SurgicalNews

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ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

3D PRINTING

The way of the future

INDIGENOUS HEALTH

Associate Professor Chris Perry awarded for Deadly Ears program

NEW RESEARCH

May lead to an acute pancreatitis blood test

Program highlights 2018

Annual Joint Academic Meetings

Thursday 8 - Friday 9 November 2018
University of Technology Sydney, UTS Dr Chau Chak Wing Bld,
Sydney NSW

DAY ONE – SECTION OF ACADEMIC SURGERY MEETING

Morning session: Mid-Career Course – Personal Development

- The Ikigai of Academic Surgery– finding your balance
- Don't go it alone – collaboration is key
- Managing up, down and across
- Diversity in academia - beyond gender and ethnicity

Afternoon session: Concurrent work shops

1. Clinical Innovations
2. Creating Institutional Vision with Academic Excellence

The day will conclude with Working Party updates:

- Clinical Trials Network Australia and New Zealand
- Clinical Academic Pathways

Royal Australasian College of Surgeons

Medtronic

Held jointly with the Academy of Surgical Educators Forum Evening on Thursday 8 November 2018

DAY TWO – SURGICAL RESEARCH SOCIETY MEETING

Invited guest speakers

Society of University Surgeons Guest Speaker – Dr Rebecca Minter
A.R. Curreri Professor and Chair of the Department of Surgery
University of Wisconsin School of Medicine and Public Health, Wisconsin, USA

Association of Academic Surgeons Guest Speaker – Dr Heather Yeo
Assistant Professor of Surgery and Assistant Professor of Public Health
Weill Cornell Medical College, New York, USA

Jepson Speaker – Professor David McGiffin
Head of Cardiothoracic Surgery, Alfred Health, Victoria

Presentation of original research by surgeons/trainees/students/scientists

Awards for the best presentations;
Young Investigator Award, DCAS Award and Travel Grants

We would like to acknowledge Medtronic as the Foundation Sponsor for the Section of Academic Surgery

Registration opening soon

Day one - Complimentary
Day two - Only $100 for SAS members to attend - *no membership joining fee*
Places will be limited at these meetings

Contact Details

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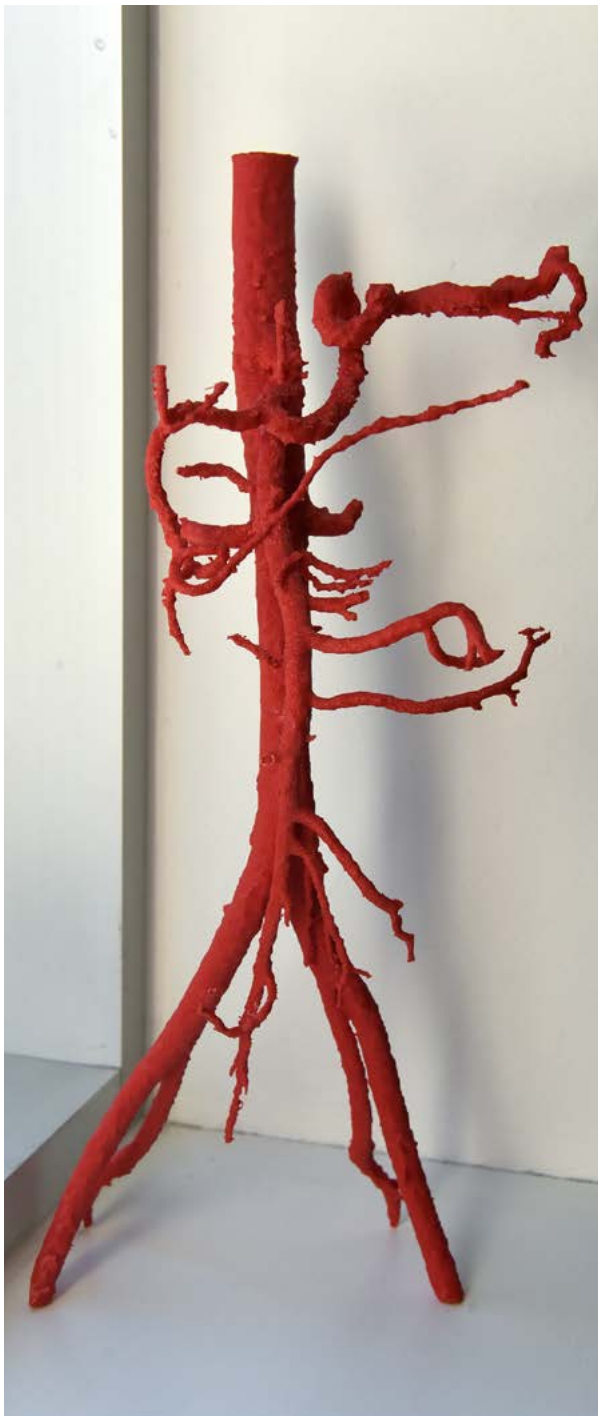

COVER: Transparent 3D printed aneurysm being cured by UV light

ABOVE: Normal abdominal aorta, 3D printed in acrylonitrile butadiene styrene (ABS) - the same plastic as LEGO blocks

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Equitable access to quality surgical care in rural and regional communities

RACS has an obligation to the communities it serves across both countries, as clearly articulated in our vision of leading surgical performance, professionalism and improving patient care. Providing equitable access to surgery for both metropolitan and rural and regional communities is vital, however despite various efforts over the years, evidence shows we are clearly failing to achieve this for rural and regional communities. At the same time, expanding sub-specialty practice occurs most successfully in major hospitals of metropolitan locations, providing a very high quality of care.

The question we must ask ourselves as a responsible profession is: "Are we meeting the needs of all the communities we serve?"

This is currently quite timely, particularly in Australia, where the federal government has appointed Australia's first National Rural Health Commissioner, with a priority to develop a national rural generalist pathway. The focus of this pathway is largely on extending general practice into areas of emergency medicine, anaesthesia, obstetrics and surgery. RACS acknowledges there can be a benefit to local communities by supporting extended scope of practice training for GP proceduralists in rural and regional Australia. However, supporting rural and regional surgical generalism is RACS' preferred option to ensure specialist surgeons provide increased services in rural and regional areas.

In the April issue of *Surgical News* the concerns we had regarding access to surgical care for rural and regional communities was featured in an article titled *The Future of Rural and Regional Surgical Training* and that RACS had held a forum on 17 March to come up with some potential solutions. The forum comprised key representatives from RACS training boards and specialties, who are integral to finding a way forward. Professor Richard Murray provided key insights into Australian rural and regional issues, highlighting how, despite training more medical practitioners per head of population than most countries in the Organisation for Economic Co-operation and Development (OECD),

Australia is still reliant on IMGs to provide services in rural and regional areas. New doctors are competing for jobs in metropolitan areas and being absorbed by increasing demand or increasing services.

Delegates supported RACS' responsibility to train surgeons able to provide services in rural and regional communities. It was acknowledged that supporting surgical generalism through training would be essential and responses would be speciality specific. Delegates from orthopaedic, general, vascular and ENT surgery shared their experiences and pathways working as rural surgeons. These pathways were largely self-determined and often based on positive work experiences undertaken while training.

Going forward there will be further discussions with the training boards towards the development of a collaborative Australian strategy that can be shared with health jurisdictions. The recommendations at this point are likely to include:

- the establishment of formal rural training pathways to support training in urology, otolaryngology head and neck, orthopaedic and general surgery;
- to support surgical generalism, providing extended cross-specialty training for surgeons seeking to practice in rural and regional areas;
- to advocate at a national level and across all states in support of delivering sustainable models for rural and regional surgery, and
- to promote careers in rural and regional surgery.

I believe RACS, together with all speciality societies, needs to be part of the solution. I look forward to your engagement as we develop the strategy and seek to improve the level of surgical services in rural and regional communities.

Mr John Batten
President

The RACS census

Helping us collect information for better advocacy

A traditional case study provides us with useful lessons from a scenario with an individual patient. Clinical anecdotes are of great value to our learning, and often help us remember what much drier research based practice guidelines may not.

We have all heard anecdotes either directly from our colleagues, or as stories murmured around the department, as a 'word to the wise' on workforce issues that have affected our profession over the years.

'I know a colleague who has wanted to retire from his country practice for years but can't find someone to take it over.'

'I know a colleague who commutes to a regional town for three days a week while her family lives in the city.'

'I know a colleague who has been doing outreach work for the last year while he looks for a consultant position.'

All too often we hear these stories that spark our concern and wonder, with all these anecdotes doing the rounds of our surgical community, why is more not being done to manage these issues?

While case studies can be useful teaching and learning tools, like anecdotes they are no replacement for evidence based guidelines and research papers that direct best practice. While RACS advocates to our governments to implement reforms to resolve our workforce issues, individual anecdotes are not enough to effect change. Our advocacy work relies on data that is representative of our entire Fellowship to show the extent of the issues we raise.

RACS's advocacy work encompasses a wide breadth of issues. Chief among these is the supply imbalance between metropolitan and rural and regional areas. The issues surrounding decisions to work in regional areas are complex to solve. However without the data to show the extent of the issue, for example, how many new Fellows started working in a rural or regional area in the last year, there is very little to show for a continuing flow of surgeons to these areas.

Workforce maldistribution is one of many issues that the upcoming 2018 RACS census data supports. With each Census we examine and refine our questions in order to best collect information that we think will help us advocate on issues that affect you.

For those reading this and thinking these workforce issues don't concern you, we want to know about you too. Without input from all of our members, our data collection becomes only affected by response bias. While our cohort size may not be considered small to some people (we now number more than 6,000 active Fellows in Australia and New Zealand) each voice matters.

So whether you are engaged in clinical practice or not, or how much longer you plan to keep working, and where you work – these are small bits of data that help us to understand the true depth of the issues that affect our Fellowship. Together your individual stories help us advocate for all of you. We need YOU.

Ms Cathy Ferguson
Vice President

Transparent 3D printed aneurysm being cured by UV light

3D printing the way of the future

Twelve thousand dollars doesn't usually go far when shopping for new medical equipment.

But a young aspiring surgeon and her colleagues have found it's enough to get you started on an exciting adventure with 3D printing technology.

Jasamine Coles-Black was still a medical student when she teamed up with vascular surgeon Jason Chuen two years ago to investigate what 3D printing technology they could buy with just $12,500 from the Austin Medical Research Foundation. To their delight, they had enough to set up a 3D printing laboratory at Austin Health in Melbourne. It was the first of its kind for an Australian public hospital.

At the time, the pair found it hard to find information about how other hospitals were using these printers, let alone their methodology. For all the media hype about 3D body parts, there were very few practical tips being shared.

But as Dr Coles-Black discovered, that has changed rapidly in recent years, with scientists and doctors reporting everything from the production of polypills to surgical implants to living tissues in medical literature.

To find out how this 'disruptive technology' was being used by surgeons, Dr Coles-Black, now a surgical resident at the Austin Hospital, reviewed 392 scientific papers. She compared them to the experience of Austin Health's 3D Medical Printing Laboratory.

The study found 3D printing was improving patient and carer understanding of their anatomy and planned ▶

Dr Jasamine Coles-Black

surgical procedures, as well as their level of engagement when compared to traditional communication methods, such as verbal and written material, anatomical drawings or X-ray images.

