulate her and wish her well for the future.

We must follow the traditions of Geoffrey Kaye, former curators, Dr Peter Penn and Dr Westhorpe and others, such as Dr Gwen Wilson, Dr Jeanette Thirlwell, Dr Richard Bailey and Dr Michael Cooper, who have built a lively tradition of interest in the history of anaesthesia in Australia. We must continue to teach history to our trainees and give them an appreciation of the relevance and interest in the history of the development of our specialty. We need to fire up some younger anaesthetists so that they are ready to take up the reins when the current historians move on.

Dr Kester Brown
Melbourne, Victoria

Kester Brown has been involved in teaching and promoting the history of anaesthesia for 50 years.

The Geoffrey Kaye legacy

Building a museum collection

The Geoffrey Kaye Museum of Anaesthetic History had its beginnings as the personal collection of Dr Geoffrey Kaye. Over the years Dr Kaye swapped and traded objects with international collectors, as well as growing his personal collection through purchase and gift.

The museum has continued this way throughout much of its history. Donations often have been ad hoc, sometimes posted or delivered, sometimes appearing as if by magic. This also has been the way many internationally acclaimed collections have been built.

Modern museums require every object to earn its place in their collections. Selection criteria applied throughout the sector include relevance, significance, provenance and documentation, condition (intactness and integrity), interpretive potential, rarity, representativeness, duplication and legal requirements. Having these criteria enables museum curators to consider the objects in a more objective fashion.

Museums around the world ask how potential donations stack up against these criteria and the Geoffrey Kaye Museum is no exception. As we strive toward achieving accreditation via the Museums Australia (Victoria) Museum Accreditation Program, this question becomes increasingly important.

This year the museum was offered a Lidwill machine. Although not perfect, it was essentially intact, came with excellent, easily documented provenance, the legal owner was offering complete transfer of ownership, and it would fill a recognised gap in the collection. The museum happily accepted the offer and the Lidwill machine is prominently displayed in the new museum space.

Sometimes significant objects are hidden away for generations, emerging as a result of relocation, a departmental reshuffle or a good, old-fashioned clean out of a dark, dusty room.

Despite having a collection of more than 5000 objects, there remain areas with little or no representation in the Geoffrey Kaye Museum of Anaesthetic History, including significant milestones in the specialty. Equally, some areas are over-represented and, in time, these will be measured against the criteria.

The history of anaesthesia and pain medicine is rich and diverse and there will always be ways to improve the collection.

If you have an object you think may be of interest, please contact the museum via email museum@anzca.edu.au, tell us what you have, include a photo if possible and as much information as you have available.

Monica Cronin
Curator, Geoffrey Kaye Museum of Anaesthetic History

Kaye portrait gets a face lift

Following the 1988 annual general meeting of the Faculty of Anaesthetists, Royal Australasian College of Surgeons, the Australian Society of Anaesthetists (ASA) presented to the Faculty a photographic copy of Robert Hannaford's portrait of Dr Geoffrey Kaye. (Robert Hannaford was also a 2014 Archibald Prize finalist with a portrait of former ANZCA President, Professor Kate Leslie).

While always considered a gem, in the years that followed, its high profile location was also heavily sunlit and framing had been done without the benefit of conservation glass. The reproduction continued to fade and discolour until it began to look more like a ghostly apparition than a copy of an oil painting.

As part of ANZCA's recent project to relocate the Geoffrey Kaye Museum of Anaesthetic History, it was decided the ASA would be asked to help arrange a new reproduction. The ASA agreed, the artist provided written permission to reproduce his work and the Sydney-based digital reproduction company provided excellent service, complete with postage to Melbourne.

A local framer was able to remove the print, the frame was reused, conservation glass was added and the College made a solemn vow not to place the work in direct sunlight ever again. The portrait now resides in the gentle light of the foyer of ANZCA's historic Ulimaroa building.

New online books and new books for loan

New online books

Online textbooks can be accessed via the library website: www.anzca.edu.au/resources/library/online-textbooks

Anesthesia equipment simplified / Rose, Gregory L.; McLarney, J. Thomas. 1st ed, New York, NY: McGraw-Hill Education, 2014.

Atlas of interventional pain management / Waldman, Steven D., 4th ed, rev., Philadelphia, PA: Saunders/Elsevier, 2015.

Cardiovascular physiology / Mohrman, David E; Heller, Lois Jane., 8th ed, New York: McGraw-Hill, 2014.

Clinical neuroanatomy / Waxman, Stephen G., 27th ed, New York: McGraw-Hill, 2013.

Gastrointestinal physiology / Barrett, Kim E., 2nd ed, New York: McGraw-Hill, 2014.

Miller's anesthesia / Miller, Ronald D [ed]; Eriksson, Lars I [ed]; Fleisher, Lee [ed]; Wiener-Kronish, Jeanine P [ed]; Cohen, Neal H [ed]., 8th ed, Philadelphia, PA: Elsevier Saunders, 2015.

Understanding global health / Markle, William H. [ed]; Fisher, Melanie A. [ed];Smego Jr, Raymond A. [ed]., 2nd ed, New York, NY: McGraw-Hill, 2013.