Dr Coles-Black has seen this first hand.

“Patients are just so excited by it. They ask to take their models home with them,” she said.

“One of my patients said it took away his anxiety before surgery. Nobody to date has said it’s too confronting. Even cancer patients have been positive about it,” she said.

It has also become a useful tool in pre-surgical planning. The literature review found patient-specific models were associated with improved patient safety through reduced operation time, reduced time under anaesthesia, reduced blood loss, and faster recovery time.

Dr Coles-Black said being able to visualise complex anatomy can help surgeons practise techniques and make decisions about their approach.

Jason Chuen, Director of Vascular Surgery and the 3D printing lab at Austin Health, can vouch for this. While the Austin lab has mostly produced models for teaching and training, or refining techniques, he said staff had used it to plan about 10 patients’ operations over two years – about one every two months.

In one case, Mr Chuen printed a patient’s aorta at life-size to get a better look at a complicated thoracoabdominal aneurysm.

“I really like the chondrosarcoma rib-cage tumours — they are so pretty, it reminds me how beautiful the human body is.”

Connecting the technology to robotic surgery systems has been more challenging though. Mr Chuen said that an attempt to project a 3D model of a kidney into a robot operator’s console for a urologist was harder than anticipated.

“Nevertheless we have found ways to bring 3D model information into the console display so that the surgeon can have access to all the information they need during the surgery.

"We tested this out on some cases at the Epworth Freemason’s Hospital and it has worked very well,” Mr Chuen said.

Dr Coles-Black said one of the main barriers to other doctors and hospitals embracing this technology was a lack of awareness and knowledge. To help overcome this, she recently shared the findings of her review in a poster presentation at the RACS’ Annual Scientific Congress. She also helps run an annual 3D printing medical conference, the fourth of which is scheduled to run in October this year.

Cost of printers can be a problem, but Dr Coles-Black said the expiry of patents meant 3D printers were now available for as little as a few hundred dollars. Some models can be printed for as little as $2.

3D printed kidney tumour model displaying relationships between tumour and vasculature

"I think it will be the norm, but like all things, it will only become the norm where it's useful," she said. "It will be used for complex cases or those where we need a bit more anatomical information. That's where the strength of the technology lies."

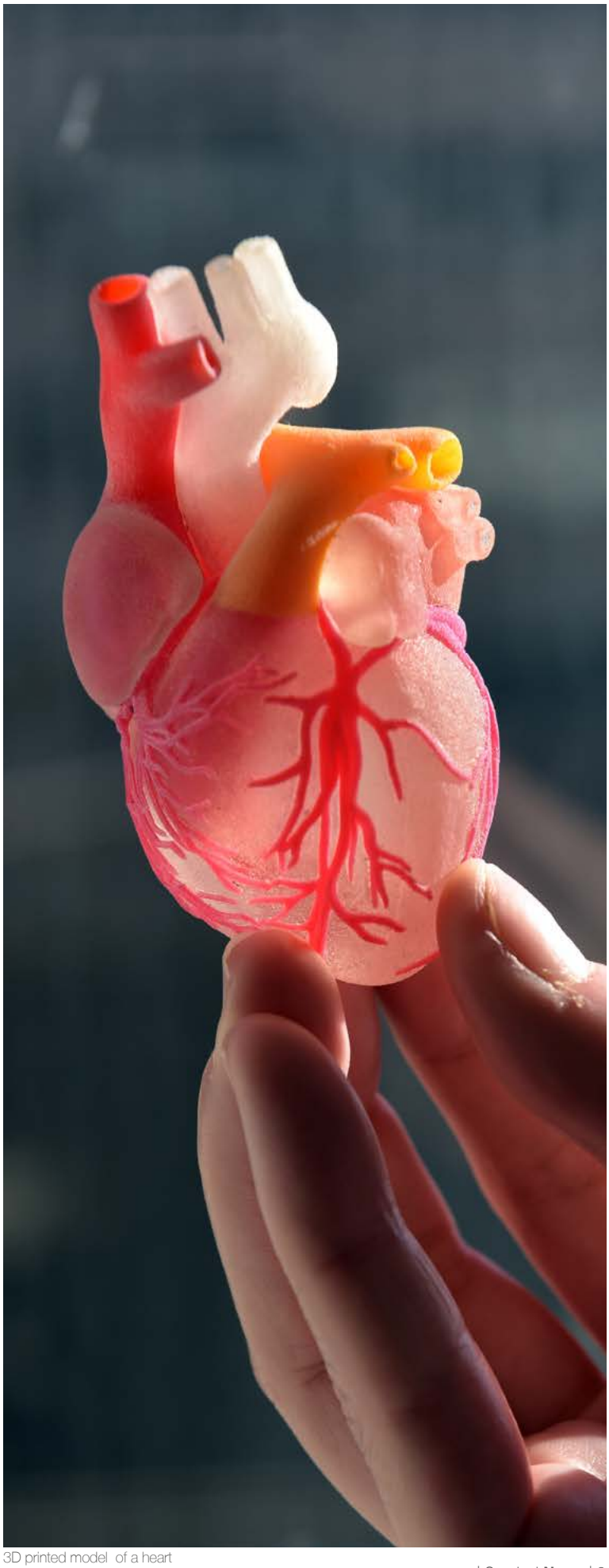
With an increasing number of institutions around the world establishing hubs and pursuing collaborations with industry leaders, Mr Chuen said 3D printing could help doctors get involved in the design of medical devices and instruments.

"A really exciting concept is 'just-in-time' manufacturing where you literally bring the medical implant factory into the hospital," he said.

"Instead of making many sizes of prosthetic hips and knees in a factory overseas, testing and shipping them to each hospital, and then having to take the unused stock back for reprocessing, we might be able to keep prosthesis designs in a computer, and then print out the exact size and shape of joint implant you want for your patient the night before the surgery."

The 4th annual 3D Med Conference will be held on 13-14 October this year at the Melbourne Brain Centre, University of Melbourne. For more information visit https://3dmedlab.org.au/3dmedau18/

Julia Medew
Surgical News journalist



3D printed model of a heart

USANZ President, Adjunct Professor Peter Heathcote

Urology Fellows take the lead in management of prostate cancer

Australia and New Zealand are set to become global leaders in the management of prostate cancer following the work done by the Urological Society of Australia and New Zealand (USANZ) to develop consensus guidelines on Prostate-Specific Antigen (PSA) testing and establish a Prostate Cancer Outcomes Registry.

In Australia, USANZ also won federal government funding in the most recent budget to cover MRI scans for prostate cancer through Medicare.

And in New Zealand, new standard triage criteria for public hospital treatment of urological patients has increased access to health care across the country while a pilot study funded by the Society is investigating the most efficient hospital settings for common urological procedures.

Such is the regard being shown to the urological advances being made in both countries – including the roll out of a new nephrectomy registry – that USANZ was selected to host the Urological Association of Asia Congress in 2021, the first time the meeting will be held outside Asia.

USANZ President, Adjunct Professor Peter Heathcote, said that after years of controversy and confusion about the use and reliability of PSA testing, the new registry of prostate cancer outcomes, the consensus guidelines and Medicare funding for MRI scans represented a paradigm shift in the treatment of the disease.

He said many other countries and health organisations such as the European Association of Urology were watching the work being done in Australia and New Zealand with great interest.

He also said the Society was now working with the Royal Australian College of General Practitioners to develop educational packages to guide GPs in their treatment of men at risk of developing prostate cancer based on the consensus guidelines.

> "No other country in the world has taken such a unified approach to the development of practice guidelines on PSA testing and the early management of test-detected prostate cancer, as we have."

"We worked with radiation oncologists, pathologists, general practitioners, medical oncologists, epidemiologists and the Prostate Cancer Foundation of Australia to resolve confusion around PSA testing for both men and their doctors.

"That took many years of work and I thank all those within USANZ who worked so hard to get us here – particularly former President Professor Mark Frydenberg.

"The recent decision by the federal government to fund MRI scans for men with elevated PSA through Medicare is another huge advance.

"This will allow us to reduce the need for biopsies, improve diagnosis and enhance surveillance so that we capture

those patients who require treatment while accurately identifying those who do not need surgical intervention.

"These developments mean that we are becoming global leaders in the treatment and management of prostate cancer, one of the most commonly diagnosed cancers in the world."

Adjunct Professor Heathcote said the reliability of using MRI scans to detect prostate cancer had been assessed and approved by RACS' Australian Safety and Efficacy Register of New Interventional Procedures – Surgical (ASERNIPS) and that the Society was now developing quality assurance protocols in cooperation with the Royal Australian and New Zealand College of Radiologists.

He also praised the decision by the federal senate to allow urologists to continue to treat women with stress incontinence using pelvic mesh.

He said that the urological use of transvaginal mesh had almost become conflated with its use in gynaecological surgery during the enquiry, but was pleased that the senate recommended it be used appropriately.

"The mid-urethral sling is the most scientifically studied surgical procedure for stress incontinence in history and has substantially improved the quality of life for many thousands of women," he said.

"However, we understand the concerns raised at the senate enquiry and USANZ will be setting up a Stress Urinary Incontinence Audit by the end of this year."

Adjunct Professor Heathcote who has a special interest in prostate cancer, robotic surgery and pelvic oncology, and holds appointments at the University of Queensland and the Queensland University of Technology, was elected President of USANZ last year.

Vice-President of the Society, Dr Stephen Mark from Christchurch, is the Clinical Lead of the New Zealand roll-out of the Prostate Cancer Outcome Registry.

He said the information provided by the registry had the potential to drive surgical advances in the treatment of the disease and increase access to surgical care for those who need it while avoiding it for those who don't, thereby decreasing both mortality and morbidity.

He said the drive for quality improvement was also behind the launch of a pilot project measuring the length of hospital stay of patients undergoing two common urological procedures – a radical prostatectomy and a nephrectomy.

The aim of the study is to identify the hospital units and geographical settings that offer the greatest safety and efficiency.

Dr Mark said USANZ is funding the pilot research which is being coordinated through the Health Roundtable, a knowledge sharing organisation developed to conduct and disseminate research to drive improvements in both clinical techniques and efficiency.

"There has long been a push to centralise surgery for major cancer into urban based tertiary centres but there has never been data to prove what is best for the health system or the patient," he said.

"We have data that indicates that smaller hospitals are just as efficient as tertiary centres and may be preferable for many patients who do not wish to travel far from home.

"We undertook this study to find out the facts behind the debate, to give clinicians a stronger voice in government decision making processes and to see how we can use big data to support clinicians."

Dr Mark also said the recent decision to standardise access to the public health system based on clinical criteria was a win for equity of access for all New Zealand urological patients.

He said that all patients – from those with kidney stones to cancer, who meet the criteria must be seen and treated within four months of referral.

Both Adjunct Professor Heathcote and Dr Mark thanked the Prostate Cancer Foundation of Australia and the *Movember* fund-raising group for the financial support provided to further prostate cancer research.

Karen Murphy
Surgical News journalist

Associate Professor Chris Perry awarded for Deadly Ears program

An increase in government funding and a nation-wide refusal to accept the high rates of otitis media in indigenous communities could reduce the unacceptably high rates of the disease, according to this year's recipient of the RACS Aboriginal and Torres Strait Islander Health Medal.