Exciting new collection of online books

Fellows and trainees of the College now have access to a massive collection of online books from Springer. It includes more than 160 anaesthesia and pain-related books from a comprehensive collection of more than 4500 medical titles. Highlights from the Springer Medical Collection include:

- Clinical Anesthesiology: Lessons Learned from Morbidity and Mortality Conferences. Jonathan L. Benumof (2014).
- Comprehensive Guide to Education in Anesthesia. Elizabeth A. M. Frost (2014).
- Acupuncture for Pain Management. Yuan-Chi Lin, Eric Shen-Zen Hsu (2014).
- The Wondrous Story of Anesthesia. Edmond I Eger II, et al (2014).
- Anesthesia for Trauma. New Evidence and New Challenges. Corey S. Scher (2014).
- The Difficult Airway. An Atlas of Tools and Techniques for Clinical Management. David B. Glick, Richard M Cooper, Andranik Ovassapian (2013).
- Pain Management: Essential Topics for Examinations. Rajesh Gupta (2014).
- Perioperative Addiction. Clinical Management of the Addicted Patient. Ethan O. Bryson, (2012).
- Perioperative Two-Dimensional Transesophageal Echocardiography. A Practical Handbook. Annette Vegas (2012).
- Crisis Management in Acute Care Settings. Human Factors, Team Psychology, and Patient Safety in a High Stakes Environment. Michael St Pierre, Gesine Hofinge, et al (2011).
- The Comprehensive Textbook of Healthcare Simulation. Adam I. Levine, et al (2013).
- Practical Handbook of Thoracic Anesthesia. Philip M. Hartigan (2012).
- Case Studies of Near Misses in Clinical Anesthesia. John G. Brock-Utne (2011).
- Principles and Practice of Anesthesia for Thoracic Surgery. Peter Slinger (2011).
- Perioperative Medicine. Steven L. Cohn (2011).
- Drug Allergy. Clinical Aspects, Diagnosis, Mechanisms, Structure-Activity Relationships. Brian A. Baldo, Nghia H Pham (2013).
- Obstetric Anesthesia Handbook. Fifth Edition. Sanjay Datta, Bhavani Shankar Kodal, et al (2010).
- Echography in Anesthesiology, Intensive Care and Emergency Medicine: A Beginner's Guide. Frédéric Greco (2010).

Access the books through the ANZCA Library online textbook page: www.anzca.edu.au/resources/library/online-textbooks

New online journal - Minerva Anestesiologica

The ANZCA Library has added a new subscription to the journal collection, which enables online access to a difficult-to-source resource. *Minerva Anestesiologica* is the journal of the Italian National Society of Anaesthesia, Analgesia, Resuscitation and Intensive Care (SIAARTI). *Minerva Anestesiologica* publishes scientific papers on anaesthesiology, intensive care, analgesia, perioperative medicine and related fields.

Access through the ANZCA Library online journal list: www.anzca.edu.au/resources/library/journals

New Medical Subject Heading (MeSH) search terms for 2015

MeSH is used when searching the Medline and some other medical databases. The list of terms for 2015 has been circulated and includes new terms, which may be useful when searching in the areas of anaesthesia and pain medicine:

- Brachial plexus block.
- Cervical plexus block.
- Culturally competent care.
- Palliative medicine.
- Pre-exposure prophylaxis.
- Robotic surgical procedures.

More information at: www.nlm.nih.gov/pubs/techbull/so14/so14_2015_mesh_avail.html

New ECRI safety publications

Operating room risk management articles:

- Overview of anesthesia safety (executive summary, October 2014).
- Awareness during anesthesia (executive summary, October 2014).

Latest anaesthesia and pain medicine research

All articles can be sourced in fulltext from the library's online journal list:

www.anzca.edu.au/resources/library/journals

Faraoni D, Cacheux C, Van Aelbrouck C, Ickx BE, Barvais L, Levy JH. Effect of two doses of tranexamic acid on fibrinolysis evaluated by thromboelastography during cardiac surgery: A randomised, controlled study. Eur J Anaesthesiol (EJA). 2014;31(9):491-498.

Abdel-Ghaffar HS, Kalefa MA-A, Imbaby AS. Efficacy of ketamine as an adjunct to lidocaine in intravenous regional anesthesia. Reg Anesth Pain Med. 2014;39(5):418-422.

O'Neill S, Manniche C, Graven-Nielsen T, Arendt-Nielsen L. Association between a composite score of pain sensitivity and clinical parameters in low-back pain. Clin J Pain. 2014;30(10):831-838.

Garnier M, Bonnet F. Management of anesthetic emergencies and complications outside the operating room. Curr Opin Anesthesiol. 2014;27(4):437-441.

Ding T, Wang D-X, Qu Y, Chen Q, Zhu S-N. Epidural labor analgesia is associated with a decreased risk of postpartum depression: A prospective cohort study. Anesth Analg. 2014;119(2):383-392.

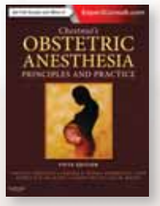
Garavaglia MM, Das S, Cusimano MD, Crescini C, Mazer CD, Hare GMT, et al. Anesthetic approach to high-risk patients and prolonged awake craniotomy using dexmedetomidine and scalp block. J Neurosurgical Anesthesiol. 2014;26(3):226-233.

Schonwald G, Skipper GE, Smith DE, Earley PH. Anesthesiologists and substance use disorders. Anesth Analg. 2014;119(5):1007-1010.

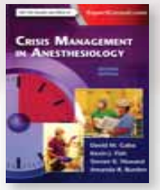
Wallin C-J, Kalman S, Sandelin A, Färnert M-L, Dahlstrand U, Jylli L. Creating an environment for patient safety and teamwork training in the operating theatre: A quasi-experimental study. Med Teach. [Online ahead of print].

New books for loan

Books can be borrowed via the ANZCA Library catalogue: www.anzca.edu.au/resources/library/book-catalogue.html



Chestnut's obstetric anesthesia: principles and practice / Chestnut, David H [ed]., 5th ed, Philadelphia, PA: Mosby Elsevier, 2014. (Also available online)



Crisis management in anesthesiology / Gaba, David M.; Fish, Kevin J.; Howard Steven K.; Burden Amanda R., 2nd ed, rev., Philadelphia: Churchill Livingstone, 2015. (Also available online)

Pain management: practical applications of the biopsychosocial perspective in clinical and occupational settings / Main, Chris J.; Sullivan, Michael J. L.; Watson, Paul J., 2nd ed., Edinburgh: Churchill Livingstone, 2008.

Contact the ANZCA Library
www.anzca.edu.au/resources/library
Phone: +61 3 9093 4967
Fax: +61 3 8517 5381
Email: library@anzca.edu.au

Special Interest Group events

Below from left: Mrs Roessler, Dr Peter Roessler, Ms Julie Kinloch, Dr Karen Ryan, Dr Neroli Chadderton (one of the meeting convenors) and Dr Harold Marsh; delegates at the meeting in Kingscliff, NSW.

Below from left: Pictures from the simulation workshop "Shades of grey – ABC or DNT?"; co-convenors Dr Nic Randall and Dr Dick Ongley.

Combined Special Interest Group meeting

The Medical Education Special Interest Group (SIG) convened the 2014 Combined SIG meeting, "Bridging the gap", in Kingscliff, NSW on September 19-21.

Professor Lambert Schuwirth, the first keynote speaker, spoke informatively on "bridging the gap between novice and expert", and "bridging the gap between learning and testing" in an entertaining and engaging manner.

The second keynote speaker was Mr Hugh Mackay. A prominent social researcher and author of several books, most recently *A good life*, Mackay spoke on "Generation Y: what did we expect?" and "Why people don't listen?" Both presentations stimulated interesting discussion and were enthusiastically received. Lessons learned for many attendees extended beyond clinical practice and into personal lives, with several anaesthetists remarking they now had a new understanding of their children!

This year the newest special interest group, Communication in Anaesthesia SIG was welcomed to the meeting. The chair of the SIG, Dr Allan Cyna, was a busy man: he ran the very popular workshop "practical hypnosis for the busy anaesthetist", gave plenary talks and chaired communication sessions. Speakers organised by the Communication SIG were Dr Francis Lannigan and Dr David Sainsbury who work together to teach non technical skills. Their talk was "Teams R Us – safer Australasian surgical teamwork", which created lively audience participation on communication between surgeons and anaesthetists.

In the Welfare session, Dr Robin Youngson, who is an anaesthetist as well as the co-founder of Hearts in Healthcare movement, spoke on burnout in mid career. He also facilitated an insightful "reawakening purpose" workshop.

In the Management session, topics were focused on the gap between the roles in the operating room. Ms Ruth Melville, the President of ACORN, spoke on the role of anaesthetic nursing, and Dr Peter Roessler from ANZCA spoke about the training and expectations of the anaesthetic assistant.

The 2015 Combined SIG meeting will be organised by the Anaesthetists in Management SIG and will be held in Noosa Qld on September 25-27. The theme is "Innovation – Leadership – Accountability". We look forward to seeing you in Noosa next year.

Dr Tomoko Hara and **Dr Neroli Chadderton**
Co-convenors

Perioperative Medicine Special Interest Group meeting

The Perioperative Medicine Special Interest Group (SIG) held its annual meeting at the Outrigger Resort and Spa Little Hastings Street, Noosa Qld, from September 12-13. This year the SIG held the meeting in conjunction with the College of Intensive Care Medicine (CICM) Perioperative SIG and was entitled "Futile surgery: Avoiding unnecessary harm". The meeting was well supported with close to 150 delegates in attendance.

The venue and location for the meeting was changed this year to accommodate the increasing numbers and to offer more problem-based learning discussions. This year's meeting focused on the controversial theme of futile surgery, while still providing plenty for those interested in everyday practical perioperative issues.

Invited speakers included Dr Julie Mundy (cardiothoracic surgeon) and Mr Mohammed Ballal (general surgeon), who examined the concept of futile surgery from their perspectives. Dr Paul Lane (intensive care) and Dr Michael Putt (respiratory physician/intensivist) examined preoperative evaluation and futility in intensive care treatment. Other topics covered included perioperative stroke prevention, perioperative glucose control, palliative care for futile patients, and functional recovery from surgery.

This year the meeting offered a perioperative simulation training workshop, which was very well received by delegates.

A big thank you to the Perioperative Executive Committee and all our wonderful speakers who give their time freely to make the event possible.

Dr Dick Ongley, Co-convenor and Chair, Perioperative Medicine SIG

Dr Siva Senthuran, Co-convenor Chair, CICM Perioperative Medicine SIG

Dr Nic Randall, Co-convenor

New Zealand news

Events hit the right note

Recent events held in New Zealand have been well subscribed and well received.

The Foundation Teacher Course, held in Wellington September 17-19, attracted the maximum 18 participants keen to know more about the doctor as educator, planning effective teaching and learning, feedback to enhance learning, interactive learning and teaching, teaching in the clinical setting, teaching practical skills, authentic assessment and clinical supervision.

In 2015, there will be a Foundation Teacher Course in Auckland (October 7-9), online courses starting on March 16 and July 13, and courses also in Adelaide, Hobart, Sydney and Perth. Registration for all courses closes on February 27. See the ANZCA website for more information.

The New Zealand Education Sub-Committee workshop for supervisors of training on October 20 drew around 30 attendees, with every training site in the country represented. Both the workshop and meeting that followed gave them plenty of opportunity to discuss various issues in depth, with the training portfolio system (TPS) dominating. Attendees found it valuable to have access to head office staff: Dean of Education Dr Ian Graham (via Skype) speaking about the vision and opportunities for ANZCA from a New Zealand perspective; General Manager Education Oliver Jones (in person) specifically addressing concerns with the 2013 curriculum and TPS; and General Manager Training & Assessments Lee-Anne Pollard (by phone) outlining three key training and assessment updates including applications for Provisional Fellowship, exam remediation interviews and expectations around trainees recording time in the TPS.

The NZ National Committee's decision to re-establish a forum for clinical directors of New Zealand's anaesthesia departments to connect with each other and the College proved popular, with more than 20 clinical directors or deputies

attending and all rating it very highly. Held in Wellington on September 26, the morning sessions provided updates on College matters followed by discussion about workforce issues, anaesthetic assistants and employment matters. In the afternoon, there was a workshop on the utility of system tools in healthcare. Participants said that one of the day's most beneficial aspects was the chance to meet colleagues and to benefit from their collective wisdom and experience. They have asked ANZCA to establish a network so they can maintain contact and to hold a clinical directors' meeting in person at least annually.