Queensland ENT surgeon, Associate Professor Chris Perry, was awarded the medal for his work in helping to establish the Deadly Ears program, one of the most successful outreach programs tackling indigenous ear disease in the country.

Associate Professor Perry helped set up an Indigenous Ear Health Pilot project in Queensland in the late 1990s that eventually won sufficient support to create the state-wide Deadly Ears program in 2006, work that built on the earlier efforts of Professor William Coman and Associate Professor Gerry McCafferty.

The program delivers on-the-ground training to health workers in remote indigenous communities, organises screening for hearing loss and provides clinical specialist teams to treat children with ear disease.

It also trains rural and remote teachers in how best to communicate with these children in a classroom setting, so they have a better chance of staying in school and completing secondary education.

Associate Professor Perry said that despite years of effort by health professionals, the rates of acute suppurative otitis media (ASOM) remained shockingly high in indigenous communities with up to 90 per cent of Aboriginal children having conditions which may require surgery compared to only eight per cent of the caucasian population.

Associate Professor Chris Perry (right) receiving his award from RACS President John Batten

The immediate past President of the Australian Otolaryngology Head and Neck Society (ASHONS), Associate Professor Perry said state and federal governments needed to increase funding to support those seeking to reduce the burden of disease.

He said ASHONS had made Indigenous ear health a central aspect of ENT surgery by:

- Embedding Aboriginal ear disease and cultural competency as core components of ENT training;
- Prioritising indigenous ear health research and discussions at ASHONS scientific meetings; and
- Encouraging and supporting indigenous medical students to become ENT surgeons.

"You can't be an ENT surgeon without dealing with Aboriginal ear disease wherever you are in Australia," Associate Professor Perry said.

"Yet while there is great good will within the medical profession to tackle this national disgrace, there is still very little political support in some jurisdictions because it seems there are no votes in Aboriginal health.

"The Australian Medical Association has shown great support for this work,"

"We still need more GPs and nurses to stop normalising acute suppurative otitis media within indigenous communities because that is not good enough"

Since he began working with the program, Associate Professor Perry has travelled across Queensland and out to the Torres Strait Islands to treat indigenous children, working at some of the most isolated communities in the country.

"I feel greatly privileged to have had the chance to work with some amazing people, including indigenous people who have welcomed us so warmly and other team members deeply committed to trying to make a difference," he said.

Associate Professor Perry was awarded the Order of Australia Medal in 2008 for services to ENT surgery and indigenous health and is the current chairman of the Multidisciplinary Head and Neck Cancer Clinic at the Princess Alexandra Hospital in Brisbane and a RACS Councillor.

With Karen Murphy
Surgical News journalist

College Councillor strives for equity in medicine

Associate Professor Kerin Fielding

RACS Councillor Associate Professor Kerin Fielding has dedicated her professional life to promoting equity both within the surgical profession and the broader health care system.

Based in Wagga Wagga in regional New South Wales, she has long advocated for greater access to specialist care in regional Australia, better access to new drug therapies for regional patients and training rotations designed to attract junior doctors out of metropolitan centres and into regional hubs.

The first female orthopaedic surgeon in NSW, Associate Professor Fielding is also committed to promoting gender equality within the specialty.

With a special interest in hip, knee and spinal surgery, Associate Professor Fielding has a practice based at the Wagga Wagga Base Hospital and Calvary Healthcare Riverina and is an Associate Professor at the University of Notre Dame Australia.

She is a leader in surgical education and training and in 2012 was awarded the RACS merit award by the NSW regional committee for her distinguished services to surgery, particularly her commitment to surgical education.

She is the Chair of the NSW Clinical Surgical Training Council for the Health Education and Training Institute, is on the RACS Board of Surgical Education and is the in-coming Chair of the RACS Prevocational and Skills Education Committee.

Associate Professor Fielding said she had an enduring interest not just in surgical education but in leading change across medical education in general.

“I believe we need to actively work to attract greater diversity within medicine while also providing better supervision and support for junior doctors and surgical Trainees,” she said.

“Surgery is a wonderful profession, but we can’t expect our Trainees to succeed and reach their full potential if we don’t invest in them with our time, support and mentoring.

“I’m also passionate about rural health because it seems outrageous to me that in 2018 we can still have a marked difference in life expectancy between people who live in our cities and those in regional, rural or remote areas.

“The gap needs to go and one way for that to happen is to improve access to specialist care and provide better access to treatments, drug therapies and clinical trials.

“We also have an enormous problem recruiting specialists to rural areas which needs to be urgently addressed.”

Associate Professor Fielding said she first worked in Wagga Wagga on a training rotation, met her future husband there, and the two decided to return after their marriage to escape the long commute she was then forced to endure in Sydney.

She said working in a regional city offered greater surgical variety but came with the challenge of increased professional isolation.

“It can be difficult getting time away, but we get to manage a much broader range of issues which creates a stimulating work environment,” Associate Professor Fielding said.

“Sometimes we feel looked down upon by our city colleagues because we are not super-specialists, but I think those working in a regional setting need to be highly skilled. We must be great clinicians, we must be great diagnosticians and we have to know our limits and when to refer.

“I try to get this across to all the medical students and junior doctors I work with in a bid to attract them into a regional setting, not only because it would be great for rural patients but because being a regional surgeon is so interesting.

“What’s more, there are now rural clinical schools linked to major universities that provide excellent academic support for teaching and research.

Associate Professor Fielding said she is also working with other female orthopaedic surgeons across Australia to help eradicate the gender bias and discrimination which still permeates the specialty.

Having served on the NSW Committee of the Australian Orthopaedic Association (AOA) for eight years, she said the organisation had never had a female board member and was slow to embrace diversity.

With other female orthopaedic surgeons, she helped establish the Orthopaedic Women’s Link (OWL) in 2016 to advocate for women in the specialty and encourage and support them through their orthopaedic careers from medical school through to consultant level.

Assoc. Prof Fielding is currently the NSW representative for OWL.

She said that while RACS had done wonderful work to promote equality and end discrimination and harassment, the AOA had been slow to change a sexist culture that worked to exclude women.

“There are approximately 70 female orthopaedic surgeons out of approximately 1,200 orthopaedic surgeons in Australia and we’re fed up with being treated with disrespect,” she said.

“I love my job and I think more women should do it but most of us hate attending specialty meetings because of the appalling sexist behaviour we have to deal with, and when you’re tempted to read the Code of Conduct before every meeting, you know there is a problem!

“It’s been phenomenal to see how other specialty groups have taken up the challenge to encourage and support diversity and I find it embarrassing and upsetting that our specialty group is falling so far behind.”

When not at work Associate Professor Fielding is either in France with her family renovating a cottage in the Loire Valley or creating heavenly delicacies in the kitchen.

She is a qualified Cordon Bleu Pastry Chef, having learnt the craft over four years in Paris, and now fulfils patisserie orders from her home through an online shop.

“It sounds very posh to say we have a holiday home in France but we have been working on it for more than 15 years. My sister lives in England so we thought it was the easiest way for us to spend time together, and provide our children with the chance to hang out with their cousins,” she said.

“As for the Facebook patisserie page, I only set it up as a way for people to contact me if they want something made for a special occasion like engagements or wedding cakes or small catering jobs or just want to have a special pastry for the weekend.

“Working in the kitchen allows me to switch off from work while it still requires technical skill, expertise and care.”

Associate Professor Fielding is married to Associate Professor Joe McGirr, the Rural Dean of the University of Notre Dame Australia and has four children.

With Karen Murphy
Surgical News journalist

Dr Jacob Jacob

Dr Jacob Jacob

A tireless advocate for rural health

When it comes to rural and remote medicine there are few places more challenging than Alice Springs. Its nearest capital cities are Darwin and Adelaide, both located approximately 1,500 kilometres away in opposite directions.

The town does not have any private hospitals, and the public hospital is the only major trauma centre and secondary referral hospital in central Australia, covering a catchment area of 1.6 million square kilometres. To put it in perspective, this is more than 300,000 kilometres larger than the combined areas of New Zealand, New South Wales and Victoria.

For some this sort of isolation may be hard to fathom, but for the past two decades Dr Ollapallil (Jacob) Jacob, has called the central Australian town of Alice Springs his home. During that time he has embraced the lifestyle, and become a much loved and respected member of the community among his peers and his patients alike.

“Alice Springs or ‘the Alice’ defies the expectations of a desert town. It combines a strong sense of its own heritage, steeped in Aboriginal culture and pioneer history, with all the convenience of modern facilities and activities,” Dr Jacob said.

“It is not a flat, dusty, barren landscape like some might think. Picture instead a place with stunning arid zone flora, an attractive town centre with excellent cafes and restaurants and of course the world’s best arid golf course!

“We get amazingly clear and spectacular skies, with beautiful starry nights, and our weather is lovely for most of the year.

“From a work perspective, when you don’t have any other major hospitals within close proximity you have to manage everything that comes through the emergency department doors. It is a very interesting and sometimes challenging place to work, and one which I thrive on,” he said.

As well as his surgical prowess, Dr Jacob is widely regarded across Australia for his tireless advocacy for indigenous and rural health. In 2015 he was a popular choice, and a deserved recipient of the Inaugural RACS Aboriginal and Torres Strait Islander Health Medal.

His deep commitment to social justice is best encapsulated in his favourite quote by the great biochemist and Nobel Prize winner Cesar Milstein;

'*Science/Medicine will only fulfil its promise when the benefits are equally shared by the real poor of the world.*'

While Dr Jacob has seen improvements since his arrival, he is frank about the many challenges that still face the region.

“Since I moved here there has been a lot of talk about ‘closing the gap’, and of course that has always been the aim. We have made some positive changes, particularly around infant and maternal mortality rates.

“But sadly across a range of other measurements, health outcomes for indigenous patients are much more in line with what you would expect to see in many third world countries.”

Dr Jacob highlights a noticeable increase in the rate of soft tissue infections as a major concern in recent years. The increase has occurred across the region, but has been particularly evident among the Aboriginal population.

"In the last three years we have seen a rise in soft tissue infections – not just simple subcutaneous abscesses, but more serious infections, like necrotising fasciitis and large carbuncles with sepsis and life threating head and neck infections.

"The main risk factors are frequent exposure to contagious diseases, such as scabies and tinea capitis. As well as this, household overcrowding, hot climatic conditions, low income, nutritional imbalances, and alcohol, diabetes, renal failure and endemic HTLV-1 virus infections, are all contributing factors.

"In advanced countries greater economic and social advances have seen reductions in infectious diseases and nutritional deficiencies, with a corresponding increase in non-communicable diseases like diabetes and heart disease. The great Alice Springs dilemma is that unfortunately we have high incidences of both diabetes and heart disease, and also infection related admissions.

"These are not simple problems, they have far-reaching consequences. When children contract soft tissue infections it can lead to nephritis, which we know often leads to renal failure in later life.

"Another issue is that when these soft tissue infections reach the blood stream they can cause endocarditis and reduced life expectancy. Diabetic foot infections and major amputations are also on the increase. Obviously there are vast economic and social consequences attached to this," Dr Jacob said.

Alice Springs Hospital has seen many advancements since Dr Jacob first arrived, but he notes that the rate of infection in the community provides an added difficulty for recruitment and retention of health workers on top of existing difficulties that naturally confront rural hospitals.