November 15 saw the fourth Part 3 course in action, back at Middlemore Hospital, with 23 of the 24 places filled. Designed for advanced trainees about to make the transition to being specialists, the course offered interactive sessions on such topics as CV/interview skills, where FANZCA can take you, "A day in the life of ... (various anaesthetists)" and "Things I wish I had known". The informal atmosphere encouraged trainees and specialists alike to share information, and the breaks and dinner that followed provided good networking opportunities.

By the end of November, there were 40 registrants for the inaugural ANZCA NZ Anaesthesia Research Workshop being held at Auckland City Hospital on December 4. The workshop brings together internationally-recognised New Zealand researchers in anaesthesia to provide a guide for specialists, trainees and research nurses on how to become involved with and develop quality research. It will also provide an opportunity for novices to seek guidance and to network with research peers. In the afternoon, there will be a "Dragon's Den"-type session, where participants present their research or ideas to a panel of experts to critique.

Five visiting lecturers available for 2015

The NZ Anaesthesia Education Committee has approved five visiting lecturers for 2015 under its NZ Anaesthesia Visiting Lectureship program. Those awarded lectureships are:

- **Dr Emma Patrick**, Taranaki Base Hospital, with the topic "Blood topics/transfusion update", a presentation described as a "useful update on very relevant topics that are constantly evolving and present to us frequently in our everyday practice".

- **Dr James Cameron**, Hutt Valley DHB, "Simple steps to a safer block", a presentation in which Dr Cameron shares knowledge he acquired during his recent fellowship studying regional anaesthesia in Canada.

- **Dr Doug Campbell**, Auckland DHB, "Changing practice with large trials", a presentation that looks at outcomes research through vignettes of current and future clinical trials addressing simple questions on depth of anaesthesia, maintenance oxygen therapy and intra-operative haemodynamic management.

- **Dr Ben Griffiths**, Auckland City Hospital, "Emergency laparotomy perioperative outcome and quality improvement pathways: a United Kingdom and New Zealand perspective", a talk that utilises Dr Griffiths' experience in being a clinical lead for the design and implementation of an emergency laparotomy quality improvement project, when he was working as a consultant anaesthetist in the UK.

- **Dr Jeanette Scott**, Middlemore Hospital, "What is new in difficult and failed airway algorithms", a presentation that builds on Dr Scott's airway fellowship in Canada and subsequent work on the Canadian Airway Focus Group guidelines for difficult airway management, as well as her international teaching experience in airway management and airway skills.

Under the visiting lectureship program, visiting lecturers give their presentations at two other centres in New Zealand.

In 2013 and 2014, some hospital departments have combined forces to offer a regional meeting utilising two lecturers on the same day and inviting anaesthetists from several different hospital departments to an education session. Having five lecturers available in 2015 will provide even more opportunities for such innovative arrangements.

New Zealand departments who would like to host one (or more) of the above lecturers in 2015 should contact Rose Chadwick at nzaec@anaesthesia.org.nz or phone Rose at 04 495 9785.

New Minister of Health

Dr Jonathan Coleman has been appointed Minister for Health following the resignation of Tony Ryall at the September election. Dr Coleman took his medical degree at Auckland University and has worked as a doctor in New Zealand, the UK and Australia. He obtained an MBA in London in 2000 and returned to New Zealand, working as a consultant on health sector issues and as a part-time general practitioner in South Auckland. Dr Coleman has been the MP for the Northcote seat since 2005, and has been in the National Government since 2008, serving in the cabinet since then in various roles, including as associate health minister (2008-11).

South Island-wide systems rolling out in 2015

The South Island Alliance, which consists of the five South Island district health boards, is moving closer to a single repository for clinical records and has been given ministerial approval for the introduction of a single patient information system to all South Island hospitals.

The South Island clinical workstation known as Health Connect South is due to be rolled out to the final two South Island district health boards, Southern and Nelson Marlborough district health boards in the first half of 2015, adding them to the existing implementation within the Canterbury, South Canterbury and West Coast district health boards.

The system will provide clinicians with access to results, reports and encounters, and they will be able to search and display clinical documentation as well as laboratory results from one regionally accessible interface. Health Connect South will aggregate information that is currently stored in many different systems and present it in a single view for clinicians. The system is expected to make it easier for patients and district health board staff to move around the region.

Announcing the new patient IT system, then Health Minister Tony Ryall said the South Island Patient Information Care System would connect hospitals and health services in the South Island so that health professionals could share information securely and provide patients with better care. It will mean each district health board's patient information system is replaced with a single regional system. It will also be able to manage patient appointments, admissions, discharges, and transfers.

The system will be introduced throughout South Island hospitals in stages, beginning in 2015 with Burwood Hospital in Christchurch and then with hospitals in the Nelson/Marlborough region.

Photos at top left: the well-received Clinical Directors' meeting; participants at the highly-rated Part 3 Course appreciate the knowledge of the panel; and ANZCA General Manager, Education Olly Jones is on hand to answer questions at the supervisors of training workshop.

Australian news

South Australia and Northern Territory

The First Flinders Resuscitation Refresher Course for Anaesthetic Specialists

The first Resuscitation Refresher Course for anaesthetic specialists was held on November 8. The course was held in the operating theatre complex at Flinders Medical Centre, and was made available to specialists and GP anaesthetists from Adelaide and surrounding areas.

Participants had access to a specifically constructed website in the days leading up to the course. They were able to review current ALS guidelines and information on defibrillator safety. Multiple-choice questions with detailed, referenced answers were available for those who wished to test their understanding. Finally, there was an outline of the aims of the course together with information on what to expect from the course.

On the day, participants practiced their skills and tested their knowledge in four scenarios, two in the operating theatres and two in the recovery rooms. Everyone had the opportunity to take on the role of lead anaesthetist in at least one scenario whilst assisting or observing in others. Operating department nursing staff kindly gave up their Saturday morning to play their usual roles in each scenario. Discussions held after each scenario, were informative, with participating specialists bringing with them a wealth of knowledge and experience.

Simulation-based training has the potential to be quite confronting to those involved. With this in mind, participants signed a confidentiality agreement at the start of the morning and it was made clear to all that there was no element of formal assessment involved, simply the opportunity to rehearse the management of a rare complication of anaesthetic practice in a secure learning environment.