"In the early 2000s, Alice Springs Hospital was considered one of the worst rural hospitals in the country. We have come a long way since this time, largely because we have had a group of core senior medical clinicians and nursing staff who have stayed here for a long time and provided continuity. I think we are now one of the best.

"It will be a challenge though in the long term as the current group nears retirement age. We have to keep the momentum going. It is important that we recruit some younger clinicians to support a long term workforce.

"We do have a lot of varied cases, particularly trauma and pancreatitis, but soft tissue infections completely overshadow anything else we do. Every day we have at least 10 to 15 cases of serious soft tissue infection, so it is not necessarily as appealing for a young surgeon to work with this on a daily basis.

"We have to keep the momentum going. It is important that we recruit some younger clinicians to support a long term workforce."

"In terms of surgical training, Alice Springs is a very popular place, because of the exposure and the challenges that Trainees receive. Recent changes to the training program to enhance the profile of rural surgery have also helped.

"These initiatives are very important because often once a surgeon has experience working in a rural community they recognise the many advantages of such positions, and the broader concentration of the work, that you don't necessarily get in a city hospital.

"I think for now we have to be realistic and strike the right balance in our workforce, and realise that there will be lots of short term positions that turn over quickly. If we can ensure that these positions are continually filled for at least a year at a time then we are on the right track. Hopefully over time this will then lead to longer term appointments."

Dr Jacob will convene the 2018 Tristate Annual Scientific Meeting (ASM) to be held in Alice Springs in August. Fittingly the theme of the conference will be 'Infections from Head to Toe'. The event will feature a number of distinguished speakers, as well as an opening night symposium on 'The Changing Face of Infectious Disease.' hosted by the Australian and New Zealand Audit of Surgical Mortality.

While the issues discussed during the meeting will be particularly pertinent to Alice Springs, Dr Jacob believes that the meeting will have plenty to offer his colleagues from across Australia and New Zealand.

"Some of the common infections that we see here, like necrotising fasciitis, are not very common in the cities. When they do present themselves it is very important to treat them appropriately.

"The mortality rate for necrotising fasciitis in Alice Springs is around eight per cent, whereas elsewhere it is more like 20 per cent. That is because we can identify and treat it early. So I think this is very much a relevant theme that participants can engage with because there is a lot we can learn from each other.

The 2018 Tristate Annual Scientific Meeting will be held from 23-25 August at Double Tree by Hilton, Alice Springs. To view the provisional program and to register please visit the NT, SA and WA pages on the RACS website, or contact the SA or WA office.

Interview by Mark Morgan
Communications and Policy Officer, RACS

Sydney ASC inspiring future Aboriginal, Torres Strait Islander and Māori Surgeons

Increasing the representation of indigenous doctors in the surgical workforce is a RACS priority. Our Aboriginal and Torres Strait Islander Reconciliation Action Plan and Māori Health Action Plan acknowledge that support for new graduates and final year medical students with an interest in surgery, is essential, as this is the time when decisions regarding career pathways are being considered. Providing opportunities for aspiring surgeons to undertake surgical-related education, skills training and research will strengthen career portfolios and importantly lead to mentoring and support networks, to help inform and aid career choices.

The Indigenous Health Committee is working with Professor Martin Nakata, Education Advisor, to determine appropriate pathways to identify and support prospective Indigenous surgical Trainees. One measure already in place is our comprehensive pre-vocational scholarship program. This year 13 scholarships, with a total value of $62,000, have been awarded for career enhancement activities, including participation in the Annual Scientific Congress.

Pirpantji Rive-Nelson, a Pitjantjantjara man in his final year of medicine at the University of Queensland Rural Clinical School, was one of seven scholarship recipients who attended the ASC in Sydney. “As a medical student on a surgical ward, it is not possible to have such an opportunity to discuss my plans and aspirations with consultants. The supportive and encouraging feedback provided to me, by many people at the ASC, has been a massive confidence

(Left to right) Dr David Murray, Chair Indigenous Health Committee, Prof Kingsley Faulkner, AM, Chair Foundation for Surgery, Dr Hinewaiora McCleery, Mr Pirpantji Rive Nelson, Ms Yaritji Green, Dr Lisa Wai, Dr Claudia Paul, Dr James Johnston, Dr Jamie-Lee Rahiri, Dr Maxine Ronald, Councillor, Deputy-Chair Indigenous Health Committee

boost for me, at a critical time of my degree. I am now feeling positive and strongly about pursuing a surgical speciality," he said.

For Māori doctor, Hinewaiora McCleery, attending the ASC with other scholarship recipients made the experience ten times better for her. "I felt as though I had a whanau looking out for me the entire conference. Networking with indigenous surgeons, upper GI (gastrointestinal) surgeons and various RACS councillors due to my award was an unbelievable experience. I met many role models whom I aspire to become like in future years," she said

Jamie-Lee Rahiri was one of two scholarship recipients presenting at this year's congress. As part of her PhD in Surgery, Jamie is undertaking an audit of all bariatric procedures performed in the Auckland region to compare outcomes between Māori and non-Māori.

Lisa Waia is the first Torres Strait Islander doctor to receive a RACS Indigenous Scholarship. Lisa wants to train as a paediatric ENT surgeon and was delighted to receive guidance from Aboriginal ear health advocates Associate Professor Chris Perry and Dr Kelvin Kong. "I have found incredible role models and mentors to facilitate my journey through surgical training pathways. I have come away with so much more drive and determination which is something you need to get onto a training program," she said.

The Committee would like to thank the RACS community for the warm welcome extended to our ASC guests and to the interest shown in them as individuals as well as potential Trainees. We are very excited by the calibre of Aboriginal, Torres Strait Islander and Māori doctors in the pipeline and the potential future of the indigenous medical specialist workforce. These scholarships would not have been possible without the support of RACS Fellows and the Foundation for Surgery.

www.surgeons.org/donations/

Dr David Murray
Chair, Indigenous Health Committee

ACADEMY OF SURGICAL EDUCATORS FORUM

ACADEMY OF SURGICAL EDUCATORS
Royal Australasian College of Surgeons

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Time: 6:30pm – 9:30pm
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Congratulations

Previous EMST Committee Chair Scott D'Amours receives the 2018 ATLS International Meritorious Award

Congratulations to Mr Scott D'Amours, FRACS who was honoured as the 2018 recipient of the Advanced Trauma Life Support (ATLS) International Meritorious Award at the Global Symposium held in San Antonio, USA in March.

Scott was recognised for his contributions to the creation and dissemination of the ATLS 10th Edition faculty update training and his continuous efforts supporting Region 16 as Vice Chair.

As previous Early Management of Severe Trauma (EMST) Committee Chair, Scott was instrumental in pioneering the rollout of the ATLS 10th Edition in Australia and New Zealand.

Scott is the Director of the Trauma Department and trauma surgeon at Liverpool Hospital in Sydney.

Mr Scott D'Amours, FRACS; and Ms Karen Brasel, FACS, previous International ATLS Chair

RACS SimuSurg app wins industry award

The RACS SimuSurg app won the industry award for the Serious Games Showcase & Challenge Australasia 2018 held by Simulation Australasia.

The app, which was one of only six finalists in the awards, was developed by Cmee4 Productions, simulates a minimally invasive surgical setting to train, and entertain prospective surgeons.

The app, which was showcased at the SimGHOSTs 2018 Conference in June, allows users to challenge themselves through four levels of clinical scenarios with six activities including simple control movement exercises to more complex tasks associated with using various instruments.

Game producer Carolyn Mee said that SimuSurg provides an engaging, fun and interactive way to perform surgical skills in a gaming environment.

“We developed this unique app to simulate real life minimally invasive surgery. We're so pleased to get the recognition and to win,” she said.

RACS President Mr John Batten said that the SimuSurg app is the first e-surgical tool to be created for RACS, and that he is looking forward to seeing future developments in the way of virtual training across the industry.

“I can certainly see this app being further developed to include many kinds of surgical procedures, and potentially, tools such as these being used as a matter of course throughout our training,” he said.

SimGHOSTs 2018 attracted an audience of program directors, clinicians, educators, academics, technology/operations specialists, and game developers. The program highlighted the use of technology and virtual environments in simulation programs.

Winners will receive instant entry and $2,500 financial support from Simulation Australasia to attend and display their game at the global Serious Games Showcase & Challenge held as part of I/ITSEC in Orlando, Florida, November 26th-30th 2018.

Gabrielle Forman
Communications and Policy Officer, RACS.

Game producer Carolyn Mee demonstrating the RACS SimuSurg app

New research could lead to acute pancreatitis blood test

Dr Maryam Nesvaderani

A Foundation for Surgery Small Project Grant has helped support research into the genetic profile of acute pancreatitis aimed at identifying a biomarker that could allow clinicians to respond more rapidly to presentations of the disease.

Acute pancreatitis is a common surgical presentation that can cause multi-organ failure or death if not identified rapidly and managed in an intensive care setting.

The mortality rate for pancreatitis is between 1.5 per cent and 4.2 per cent but varies according to the severity of the disease, increasing to 30 per cent in those with infected pancreatic necrosis.

Currently, 20 per cent of patients with acute pancreatitis have a severe course and ten to 30 per cent of those with severe acute pancreatitis die.

However, while those patients with severe presentations who are rapidly identified and treated in ICU have much better outcomes, it remains difficult for some clinicians in some settings to accurately differentiate between those patients with mild and severe pancreatitis.

Former General Surgery Trainee Dr Maryam Nesvaderani conducted PhD research to understand both the aetiology of the disease and to identify biomarkers that could allow clinicians to conduct blood tests to determine which patients need immediate ICU care.

She said that while the incidence of acute pancreatitis appeared to be increasing globally, possibly due to increased obesity rates, mortality rates had changed little in recent decades despite advances in ICU treatment.

She said morbidity and mortality rates could be reduced if clinicians could identify the most at-risk patients earlier. “Currently, clinicians use a scoring system to predict the severity of acute pancreatitis but that can take 48 hours to determine,” she said.

“Mild and acute pancreatitis can present with similar symptoms but those with severe pancreatitis can become very ill very quickly if not managed in an intensive care setting.

“Most deaths from pancreatitis occur within the first week or two of the illness and are due to multiple organ dysfunction syndrome but we know we can reduce the likelihood of this occurring by treating these patients with aggressive hydration and fasting, together with enteral feeding in an ICU setting.

“If we can develop a blood test, we could allow clinicians to use that first 48 hours to manage those patients with severe pancreatitis in ICU.”

To conduct the genetic research, Dr Nesvaderani recruited 89 patients across four hospitals in western Sydney who presented with acute pancreatitis.

Blood samples were collected and drawn for leukocyte RiboNucleic Acid (RNA) extraction with genes identified that are differentially expressed between those patients who develop mild pancreatitis and those who develop the severe form of the disease.

Further bioinformatics on the samples is being conducted in collaboration with the Centre for Microbial Diseases and Immunity Research with the University of British Columbia, Canada, with further research to identify a biomarker and develop the blood test to continue in Australia over the coming months.

Along with her genetic research, Dr Nesvaderani conducted the first multicentre large-scale study in Australia examining the epidemiology, aetiology, severity and management of acute pancreatitis in adults.