Feedback at the end of the morning was informative and encouraging. The organising committee aim to run this course regularly to provide specialists with the opportunity to refresh their ALS skills and add to their CPD portfolios.

Finally we would like to acknowledge the effort and dedication of the anaesthetists, nursing staff and anaesthetic technicians in the setting up and running of this course, and thank the participants for their enthusiasm and willingness to embrace simulation-based training.

NAP 5 Accidental Awareness under General Anaesthesia

The ANZCA/ASA combined CME meeting was held on October 29 at the Women's and Children's Hospital. The last meeting of the 2014 evening meeting series was well attended with 85 locals and 21 from remote sites Alice Springs, Darwin and Mount Gambier Hospitals. Guest speaker Dr Debbie Knight, FANZCA, spent five years in the air force as a squadron doctor, including missions to Bougainville, East Timor, Singapore and Baghdad. She studied anaesthetics in Adelaide and Darwin and now works as a full-time partner in private practice. Dr Knight delivered an excellent presentation, opening with a historical story of Frances Burney, an 18th century English novelist's personal account of having a breast surgically removed without anaesthetic due to suspected breast cancer. Burney was later able to describe the operation in detail, since she was conscious through most of it as it took place before the development of anaesthetics. Despite advances in anaesthesia, which in a 2007 BMJ poll was voted the third greatest advance in medicine after sanitation and antibiotics, a hauntingly familiar tale was told. Dr Knight went on to discuss more recent accounts of accidental awareness under anaesthesia, relevant studies and their outcomes.

The SA & NT CME Committee would like to thank all of the contributing speakers and corporate supporters over the 2014 CME series, as without their valuable support these important medical education meetings could not go ahead.

Above: Guest speaker Dr Debbie Knight. Inset: Historical portrait of 18th century English novelist Frances Burney.

Queensland

FPM pre-exam short course

This three-day course was held in Brisbane from September 19-21. A record 41 people attended this course which was again held in Brisbane for the fourth consecutive year. The FPM Queensland Regional Committee would like to thank the many course presenters together with the VIVA examiners, course convenors Dr Richard Pendleton and Dr Frank Thomas and Faculty staff for their commitment in bringing this course together over this period.

We understand the course format will change in line with the new curriculum and be hosted by another state.

Queensland weekend residential primary viva course

This course was held mid-September in the Queensland office. The number of candidates accepted into the course is limited by the number of doctors available as examiners. The course offers intensive VIVA practice to regional candidates who have been invited to sit a VIVA in Melbourne. Initial regional applications are accepted from Queensland and then from other state's regional areas if examiners are available. The other aim is to provide more time for formal feedback on presentation skills, which is rostered into the timetable.

The course is held over one and a half days and is broken into three sessions with some examiners opting to attend the full day and with some attending a single session and we are grateful for all assistance.

I would like to invite examiners to assist in 2015. The dates set for this course are:

March 28 and 29.

September 12 and 13.

Email: qldevents@anzca.edu.au

Dr Helen Davies
Course Convenor

Tasmania

Unique airway workshop in Hobart

For the first time in Tasmania, Hobart-based otolaryngologists and anaesthetists came together to present a multi-disciplinary workshop on the "Management of the difficult airway".

There was high demand, with the workshop being fully subscribed. The thirty registrants included anaesthetists, surgeons and intensivists from all states of Australia, as well as New Zealand.

Held at the impressive Medical Science Precinct in Hobart, the day commenced with lectures on identifying and managing the difficult airway from both a surgical and anaesthetic perspective. This was followed by hands-on workstations utilising cadaveric specimens to help hone practical skills. These stations focused on topics such as surgical anatomy; video laryngoscopy/direct laryngoscopy; fibre-optic intubation/ rigid bronchoscopy; jet ventilation; as well as emergency cricothyrotomy and tracheostomy. Following lunch there was a scenario-based workshop organised for anaesthetists.

The course was jointly convened by Dr Michael Challis, anaesthetist and Dr Ana Nusa Naiman, otolaryngologist, both based at the Royal Hobart Hospital. Dr Naiman said that the workshop provided a great pre-laryngology conference opportunity for surgical registrars to gain hands on experience.

Feedback was very positive. Participants valued the small workshops that allowed plenty of individual hands-on learning; the opportunity to learn in a multi-disciplinary environment, and the opportunity to practice airway techniques on cadavers.

A similar airway workshop, purely for anaesthetists will be held as part of the Tasmanian 2015 ASM on February 21 and 22. Dr Mike Challis greatly appreciated the time and effort contributed by the entire faculty. He explained that lessons learnt from this first workshop would help ensure that the February workshop will be just as positive for all participants.

Australian news (continued)

Victoria

Victorian quality assurance meeting

The final quality assurance meeting for the year run by the Victorian Regional Committee for Victorian anaesthetists was held at ANZCA House on Saturday October 18.

The meeting began with four interesting presentations by four remarkable facilitators, Dr Balvindar Kaur, Dr Raymond Hu, Dr Geoff Steele and Dr Laurence Weinberg. Thirty-five anaesthetists with a broad range of experience attended the meeting, contributing their personal cases for discussion. The cases were all interesting and engaging. Once again ethical dilemmas, and resource allocation issues were prominent.

The meeting was made possible by the professionalism and dedication of College administrative staff.

I look forward to future quality assurance meetings in the coming year.

Dr Shiva Malekzadeh
Convenor, Victorian Regional Committee

Combined continuing medication education evening meeting

The chair of the Australian Society of Anaesthetists (ASA) Victoria Section, Dr Peter Seal, arranged for one of the international speakers at the recent ASA national scientific congress, Dr William Harrop-Griffiths, to speak at a continuing medication education evening meeting held at the College on October 8.

A consultant anaesthetist at Imperial College Healthcare NHS Trust in London, Dr Harrop-Griffiths' passion is regional anaesthesia. He is president of the Association of Anaesthetists of Great Britain and Ireland, chair of the Board of Trustees for its charity, the AAGBI Foundation, chair of the editorial board of the journal Anaesthesia and a co-opted member of the Council of the Royal College of Anaesthetists.