Using data collected from the Nepean, Westmead, Blacktown and Mt Druitt hospitals over a four-year period, she found that gallstones and alcohol were the most common etiological factors for acute pancreatitis, together contributing to 80 per cent of cases.

> "Mild and acute pancreatitis can present with similar symptoms but those with severe pancreatitis can become very ill very quickly if not managed in an intensive care setting (but) if we can develop a blood test, we could allow clinicians to use that first 48 hours to manage those patients with severe pancreatitis in ICU."

Other less common causes include hyperlipideaemia, hypercalcemia, endoscopic retrograde cholangiopancreatography (ERCP), trauma, pancreatic malignancy, autoimmunity, heredity and pancreas divisum.

Her epidemiological research analysed the causes, treatment and outcomes of 900 patients with acute pancreatitis.

She said her findings supported new guidelines for the management of acute pancreatitis recently published by the American College of Gastroenterology, and the International Association of Pancreatology in collaboration with the American Pancreatic Association.

"The main differences between the new and previous version of the guidelines relate to the use of endoscopic retrograde cholangiopancreatography and the addition of the new severity category of moderately severe acute pancreatitis," Dr Nesvaderani said.

"We also recommend the use of early ultrasound scanning to investigate aetiology, rather than early CT scanning. Use of early CT scanning is not recommended, as necrosis of the pancreas will not show up on CT until much further down the track when the patient is already very ill."

Dr Nesvaderani conducted her research under the supervision of Professor of Surgery at the Nepean Clinical School, Michael Cox, Associate Professor of Surgery and Cancer Epidemiology and Director of the Whiteley-Martin Research Centre, Guy Eslick, and Associate Professor of Intensive Care Medicine at Nepean Clinical School, Benjamin Tang.

She has had papers based on some of the findings of her research published in the *International Journal of Surgery*, the *Medical Journal of Australia* and the *ANZ Journal of Surgery* and hopes to have her thesis completed by the end of this year.

With an undergraduate degree in science and an honours degree in proteomics, Dr Nesvaderani said she had greatly appreciated the chance to conduct both epidemiological and genetic research.

Having taken time away from surgery to conduct that work, however, she decided to transfer to psychiatry and is now a Stage 1 psychiatry registrar in the acute mental health ward at the Nepean Hospital.

She said she was drawn to the specialty both because she had enjoyed a locum placement in a drug and alcohol unit but also because of the research scope offered in psychiatry.

"Psychiatry, in many ways, is still quite early in the development of research, with many pharmacological treatments remaining unchanged for many years," she said.

"I have a particular interest in early psychosis and hope in the future to be able to conduct research to find new agents capable of treating disorders like schizophrenia which might result in fewer side-effects and less long-term morbidity."

She thanked RACS for all the support provided to her as both a surgical Trainee and PhD candidate.

ACADEMIC HIGHLIGHTS

- 2017 – John Loewenthal Research Scholarship, University of Sydney
- 2016 – RACS Foundation for Surgery Small Project Grant
- 2016 – John Brook-Moore Research Scholarship, University of Sydney
- 2016 – Australian Postgraduate Award and University of Sydney Merit Award

Karen Murphy
Surgical News journalist

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Supporting travel grants for Younger Fellows

RACS has worked with the Bongiorno Group for more than 30 years. The Bongiorno Group and Bongiorno National Network are one of Australia's leading financial service organisations that specialise in the medical profession. So, when Tony Bongiorno heard about the critical need for an ongoing travel grant to support younger Fellows, he and the Bongiorno National Network wanted to help.

Many of you would have seen and contributed to last month's Pledge-a-Procedure campaign where the Bongiorno National Network pledged to match donations up to $66,000. Thanks to your compassion and generosity the $66,000 target was exceeded. This was an extraordinary result, but the Bongiorno National Network wanted to do more to support younger Fellows. In addition to the promised co-funding, the Bongiorno National Network is contributing $200,000 over the next three years—an additional $134,000 to ensure younger Fellows can sustainably establish this travel grant and get the professional development they need to be the next generation leading surgical care.

Andrew MacCormick, Chair of the Younger Fellows Committee, explains the impact that the travel grant will have.

"Establishing a corpus to ensure travel grants can be offered on an ongoing basis is essential. This will provide younger Fellows with the opportunity to go overseas and develop in a way they may not have had the chance to do previously. It also gives exposure to cutting edge technology and approaches, provides new skill-sets and furthers international collaborations."

The Bongiorno National Network has been helping medical professionals for more than 53 years to grow, manage and protect their wealth. Across the country, the Bongiorno National Network works with many established surgeons who have been clients since they were young medical students.

> "This will provide younger Fellows with the opportunity to go overseas and develop in a way they may not have had the chance to do previously."

The network is made up of like-minded firms in each state; Bongiorno & Partners – Vic and NSW, Walshs – QLD, Bartons – SA and Smith Coffey – WA.

"We believe that being mindful and giving back to the community is the only way forward. Over the last decade, we have helped raise hundreds of thousands of dollars for community based charities.

Working with RACS to support younger Fellows with a travel grant was a natural fit. We are proud to create this legacy for the future benefit of surgery," said Director and founding partner Mr Tony Bongiorno.

Gabrielle Forman
Communications and Policy Officer, RACS.

Left to right: RACS CEO Mary Harney, Bongiorno & Partners Director Michael Waycott and RACS President John Batten

Dr Ruth Mitchell

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

RACSTA
Your Trainees' Association

On inspiration

There's a moment from my second year of training that lingers in my mind. I was about to do a muscle biopsy for a patient, referred by a local specialist physician. Wanting to ensure the right amount of muscle was taken, I reached for the phone and rang the referring doctor. A firm and businesslike woman answered. I introduced myself as the neurosurgery registrar, and suddenly, her tone changed. "How wonderful" she demurred "Are there many of you?" she asked, in a quiet, wistful voice. It emerged that when she was a medical student, there were hardly any women in medicine at all, and the idea of a woman going into surgery was inconceivable. Once I determined just how big a piece of vastus lateralis she wanted sent to the pathologists, she thanked me, from the bottom of her heart, for pursuing my dream. I was in tears as I hung up the phone, and I suspect she was too.

Years later in a theatre locker room I ran into an esteemed senior surgeon from another specialty. We were both rushing to other places, other patients, but even in the brief moment we talked about a difficult operative decision, I felt like I gained something. Beyond the wonderment that she remembered my name, there was the feeling that I had received a little of her wisdom. I walked out of the theatre complex with a spring in my step. When I count the inspiring moments with senior surgeons in women's locker rooms, desperately few such encounters come to mind. It wasn't until I excitedly told a male colleague about my uplifting conversation that I realised these particular locker room chats happen much more frequently for male Trainees.

"It's easy to forget that what we do as surgeons is not only helpful to our patients and their families, but valuable to those who have come before us, as well as those who follow in our footsteps."

There's a lot to be said for noting these moments of giving and receiving inspiration. It's easy to forget that what we do as surgeons is not only helpful to our patients and their families, but valuable to those who have come before us, as well as those who follow in our footsteps. And it's particularly important that we bring our whole selves to the work. It was so crucial to that specialist physician that I was a woman – in surgery. Important in ways I couldn't have imagined. Similarly, it is important and inspiring to me that an increasing number of women aspiring to become surgeons in New Zealand and Australia identify as Māori, Aboriginal or Torres Strait Islander. And whether what we bring what John Legend calls "the wisdom of the elders" or "young people's energy" we have a role to play in encouraging others to be their best and truest selves.

Dr Ruth Mitchell
Immediate Past Chair, RACSTA

Update from the South Australian State Committee

Dr David Walters

For a Regional Chair, a two-year term seems a brief and absorbing sojourn. For RACS two years represents the inexorable progress of surgery carried forth by the talent and commitment of its Fellows. They steadfastly make in-roads into bottomless waiting lists with the consistent values of their predecessors. For the apparatchiks of our health system it can be another two years under the government's moniker of *Transforming Health*. Two more years of media disasters, spin doctoring, stamping out fires, revolving door administration, electronic medical record system failures, ramping down and ramping up again, bed blocks, budget blow-outs, upgrading, downgrading, shutting facilities and opening new hospitals.

In contrast to RACS's steady ideals, this has been a tumultuous time in the South Australian health system. When last I wrote in this forum we were about to enter an exciting era with a new state-of-the-art hospital. A lot has happened over those twelve months.

In September the much-anticipated move to the new Royal Adelaide Hospital (RAH) was conducted over three days. The transition agenda was beset with murmurings about pre-election political time-lines and other non-clinical imperatives. Suspicions heightened when it was considered appropriate to move during the height of the flu-season!

Decanting the old facility and 'ramping up' the new, was an incredibly complex undertaking. This included 'ramping down' RAH services several weeks earlier and distributing the activity across the state's other city and fringe metropolitan facilities. For all the misgivings about this massive logistical exercise, it is accepted that the process went smoothly and none of the Armageddon-like scenarios eventuated. Everyone involved, both frontline and administration, should be applauded. We all breathed a sigh of relief.

As one might expect the operational demands of a hospital soon 'stress-test' a new facility. Stories began to emerge of defects and alterations to be commissioned. These included operating room lights fixed too low, leaking pipes and resuscitation rooms too small to be functional. The poor standard of the inpatient meals became fodder for the media. Many of these 'teething' issues were serialised in The Australian. Chronic emergency bed-blocks (almost prompted a disaster plan response) appear to be more than just the 'honey-pot effect' of a gleaming new facility. The new RAH is still sorting through a range of new systems and we wait to see if efficiency can be raised to cope with anticipated demand, or whether services need to be further 'transformed'.

> The distribution of the South Australian population has necessitated an adaption of the 'hub-and-spoke' approach to support rural surgeons. This is an oversimplification but generally our impression was that it seemed to work well, especially when compared to other rural disciplines organising themselves in a more ad-hoc manner."

The move to the new RAH has presented many challenges for surgical service delivery. The main ramification has been the blow-out in elective surgical waiting lists. Nine months later and this remains a burden. Although effective surgical teams ultimately devise methods of overcoming most physical and system constraints, it is still unclear if the new RAH has reached an equivalent elective through-put. Furthermore, considering all the gold and toil that has gone into the RAH project, concerns have also been raised around equity, particularly when resources are spread thin over a state-wide surgical service.

The Marshall government was sworn in in March, ending sixteen years of Labour health oversight, which began with the utopian vibe of the *Generational Health Review*

and concluded with the ambitious and controversial reform agenda *Transforming Health.* Now a new government faces old problems. It remains to be seen how the system evolves after the regime change.

Seemingly far away from these headline controversies is the quiet toil of our rural and regional surgical colleagues. This year, representing RACS, I conducted a tour of the regions with the RACS South Australian manager, to keep in touch with this important and integral part of our network. This was an opportunity to meet formally and informally with local surgeons and administrators and come away with a more detailed understanding of the common challenges and significant achievements of rural surgery in the state. The distribution of the South Australian population has necessitated an adaption of the 'hub-and-spoke' approach to support rural surgeons. This is an oversimplification but generally our impression was that it seemed to work well, especially when compared to other rural disciplines organising themselves in a more ad-hoc manner. Peer-review opportunities, education, mentoring, multidisciplinary meetings, locum relief, rostering support, telemedicine and tertiary links are fostered through these arrangements. This appeared to strike a balance between autonomous practice and personal/professional sustainability. The visit also highlighted a number or revitalised facilities and impressive capital improvements that were modern, functional and stunning aesthetically. We were both very grateful for the generous local hospitality and the significant interest our visit received.