He enjoys public speaking and gave a most entertaining talk on "The revalidation experience in the United Kingdom: welcome to my nightmare!"

Above from left: Dr Raymond Hu, Dr Balvindar Kaur, Dr Shiva Malekzadeh, Dr Geoff Steele, and Dr Laurence Weinberg; discussion group at the meeting.

Western Australia

Updates in Anaesthesia meeting

Sir Charles Gairdner Hospital and the WA Continuing Education Committee welcomed 140 delegates to beautiful Bunker Bay for the ANZCA/ASA WA Updates in Anaesthesia Meeting in October. The topic of "Crisis management" was chosen to complement the "Emergency responses" component of the ANZCA CPD Program. In keeping with the ANZCA/FPM mission statement, "To serve the community by fostering safety and high quality patient care in anaesthesia, perioperative medicine and pain medicine", we are striving to ensure we remain up to date.

The "Emergency responses" CPD category ensures regular education in core emergency responses which may be encountered infrequently but remain essential to safe anaesthesia practice. The four areas, CICO, ALS, anaphylaxis, and massive blood loss were all covered by approved workshops and PBLDs within this meeting. Additionally, presentations from local experts throughout the weekend encouraged the delegates to consider planning and preparing for crises, and provide updates on the management of crises in various clinical contexts, including adult, paediatric, obstetric and outside areas.

The WA office would like to thank the speakers and workshop facilitators for sharing their expertise and for committing their time and effort to another successful Bunker Bay meeting. We are especially grateful to ANZCA President, Dr Genevieve Goulding who travelled from Brisbane to attend and present at the conference.

Above right: Delegates attending the Cardiac Arrest Workshop hosted by Tania Rogerson.

Other news

On November 14 Professor Britta Regli-von Ungern-Sternberg and Professor Michael Paech conducted the prize viva to determine the 2014 recipient of the ANZCA/ASA Gilbert Troup Prize in Anaesthetics. The successful candidate was Ms Natalie Smith.

The Faculty of Pain Medicine Exam was held on November 7, the final ASA Committee Meeting was held on November 17 and the final ANZCA Regional Committee meeting was held on November 24. The CME Committee met on November 24 to discuss the upcoming Autumn Scientific Meeting and to discuss feedback from the Country Conference.

Please place the following dates in your calendars for next year: Autumn Scientific Meeting – March 14, 2015 held at the University Club and convened by Dr Lip Yang Ng. Winter Scientific Meeting – July 4, 2015 held at the University Club and convened by Dr Michela Salvadore. Country Conference – October 16-18, 2015 held at Pullman Resort, Bunker Bay and convened by Dr Sam Hillyard.

GASACT Part 3 course was held on November 29 for all ANZCA/ASA trainees; we thank the sponsors for their support and hope the trainees enjoyed the session.

The Part 0 course will be held on February 5 for the ASA trainees and the ANZCA trainees Part 0 course will be held on February 6.

We would like to thank the members of our various committees for their support and attendance this year, as well as the delegates that have attended our conferences and the sponsors for their support. We've enjoyed working with you all and we look forward to another busy year in 2015.

Australian Capital Territory

2015 Art of Anaesthesia

The 2015 Art of Anaesthesia meeting will take place on Saturday March 14 at the John Curtin School of Medical Research, ANU. In addition, we will host two emergency response workshops (CICO and cardiac arrest) on Sunday March 15 at the ANU Medical School, Canberra Hospital campus.

The Art of Anaesthesia meeting will be held during the annual Canberra Balloon Festival, a spectacular event on the shores of Lake Burley Griffin. Bring the family, stay for the weekend and enjoy Canberra's unique attractions.

A full program of events and online registration for the meeting will be available soon. Look out for further details on the ANZCA ACT website: www.act.anzca.edu.au.

ACT Trainee Committee

In 2015 we will farewell three of our ACT Trainee Committee members – Dr Candida Marane, Dr Elizabeth Merenda and Dr Nathan Oates. Dr Marane is heading off to new adventures at Western Health in Melbourne as an Anaesthetic, Simulation and Medical Education Provisional Fellow. Dr Marane has been an integral part of the ACT Trainee Committee, most recently serving as chair, and will be greatly missed in Canberra. Dr Oates is also setting off on a new venture – this time to sunny Northern Territory where he will take up a position at the Royal Darwin Hospital. Dr Merenda will soon welcome a new little one to her family and will take maternity leave for the first part of next year. We wish Candida, Nathan and Elizabeth all the very best in the next phase of their lives and career and thank them for their hard work on the ACT Trainee Committee.

Australian news (continued)

New South Wales

Australian Medical Association careers day

Members of the ANZCA NSW Regional Committee and Trainee Committee attended the NSW Australian Medical Association careers day on August 30 at the Sydney Olympic Park.

The event was designed to introduce the various careers available to junior doctors and around 200 junior doctors and medical students attended.

The NSW ANZCA table was well attended and questions ranged from "How do I become an anaesthetist?" to "How do I pass the primary exam?" and "How do I get a trainee job?".

Highlight of the day was the retrieval demonstration by Careflight, who flew in to extricate an injured child from a mock-up playground accident.

This generated great interest in attendees when it was revealed that anaesthetists are part of the retrieval team. Many thanks to NSW ANZCA staff and doctors who gave up their Saturday to talk about anaesthetics.

"Are you aware?" meeting

The "Are you aware?" meeting was held at the Crowne Plaza Terrigal from November 1-2. The meeting attracted Anaesthetists from across Australia and New Zealand and was very well received.

Some of the topics that the keynote lectures covered were: NAP5; ACE-I – the pre-operative dilemma; a survival guide for pulmonary hypertension; Buccal oxygen delivery and dysanaesthesia.

The PBLDs and workshops were a great success and addressed new techniques and equipment facilitated by expert presenters. A highlight of the workshops was the massed CICO workshop run by Dr Andrew Heard.