Finally, in other local news, the South Australian Audit of Surgical Mortality (SAASM) has a new Clinical Director with Glenn McCulloch retiring from the position. Glenn's long involvement with SAASM has been pivotal to the success and ongoing viability of the audit. Ongoing funding from government and near universal compliance of Fellows reflects how Glenn has elevated the importance of this activity to surgeons and other stakeholders. A commitment such as this deserves recognition. I am therefore delighted to advise that Glenn McCulloch has been awarded this year's Sir Henry Newland Award. A serial nominee since the inception of the award, Glenn is a worthy winner among a field of nominees that continues to grow each year with the increased prestige of the award.

Dr David Walters
Chair, South Australia State Committee

Open House
Melbourne

Sunday
29 July 2018

A major public event in Melbourne's calendar.

RACS is again opening its doors to the general public as part of the Open House Melbourne weekend. A number of buildings not normally open to the public will be participating.

If you would like to be involved in Open House and volunteer as a tour guide we would like to hear from you.

For more information and to register as a volunteer please contact **Megan Sproule**
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Foundation Year Trainees practice hands-on training by inserting an airway during the PTC course

Building foundations in Timor-Leste

It has been well over a decade since the Primary Trauma Care (PTC) course was introduced in Timor-Leste in 2004. This was before the new National Referral Hospital in the capital of Dili (HNGV) was rebuilt and during the time when paper-based medical records were temporarily stored in a colourful array of shipping containers.

Initially, the PTC course was run by visiting international trainers and over the years, RACS advisors engaged in Dili have taken on mentoring while positioning Timorese clinicians at the forefront.

Those who are familiar with the PTC will recognise that the course focuses on 'cascading' locally, meaning that though initial training is carried out by visiting instructors, those trained through the train-the-trainer model will eventually take over the course to train others, thereby providing an effective way to future proof trauma training in Timor-Leste.

Eight years ago, the PTC course forayed in to the regional districts of Timor-Leste including Baucau, Maliana, Maubisse, Suai and the remote coastal exclave of Oecussi resulting in many doctors working in the periphery, trained in new trauma skills, under the watchful eye of RACS-engaged clinicians.

From 2010 until now, the PTC course has been run annually, with crucial buy-in from various Heads of Department across the National Hospital. Our Timorese counterparts use tools developed by our esteemed anaesthetic colleagues and these essential tools have further been translated in multiple languages including Bahasa Indonesian.

One of the key strategic global health pillars of RACS is to support capacity building and sustainable workforce development through leadership. As part of RACS' support to Timor-Leste and at the request of the Ministry of Health, RACS is currently engaged in delivering what is widely known as the Foundation Year Program, an entry pathway into a Post Graduate Diploma.

The purpose of the PTC in Timor is to familiarise Trainees with basic trauma care, directed especially at doctors working at the community health centre level. In April 2018, Trainee doctors in the Foundation Year Program participated in the PTC course. This was the second time the course was run in Timor-Leste by national instructors, again with the support of RACS engaged clinicians. The course was extremely well received with Trainees commenting on how useful their new skills will be in their future management of trauma patients.

Courses such as the PTC are part and parcel of establishing an effective hospital system and clinical governance in Timor-Leste. A three-tier clinical hierarchy is gradually being built up with Foundation Year Trainees being supervised by the senior Post Graduate Diploma Trainees, and senior clinicians supervising the Post Graduate Diploma doctors.

I am especially grateful and proud of our Timorese colleagues who delivered the PTC. Feedback indicates they did this tremendously well. Congratulations to all of the instructors and students involved!

The Primary Trauma Care course was supported by the Australian Government and implemented by RACS under the ATLASS II Program.

Professor Glenn Guest
FRACS

with Gwyn Low, Project Officer, Global Health, RACS

Courses for every stage of your career

Online registration form *is now available (login required).*

Inside 'Active Learning with Your Peers 2018' booklet are professional development activities enabling you to acquire new skills and knowledge and reflect on how to apply them in today's dynamic world.

Mandatory courses

With the release of the RACS 'Action Plan: Building Respect and Improving Patient Safety', the following courses are mandated for Fellows in the following groups:

- Foundation Skills for Surgical Educators course: Mandatory for SET Surgical Supervisors, Surgeons in the clinical environment who teach or train SET Trainees, IMG Clinical Assessors, Research supervisors, Education Board members, Board of Surgical Education and Training and Specialty Training Boards members.
- Operating with Respect one-day course: Mandatory for SET Supervisors, IMG Clinical Assessors and major RACS Committees.

Foundation Skills for Surgical Educators course (FSSE)

20 July 2018	Brisbane	QLD
20 July 2018	Hobart	TAS
22 July 2018	Sydney	NSW
28 July 2018	Melbourne	VIC
4 August 2018	Sydney	NSW
4 August 2018	Melbourne	VIC
17 August 2018	Christchurch	NZ
17 August 2018	Melbourne	VIC
24 August 2018	Perth	WA
25 August 2018	Brisbane	QLD
20 September 2018	Orange	NSW
22 September 2018	Adelaide	SA
16 October 2018	Queenstown	NZ

FSSE is an introductory course to expand knowledge and skills in surgical teaching and education. The aim of the course is to establish a basic standard expected of RACS surgical educators and will further knowledge in teaching and learning concepts. Participants will look at how these concepts can be applied into their own teaching context and will have the opportunity to reflect on their own personal strengths and weaknesses as an educator.

Operating with Respect course (OWR)

30 August 2018	Melbourne	VIC
1 September 2018	Wellington	NZ
5 September 2018	Brisbane	QLD
14 September 2018	Adelaide	SA
29 September 2018	Canberra	ACT
12 October 2018	Sydney	NSW
13 October 2018	Sydney	NSW
16 October 2018	Queenstown	NZ

The OWR course provides advanced training in recognising, managing and preventing discrimination, bullying and sexual harassment. The aim of this course is to equip surgeons with the ability to self-regulate behaviour in the workplace and to moderate the behaviour of colleagues, in order to build respect and strengthen patient safety.

Academy of Surgical Educators Studio Sessions

25 July 2018	Brisbane	QLD
10 August 2018	Hobart	TAS
11 September 2018	Canberra	ACT

Each month, the Academy of Surgical Educators presents a comprehensive schedule of education events curated to support surgical educators.

The Educator Studio Sessions are presented around Australia and New Zealand and deliver topics relevant to the importance of surgical education and help to raise the profile of educators. They provide insight, a platform for discussions and an opportunity to learn from experts.

All sessions are also simulcast via webinar. Register here: www.surgeons.org/studiosessions

Safer Australian Surgical Teamwork (SAST)

21 July 2018	Sydney	NSW
11 August 2018	Brisbane	QLD

SAST is a combined workshop for surgeons, anaesthetists and scrub practitioners. The workshop focuses on non-technical skills which can enhance performance and teamwork in the operating theatre thus improving patient safety.

It explores these skills using three frameworks developed by The University of Aberdeen, Royal College of Surgeons of Edinburgh and the National Health Service - Non-Technical Skills for Surgeons (NOTSS), Anaesthetists Non-Technical Skills (ANTS) and Scrub Practitioners' List of Intra-operative Non-Technical Skills (SPLINTS). These frameworks can help participants develop the knowledge and skills to improve their performance in the operating theatre in relation to communication/teamwork, decision making, task management/leadership and situational awareness. The program looks at the relationship between human factors and safer surgical practice and explores team dynamics. Facilitators will lead participants through a series of interactive exercises to help reflect on performance and that of the operative team.

Surgeons as Leaders in Everyday Practice

10-11 August 2018	Canberra	ACT
23-24 November 2018	Melbourne	VIC

Surgeons as Leaders in Everyday Practice is a one and a half day program which looks at the development of both the individual and clinical teams' leadership capabilities. It will concentrate on leadership styles, emotional intelligence, values and communication and how they all influence their capacity to lead others to enhance patient outcomes. It will form part of a leadership journey sharing and gaining valuable experiences and tools to implement in the own workplace. All meals, accommodation and educational expenses are included in the registration fee. The evening session will involve an inspirational leadership speaker.

Combined Meeting of AOA/RACS/AMLC includes AMA Guidelines: Difficult Cases

7-8 September 2018	Melbourne	VIC

This meeting includes:

- Clinical updates on micro-invasive surgery, on elbows – particularly the stiff
- Elbow, on surgery for arthritis of the ankle, foot surgery, and on degenerative and post traumatic conditions
- Risk management in bariatric surgery
- Robotic surgery
- Medico-legal matters such as 'operating on the futile case'
- Current litigation presentations by indemnity providers
- Expert evidence
- Pain Management including opiate overload and Complex Regional Pain Syndrome
- Difficult cases assessed under AMA 4th, 5th and 6th Editions

External registration through AOA.

SAT SET course

8 September 2018	Brisbane	QLD

The Supervisors and Trainers for Surgical Education and Training (SAT SET) course aims to enable supervisors and trainers to effectively fulfil the responsibilities of their important roles under the new Surgical Education and Training (SET) program. This free three hour workshop assists Supervisors and Trainers to understand their roles and responsibilities, including legal issues around assessment. It explores strategies which focus on the performance improvement of Trainees, introducing the concept of work-based training and two work-based assessment tools; the Mini-Clinical Evaluation Exercise (Mini CEX) and Directly Observed Procedural Skills (DOPS).

Keeping Trainees on Track

8 September 2018	Brisbane	QLD

Keeping Trainees on Track (KTOT) has been revised and completely redesigned to provide new content in early detection of Trainee difficulty, performance management and holding difficult but necessary conversations.

This free three hour course is aimed at RACS Fellows who provide supervision and training to SET Trainees. During the course, participants will have the opportunity to explore how to set up effective start of term meetings, diagnosing and supporting Trainees in four different areas of Trainee difficulty, effective principles of delivering negative feedback and how to overcome barriers when holding difficult but necessary conversations.

Process Communication Model Seminar 1

12 -14 October 2018	Perth	WA
16 -18 November 2018	Adelaide	SA

Patient care is a team effort and a functioning team is based on effective communication. PCM is a tool which can help you to understand, motivate and communicate more effectively with others. It can help you detect early signs of miscommunication and thus avoid errors. PCM can also help to identify stress in yourself and others, providing you with a means to re-connect with those you may be struggling to understand.

Before the Introductory PCM course each participant is required to complete a diagnostic questionnaire which forms the basis of an individualised report about their preferred communication style.

Partners are encouraged to register.

Process Communication Model Seminar 2

14 -16 September 2018	Sydney	NSW

This advanced three day program allows you to build on and deepen your knowledge while practicing the skills you learned during PCM Seminar 1. You will learn more about understanding your own reactions under distress, recognising distress in others, understanding your own behaviour and making communication happen. PCM enables you to listen to what has been said, while at the same time being aware of how it has been said. At times we are preoccupied with concentrating on what is said, formulating our own reply and focussing solely on the contents of the conversation. To communicate effectively, we need to focus on the communication channels others are using and to recognise when they are in distress. ►

Note: In order to participate in PCM Seminar 2, registrants must have attended and be familiar with the content of PCM Seminar 1.