We congratulate the NSW ACE committee, convenors and NSW ANZCA staff on the success of this event. They are already planning for next year.

Above from top: Dr Tony Padley running the videoscopes workshop; Dr Scott Fortey, Professor Jaideep Pandit, Dr David Elliott and Dr Craig Coghlan.

Dr Patricia Rae McDonald (nee Ford) 1918-2014

Dr Patty McDonald was born Patricia Rae Ford on January 31, 1918 in Bournemouth, England, when her New Zealand father, Allan Charles Ford, was abroad serving in WW1. He'd asked to be billeted with some pretty girls and so met Hildegarde Mary Reynolds. Patty was one when she met her father. After the war, the family sailed to Allan's family in Dunedin, New Zealand, where he became an architect. They then moved to Invercargill, where Allan established practice and had four more daughters – all redheads.

Patty's early education was fairly rudimentary, although she enjoyed writing stories for her younger sisters, was an avid reader and an excellent pianist. She graduated from Southland Girls' High School as dux and head prefect and went on to attend the University of Otago in Dunedin, studying medicine at a time when it was considered disadvantageous to educate women as they only went off to have families.

Patty had not studied sciences before – it was not taught to girls – so it was a steep learning curve. She was the only woman in her year and, being female, was not permitted to attend the sex education classes, though ironically, after qualifying in 1943, she was placed in a VD clinic just because she was a woman. Patty lived in at St Margaret's College and also continued her piano lessons, with a cousin who lived in Dunedin.

At age 23, Patty was placed at Ashburton Hospital during a diphtheria epidemic. There was just one other doctor – many of the male doctors had gone to war. Due to that shortage, the other doctor attended his graduation while Patty stayed back in Ashburton. Patty never quite got over having to tell a mother that her daughter had died of diphtheria.

While working as surgeon and anaesthetist at the same time, Patty lost a young patient. She felt she needed to understand anaesthetics better, and developed a strong interest. In those days, only chloroform and ether were used, though by the end of the decade chloroform was abandoned for being too dangerous.

Patty moved to Auckland in 1943 and worked at Auckland Public Hospital focusing on anaesthetics and working as an anaesthetics registrar 1946-1950. Auckland's anaesthetic department was established in 1947 with Dr Eric Anson as director and Patty as its first registrar. Her interest in anaesthesia saw her travelling to the UK in 1950 to further her studies, there being no graduate course in New Zealand at the time.

Following a locum at the Royal Infirmary of Edinburgh, she moved to London in 1950. London was still rebuilding after the blitz, suffering from smog, and rationing was still in place. She worked at the National Hospital for Nervous Diseases in Queen's Square, London, and graduated Diploma in Anaesthetics in 1952. While in Europe, she travelled extensively with friends, camping by the road.

In 1952, Patty returned to Auckland working in a team firstly as a junior specialist until 1954 and then as a senior specialist until 1958. She brought many advances from London and challenged the status quo. Anaesthetists had to travel between hospitals covering Greenlane Hospital, Middlemore Hospital, National Women's Hospital and Auckland Hospital, then all quite separately located.

During Patty's working life, anaesthesia made many advances, with anaesthetists being innovative about creating new equipment and improving understanding of anaesthetics. New gases were invented and improved upon. Patty invented a Luer-type needle, using dental equipment, and rubber tubing and valves. It was nicknamed the Model T Ford as it had three lines into one needle that stayed in the arm. Before this, multiple injections were needed.

Patty attained FFARCS in 1954, FFARACS in 1956 and FANZCA in 1992.

She was also involved in medical groups being a member of the NZ Medical Association from 1943 onwards, and a member of the NZ Medical Women's Association from 1943 onwards – serving as treasurer, secretary and president at various times. Patty also served as secretary of the NZ Society of Anaesthetists from 1941-1947.

Patty also had a busy life outside of anaesthesia, combining work with marriage and motherhood plus a range of interests.

She married James McDonald, a language lecturer, in 1957 and their children, Sally, Jenny and Ian, soon followed. Sadly, Jim passed away in 1974. Patty took a break from working in anaesthesia when her children were young (she being then in her early 40s), returning to work part time at Auckland Hospital from 1963 until 1984 and undertaking a lot of ENT work.

Around this time, Patty got the travel bug again. She flew on a sightseeing trip to Antarctica, travelled extensively through Europe and Israel, and had trips to Japan, Australia, India, Thailand, Canada, South America, Malaysia, Borneo, and the US. She also completed various famous New Zealand walks such as the Abel Tasman, Hollyford and Milford tracks, and was a lifetime member of the Alpine Sports Club. She enjoyed weekend bush treks, helped build a ski hut on Mt Ruapehu and developed a keen interest in geology, running a geology group through U3A for about 20 years, with field trips every other meeting.

The travelling, tramping and skiing may have taken a toll. In 1994, she had a right knee replacement. Her other knee and both hips followed later. Nevertheless, Patty continued travelling with visits to various Pacific Islands, as well as Mongolia and China.

Music remained central to her life. She was an excellent pianist, playing quartets with friends, and an organist of repute, serving as such at St Andrew's Church in Kohimarama for at least three decades, and she was a life member of the Auckland Organists' Association. In retirement, Patty sat Grade 8 theory of music, just for fun, and surpassed her teacher.

Other contributions in retirement included voluntary work at the Citizens Advice Bureau, the Blood Bank and the South Auckland Hospice, as well as delivering Meals on Wheels.

Throughout her career, her kindness and egalitarian spirit combined with a phenomenal intelligence led Dr Patty McDonald to being proactive in the ideal of universal healthcare. She stayed in the public system and taught many students, passing on her skills and expertise. She is recalled as being "a delightful person, very calm and understanding", "the loveliest woman you could come across – very very kind" and "a good and safe anaesthetist, cheerful and a good companion" as well as someone who stood up for herself very well in an era when women had to.

Dr McDonald outlived most of her contemporaries, dying on July 8, 2014, aged 96 and having most recently lived at Gulf Views Rest Home, Howick, Auckland. She will be sadly missed by all who knew her, especially her children and eight grandchildren.