Clinical Decision Making

15 September 2018	Melbourne	VIC
30 November 2018	Adelaide	SA

This four hour workshop is designed to enhance a participant's understanding of their decision making process and that of their trainees and colleagues. The workshop will provide a roadmap, or algorithm, of how the surgeon forms a decision. This algorithm illustrates the attributes of expert clinical decision making and was developed as a means to address poor clinical decision making processes, particularly as a guide for the supervisor dealing with a struggling trainee or as a self improvement exercise.

Non-Technical Skills for Surgeons (NOTSS)

22 September 2018	QLD	Brisbane
5 October 2018	NZ	Auckland
26 October 2018	SA	Adelaide
23 November 2018	NSW	Sydney

This workshop focuses on the non-technical skills which underpin safer operative surgery. It explores a behaviour rating system developed by the Royal College of Surgeons of Edinburgh which can help you improve performance in the operating theatre in relation to situational awareness, communication, decision making and leadership/ teamwork. Each of these categories is broken down into behavioural markers that can be used to assess your own performance as well as your colleagues.

Bioethics Forum

27 October 2018	Sydney	NSW

RACS Medico Legal Section presents the Bioethics Forum to stimulate robust bioethical discussions amongst surgeons. The Forum has a broad clinical emphasis to reveal current medical, surgical and hospital practice and to bring into focus innovations in medicine, nursing, pain relief and surgery that continue to evolve. Topics include Medicinal Cannaboids, Euthanasia Debate - Patient's rights to die, Futile case - Collaborating Hospitals of Surgical Mortality on Mortality Rate, Complaints handling in bioethical disputes, Advanced directives, Guardianship and Power of Attorney, Off-field behaviour by professionals and Conflict of Interest, Financial disclosure e.g. when a surgeon has been involved in the development of an implantable device, End of life issues and Healthcare proxy. The target group for this forum is Fellows, IMGs, Trainees and other interested participants.

PROFESSIONAL DEVELOPMENT WORKSHOP
DATES: July - November 2018

ACT		
Surgeons as Leaders in Everyday Practice	10-11 Aug	Canberra
Academy of Surgical Educators Studio Session	10 Sep	Canberra
Foundation Skills for Surgical Educators	2 Dec	Canberra
NSW		
Safer Australian Surgical Teamwork	21 July	Sydney
Foundation Skills for Surgical Educators	22 July	Sydney
Surgeons as Leaders in Everyday Practice	3-4 Aug	Sydney
Foundation Skills for Surgical Educators	4 Aug	Sydney
Process Communication Model Seminar 2	14 -16 Sep	Sydney
Foundation Skills for Surgical Educators	20 Sep	Orange
Bioethics Forum	27 Oct	Sydney
Non-Technical Skills for Surgeons	23 Nov	Sydney
NZ		
Foundation Skills for Surgical Educators	17 Aug	Christchurch
Foundation Skills for Surgical Educators	16 Oct	Queenstown
Non-Technical Skills for Surgeons	5 Oct	Auckland
QLD		
Foundation Skills for Surgical Educators	20 July	Brisbane
Academy of Surgical Educators Studio Sessions	25 July	Brisbane
Safer Australian Surgical Teamwork	4 Aug	Brisbane
Foundation Skills for Surgical Educators	25 Aug	Brisbane
SAT SET Course	8 Sep	Brisbane
Keeping Trainees on Track	8 Sep	Brisbane
Non-Technical Skills for Surgeons	22 Sep	Brisbane
VIC		
Foundation Skills for Surgical Educators	28 July	Melbourne
Foundation Skills for Surgical Educators	4 Aug	Melbourne
Academy of Surgical Educators Studio Sessions	8 Aug	Melbourne
Foundation Skills for Surgical Educators	17 Aug	Melbourne
Clinical Decision Making	15 Sep	Melbourne
Academy of Surgical Educators Studio Sessions	23 Oct	Melbourne
TAS		
Foundation Skills for Surgical Educators	20 July	Hobart
Academy of Surgical Educators Studio Sessions	10 Aug	Hobart
WA		
Foundation Skills for Surgical Educators	24 Aug	Perth
Process Communication Model Seminar 1	12-14 Oct	Perth
SA		
Foundation Skills for Surgical Educators	22 Sep	Adelaide
Non-Technical Skills for Surgeons	26 Oct	Adelaide
Process Communication Model Seminar 1	16-18 Nov	Adelaide
Clinical Decision Making	30 Nov	Adelaide

Register online

For future course dates or to register for any of the courses detailed above, please visit https://www.surgeons.org/for-health-professionals/register-courses-events/
Contact the Professional Development Department on +61 3 9249 1122 or email **PDactivities@surgeons.org**

Skills training courses 2018

RACS offers a range of skills training courses to eligible medical graduates that are supported by volunteer faculty across a range of medical disciplines. Eligible candidates are able to enrol online for RACS Skills courses.

ASSET: Australian and New Zealand Surgical Skills Education and Training

ASSET teaches an educational package of generic surgical skills with an emphasis on small group teaching, intensive hands-on practice of basic skills, individual tuition, personal feedback to participants and the performance of practical procedures.

EMST: Early Management of Severe Trauma

EMST Edition 10 has launched! EMST teaches the management of injury victims in the first hour or two following injury, emphasising a systematic clinical approach. It has been tailored from the Advanced Trauma Life Support (ATLS®) course of the American College of Surgeons. The course is designed for all doctors who are involved in the early treatment of serious injuries in urban or rural areas, whether or not sophisticated emergency facilities are available.

CCrISP®: Care of the Critically Ill Surgical Patient

CCrISP Edition 4 has launched! RACS has officially launched Edition 4 of the Care of the Critically Ill Surgical Patient (CCrISP®) course across Australia and New Zealand. The CCrISP® Committee has extensively reviewed materials provided by the Royal College of Surgeons of England (RCS) - resulting in an engaging new program which is highly reflective of current Australian and New Zealand clinical practice and standards in management of critically ill patients.

CLEAR: Critical Literature Evaluation and Research

CLEAR is designed to provide surgeons with the tools to undertake critical appraisal of surgical literature and to assist surgeons in the conduct of clinical trials. Topics covered include: Guide to clinical epidemiology, Framing clinical questions, Randomised controlled trial, non-randomised and uncontrolled studies, Evidence based surgery, Diagnostic and screening tests, Statistical significance, Searching medical literature and decision analysis and Cost effectiveness studies.

TIPS: Training in Professional Skills

TIPS is a unique course designed to teach surgeons-in-training core skills in patient-centred communication and teamwork, with the aim to improve patient care. Through simulation participants address issues and events that occur in the clinical and operating theatre environment that require skills in communication, teamwork, crisis resource management and leadership.

SKILLS TRAINING COURSE DATES
JULY - SEPTEMBER 2018 | *Available courses

ASSET	
Thursday, 9 August – Friday, 10 August	Perth
Friday, 10 August – Saturday, 11 August	Wellington
Friday, 24 August – Saturday, 25 August	Brisbane
Friday, 7 September – Saturday, 8 September	Sydney
Friday, 12 October – Saturday, 13 October	Brisbane
Friday, 19 October – Saturday, 20 October	Melbourne
Friday, 26 October – Saturday, 27 October	Auckland
CCrISP	
Friday, 10 August – Sunday, 12 August	Perth
Thursday, 16 August – Saturday, 18 August	Wellington
Friday, 24 August – Sunday, 26 August	Brisbane
Thursday, 6 September – Saturday, 8 September	Auckland
Friday, 7 September – Sunday, 8 September	Melbourne
Friday, 19 October – Sunday, 21 October	Melbourne
Friday, 26 October – Sunday, 28 October	Sydney
Friday, 26 October – Sunday, 28 October	Brisbane
Friday, 31 October – Sunday, 2 November	Dunedin
CLEAR	
Friday, 24 August – Saturday, 25 August	Sydney
Friday, 14 September – Saturday, 15 September	Melbourne
Friday, 19 October – Saturday, 20 October	Brisbane
EMST	
Friday, 24 August – Sunday, 26 August	Dunedin
Friday, 31 August – Sunday, 2 September	Melbourne
Friday, 31 August – Sunday, 2 September	Brisbane
Friday, 14 September – Sunday, 16 September	Wagga Wagga
Friday, 14 September – Sunday, 16 September	Auckland
Saturday, 21 September – Sunday, 23 September	Sydney
Friday, 5 October – Sunday, 7 October	Brisbane
Thursday, 11 October – Saturday, 13 October	Perth
Monday, 15 October – Wednesday, 17 October	Melbourne
Friday, 19 October – Sunday, 21 October	Hamilton
Friday, 19 October – Sunday, 21 October	Sydney
Friday, 26 October – Sunday, 28 October	Canberra
Friday, 26 October – Sunday, 28 October	Adelaide
TIPS	
Friday, 24 August – Sunday, 26 August	Perth
Friday, 14 September – Sunday, 16 September	Melbourne

**Courses available at the time of publishing*

Contact the Skills Training Department

Email: skills.courses@surgeons.org • Visit: www.surgeons.org click on Education and Training then select Skills Training courses.
ASSET: +61 3 9249 1227 asset@surgeons.org • **CCrISP:** +61 3 9276 7421 ccrisp@surgeons.org • **CLEAR:** +61 3 9276 7450 clear@surgeons.org
EMST: +61 3 9249 1145 emst@surgeons.org • **TIPS:** +61 3 9276 7419 tips@surgeons.org • **OWR:** +61 3 9276 7486 owr@surgeons.org

A case note review

Poor postoperative communication with the treating surgeon despite repeated MET calls and a leaking anastomosis

Clinical details:

Diagnoses: Rectovaginal fistula with dysfunctional loop ileostomy.

Operations: Closure of loop ileostomy and laparoscopic formation of end colostomy.

Cause of death: Gross systemic sepsis from possible anastomotic leak.

Course to death:

An elderly patient was admitted for planned closure of loop ileostomy (dysfunctional) and conversion to end colostomy. The patient had a past history of anterior resection for rectal cancer with postoperative radiotherapy. The patient also had a colovesical fistula that was biopsy-negative for local recurrence. Comorbidities included diabetes, cardiac failure and dementia. All investigations were negative for local recurrence and it was presumed that the fistula was formed as a result of radionecrosis. Lung and liver metastases were diagnosed. Palliative loop ileostomy had resulted in poor local stoma control. The stoma was revised. This final admission was an elective admission for closure of the ileostomy.

A laparoscopic mobilisation of the left colon with side-to-side stapled anastomosis of small bowel after resection of ileostomy was carried out. All staple lines were oversewn and an end colostomy formed. It was an uneventful recovery until day seven.

The patient went into urinary retention on day three postoperatively, the indwelling catheters were removed on day five and a urinary tract infection with Escherichia coli was documented. A medical emergency team (MET) call was made on day six at 11:59 for rapid atrial fibrillation. The patient's condition was discussed with the medical registrar regarding anticoagulation. Electrolytes were replaced due to low magnesium with nausea and vomiting. The patient was febrile and tachypnoeic and deemed to be septic. Blood cultures were taken and bloods were sent with full septic screen initiated. Chest X-ray was performed revealing free gas and a computed tomography of the abdomen showed increased possible air leak. Subsequent multiple MET calls were made due to increased respiratory rate, tachycardia and sepsis.