Sally Picot (Dr McDonald's daughter), Auckland

Dr Stephen Keith Swallow 1957-2014

Family, friends and colleagues were saddened by the recent death of Hobart anaesthetist Dr Stephen Swallow. He will be missed by many.

Stephen went to school in Liverpool, England, and attended Medical School in Cambridge, with his clinical years spent at the Middlesex Hospital Medical School in London. After two weeks in general practice, Stephen's career was decided and he sought anaesthesia training at the University Hospital of Wales in Cardiff.

As with so many UK-trained anaesthetists, Stephen found his way to the Antipodes, firstly to the Department of Anaesthetics in Dunedin, New Zealand, where he obtained his FANZCA, and then to take up a staff specialist position in Townsville. Stephen always spoke highly of his time in the Dunedin department under Professor Barry Baker, and in Townsville with the charismatic leadership of Dr Vic Callahan.

But it was in Tasmania where Stephen was to spend most of his career, firstly in Launceston and then from 1999 at the Royal Hobart Hospital. His contribution to medicine and anaesthesia was remarkable. Stephen often boasted of excelling as an underachiever. This could not be further from the truth. His was a sharp intellect that would not tolerate fools. He expected more from his professional world than most ordinary mortals could give. But Stephen was equally exacting of himself. His long history of service in teaching hospitals saw many cohorts of trainee anaesthetists benefit from his teaching and his unique view of the medical model, and the bigger world around it. His consultant work in Townsville, Launceston and Hobart covered a breadth of domains from intensive care to neuroanaesthesia as well as the more mundane service duties of large public hospitals.

But it was in his extra curricular activities that Stephen really excelled. Whether it was mountaineering in Nepal, competing in international Frisbee competitions, or teaching on Early Management of Severe Trauma (EMST) courses, Stephen was conspicuous by his contributions. He was an early member of the Primary Trauma Care (PTC) movement, which spread into over 60 countries around the world. Stephen co-authored the PTC instructor manual and through his teaching trips helped develop trauma management in Mongolia, Myanmar and China. He was an active member of the Australian Society of Anaesthetists (ASA) Overseas Development and Education Committee (ODEC) and took seed money for a China project, which became enormously successful, training more than 25,000 Chinese doctors in 1250 PTC courses. He chaired the Neuroanaesthesia Special Interest Group as well as inaugurating the Royal Hobart Hospital's Global Outreach.

While Stephen had a conventional, team-based approach to clinical anaesthesia, his approach to non-clinical activities could be unconventional. He was not afraid to speak his mind and expected his colleagues to do the same. This had the potential for teleconferences to run well into the night! He once threatened to resign as chair of the Neuro SIG after the *ANZCA Bulletin* published his name against a photo of a colleague after he had refused to provide a picture of himself for the article. Unknowingly, a few weeks later, the ASA newsletter published a PTC article with a large photo of a topless Stephen, acting as a mock patient for chest tube insertion demonstration, on the front page. ODEC nearly lost a valuable member!

Prior to the ASA annual general meeting in 2008, Stephen decided to enlist support for major ASA constitutional change. He campaigned vigorously, outside the meeting venue, dressed in ASA white cycling Lycra, a size too small. Not surprisingly, he failed to enlist many, if any, signatures of support and withdrew his challenge to council but sat through the ensuing meeting still in costume.

While Stephen could be an imposing presence in an English-speaking world, he had tremendous understanding for those of different backgrounds and would always trust the local co-ordinators in less affluent countries. This made him an excellent PTC instructor and program manager.

He had the ability to calmly diffuse tense situations – in 1999 he found himself in the middle of a significant disturbance in the main market in Honiara. Despite having arrived in the Solomon Islands just a day earlier, he deftly negotiated safe passage through the riot using local politics and rugby as discussion points.

Stephen's outdoor adventures took him far and wide, from Federation Peak in south-west Tasmania to the Annapurna Circuit in the Himalayas. With his daughter, Stephanie, he visited Machu Picchu in Peru, the volcanic mountain Cotopaxi in Ecuador, and the Galápagos Islands. With his son, Oliver, he travelled to Mongolia for a horseback expedition into the mountains. He returned to New Zealand on several occasions for mountaineering and ice climbing, including summiting Mount Aspiring and traversing the Olivine Ice Plateau. Often while perched on a summit or anchored to the side of an ice cliff he would remove a piece of paper from his jacket and recite a poem relevant to the moment. In the tent in the evenings after a day's climbing with fellow mountaineers and guides, he would lead discussions on a wide variety of subjects while giving commentary on a single malt whiskey or a red wine he'd carried in and shared. He was a true Renaissance man.

Stephen was always a stimulating colleague both in and out of the operating theatre. And it was a real pleasure to work with him on his overseas teaching trips. His hands-off-the-wheel approach to life seemed to work well in Mongolia and he returned to Ulaanbaatar many times. Was he possibly looking for his ancestry in the turbulent history of the great Ghengis Khan?

Stephen made enduring friends everywhere he worked from the UK, Hong Kong, China, the Pacific and Australia.

His career was tragically shortened and Stephen's last years as an anaesthetist were not without difficulties. The medical future he had foretold for himself unfortunately came to pass. He bore his infirmities with dignity and equanimity. He sought refuge in his many alter egos, as writer, poet, cook and social commentator.

Many will have their own stories about Stephen Swallow. We celebrate his life, we give thanks for his friendship and we treasure the opportunity to have shared some of life's mystery with this remarkable man. He has left behind his partner, Angela, and two children, Oliver and Stephanie, who will be his ongoing spirit. But in fact everyone who knew him will carry a little bit of Stephen with them.

We mourn his passing, but we are richer for having known him.

Vale Stephen.

John Madden, FANZCA
Calvary Hospital, Tasmania

Rob McDougall, FANZCA
Royal Children's Hospital, Victoria

Haydn Perndt, FANZCA
Royal Hobart Hospital, Tasmania

This obituary has also appeared in the December edition of *Australian Anaesthetist*.