There was discussion with the family regarding resuscitation limitations. The patient was deemed not appropriate for the Intensive Care Unit on day seven at 04:00. Over the course of the day the patient continued to have multiple MET calls. Gastrografin was given, revealing extravasation at the anastomosis. The patient was planned for surgery but this was cancelled due to low blood pressure, leading to discussions with the patient's family. The patient continued to deteriorate throughout the day and a decision was made to palliate. The patient passed away on day seven at 21:00.

Assessor's comments:

This elderly patient was admitted for elective surgery because of a difficult-to-manage ileostomy that had been performed to control a rectovaginal fistula resulting from the treatment of rectal cancer. The patient had low volume metastatic disease known for several years, in addition to mild vascular dementia, biventricular heart failure and type 2 diabetes. The patient had been transferred after unsuccessful refashioning of the loop ileostomy at another hospital.

The laparoscopic assisted ileostomy resection and formation of colostomy proceeded uneventfully. Three days later there was some vomiting, the patient was noted to be in atrial fibrillation and there was minimal stoma output. On postoperative day six, progress was satisfactory, and the patient was reviewed by the rehabilitation team and deemed ready for transfer to rehabilitation.

At midnight on day six there was a MET call with heart rate 130 beats per minute and rigors. A chest X-ray

showed significant free gas and a subsequent Computed Tomography scan confirmed increasing free gas and intra-abdominal fluid. After a second MET call the criteria were modified to allow a heart rate of up to 140 beats per minute.

The overnight plan was for palliation including antibiotics and fluids, and not for resuscitation in light of known metastatic cancer, but these instructions were only documented at 08:00 the following morning. The patient continued to deteriorate with a total of seven MET calls (although the documentation was unclear, so a couple of the MET call entries may actually refer to the same episode). The surgical registrar considered an anastomotic leak and ordered a Gastrografin follow-through, which occurred at 11:30 but was unhelpful. The Intensive Care Unit consultant reviewed the patient at 15:00 and requested a surgical consultant review. The consultant documentation was at 16:30 and the plan was to take the patient to theatre for laparotomy for peritonitis. The patient's condition deteriorated and it was felt that surgical intervention would be futile. Palliation was instituted and the patient died later that evening.

Documentation in the progress notes was patchy. There was no indication of goals of care, or of advanced care planning. At the time of being made palliative it was documented that there was no advanced care plan. There was no documentation of any surgical consultant review, or of postoperative discussions being held with the consultant, until the day of death.

It was surprising (and disappointing) that, despite seven MET calls for this desperately unwell patient in the space of 12 hours, a surgical consultant was not notified. The patient's only chance of survival would have been early recognition of anastomotic leak and return to theatre. The covering team overnight had no written indication of advanced care planning, and did not appreciate the significance of free intraperitoneal gas and clinical deterioration.

Documentation of the goals of care and advanced care planning are important in elderly patients with significant pathology and comorbidities. The responsible consultant should be kept informed of progress and this should also be documented. A MET call indicates significant clinical concern and should mandate notification of the consultant who can advise appropriate investigations or care limitations.

Professor Guy Maddern
Surgical Director of Research and Evaluation incorporating ASERNIP-s

A glorious revolution

Did British naval medicine influence 'modern' medicine?

How did Britain, a small island, of no great population, and which had, for the most part, played an insignificant role in 17th century Europe, transform itself in the space of sixty years, into a great naval power with an immense empire? What factors led to this? How did this happen? Did it change modern medicine?

Before the industrial revolution Europe was an agricultural economy. Western Europeans had to buy exotic Asian goods from the Ottoman Empire and were prevented from exploiting their trade routes.

With the discovery of the New World, Europeans found alternative routes to Asia. Trade changed from the Mediterranean Sea to the Atlantic Ocean.

The Glorious Revolution in 1688, when William of Orange and his wife Mary Stuart seized the crown from his uncle and father-in-law James II, led to massive changes.

The creation of the Bank of England and the national debt were among the Dutch innovations adopted by the British to underwrite wars. William increased the size of naval medical staff and changed the organisation of medical services.

Institutional conflicts occurred between the College of Physicians, with their educated judgement, and the Lords of the Admiralty, who were all for medical empiricism. The Physicians wanted to limit the influence of the empirical and practical sort of curative medicine performed by the Barber-Surgeons' Company and the Society of Apothecaries.

It was neither possible nor desirable to apply humoral therapeutics for each serviceman. Medical empiricism was legitimised by naval medicine leading to the development of standardised diagnosis and treatment.

Soldiers and sailors lived in cramped and dirty quarters or in the open air, subject to the weather, elbow to elbow with their fellows, on inadequate and commonly bad, even inedible rations. Scurvy, tropical diseases, and fevers of all kinds raged among the men, incapacitating many of those who did not perish.

The intellectual renaissance of the closing decades of the sixteenth century led to the budding spirit of scientific inquiry. Quantitative medical experimentation was conducted at Parma around 1600 by Galileo (1564-1642) and Sanctorius (1561-1636) - the founding father of metabolic balance studies[1].

John Graunt

John Graunt (1620-1674) developed early human statistical and census methods that became modern demography. He produced the first life table and was one of the first experts in epidemiology[2].

Sir John Pringle (1707-1782) published *Observations on the Diseases of the Army*. Pringle identified hospitals as a major cause of sickness. Pringle felt that fevers, dysentery, and jail fever were the three most prevalent and fatal diseases affecting armies. His recommendations for prevention helped to control epidemics. He made the humane suggestion that military hospitals on either side should be regarded as neutral and mutually protected[3].

James Lind (1716-1794) is rightly called 'the father of nautical medicine', a pioneer of naval hygiene in the Royal Navy. By conducting the first ever clinical trial (May 1747): he developed the theory that citrus fruits cured scurvy. He argued for the health benefits of better ventilation aboard naval ships, improved cleanliness of sailors' bodies, clothing and bedding, and below-deck fumigation with sulphur and arsenic. He also proposed that fresh water could be obtained by distilling seawater. His work advanced the practice of preventive medicine, tropical medicine and improved nutrition to "*preserve the lives of Seaman, and as a sequel, such (Europeans) undertaking Voyages to distant Countries*"[4].

James Lind

Sir Gilbert Blane (1749-1834) noted in 1781 that one in seven seamen died in the West Indies. He improved naval hygiene. This led to a drop in mortality to one in 20. These changes in health more than doubled the fighting force of the navy. He ensured long overdue reforms such as supplying free drugs to naval surgeons, the provision of soap and the issue of lime juice to prevent scurvy. He assisted the Government in drawing up the rules for the *Quarantine Act* of 1799; advised on the prevention of contagious fevers in prisons and in ships carrying convicts to Botany Bay; supported compulsory vaccination; and advised on regulations for the medical services in India[5].

In the 18th century, with the move to standing armies and navies, came permanent military medical establishments and a shift from the management of disease in individuals to groups. Prevention, discipline and surveillance bought results and career opportunities for physicians and surgeons. These developments had an impact on medicine and society, and in turn were influenced by them. Medicine and war were components of a wider social, economic, cultural and political framework. Medicine was part of the process of militarisation.

For the civilian population, the restructuring of the naval medical establishment and the scientific revolution meant: a new career structure for doctors, a framework for investigations into public hygiene and clinical problems, the changing role of the hospital, the movement of medicine in a 'clinical' direction and the 'rise of the surgeons'.

1. Sanctorius, Sanctorio (1561-1636): De statica medicina et de responsione ad staticomasticem. (Hagæ-Comitis: Adriani Vlaq, 1657) C 415
2. Graunt, John (1620-1674): Natural and political observations mentioned in a following index and made upon the bills of mortality. (London: John Martyn, 1665) C235
3. Pringle, Sir John (1707-1782): Observations on the Diseases of the Army. (London: printed for A. Millar, D. Wilson and T. Durham, and T. Payne, 3rd edn, 1761) C 391
4. Lind, James (1716-1794): An Essay on Diseases incidental to Europeans in hot Climates, with the Method of preventing their fatal Consequences. (London: J. Murray, 1788) GC
5. Blane, Sir Gilbert (1749-1834): Observations on the Diseases incidental to Seamen. (London: Joseph Cooper, 1785) C 63

Dr Philip Sharp
FRACS

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

South Australian Dinner & Anstey Giles Lecture

Friday 12 October 2018

The Sanctuary Adelaide Zoo

Plane Tree Drive, Adelaide

Pre-dinner drinks and zoo animal experience at 6:30pm to 7:00pm
Dinner 7:00pm

Anstey Giles Lecture

Professor Peter Rathjen

Vice-Chancellor and President, The University of Adelaide

The 2018 South Australian Sir Henry Newland recipient Mr Glenn McCulloch will be awarded during the dinner.

Cost: $140.00 per person

Dress: Lounge Suit

RSVP: 2 October 2018

Professor Peter Rathjen is the 22nd Vice-Chancellor and President of the University of Adelaide.
He is internationally renowned as a gifted scientist and medical researcher, with a strong interest in stem cell science.
His most recent prior appointment was as Vice-Chancellor of the University of Tasmania where he oversaw the creation of vibrant new university precincts within Hobart, Launceston and Burnie.
He brings a similarly ambitious reform agenda to Adelaide.

Free car parking available outside the zoo on Plane Tree Drive

Online registration now available via this link https://surgeons.eventsair.com/saad18/onlinebooking

Royal Australasian College of Surgeons

PO Box 44, North Adelaide SA 5006
Telephone: 08 8239 1000 **Email:** college.sa@surgeons.org **Website:** www.surgeons.org

The College Grace

A vanishing tradition

College façade 1960s (Sir Benjamin Rank's car in driveway)

God Grant Grace to the Queen
Wisdom and Prosperity to this Royal College
And to every one of us a thankful heart
For His good gifts today

Our College Grace is a replica of the Grace used by the Royal College of Surgeons of England. It came about in 1962 when the President of the English College at the time, Mr Hedley Atkins, visited our College. He was asked to say Grace before the GSM dinner. That was the first time, to my knowledge, that the Grace was used in Australia. Since then by courtesy of our sister College in London, we have on occasions, used the Grace of the Royal College of Surgeons of England as our own. In 2008, at the Annual Scientific Congress in Hong Kong, Council declined the use of the Grace at the College Banquet and all Specialty dinners. However, in recent years, the Grace was occasionally still in use at the Military Surgery and Surgical History sectional dinners. The last time it was used was in 2017. Also missing these days is the Loyal Toast and the Toast to our College.

Ref: Mellick SA, Changing Our Religious Profile, Surgical News. Vol. 9. July 2008. p 30

Gordon Low AM
FRACS

JWM Turner , Battle of Trafalgar, 1808-8 (Tate)

The *All at Sea* display is now in the walkway of RACS.

The display focusses on naval surgeons from the inveterate explorer, George Bass to surgeons currently serving in the Navy or Naval reserve. The Surgeon's Chest board has images of early 19th century instruments – most of these are from our own collections (via NZ office) and when they return from the conservator, they will also be displayed.

Trephine and handle, early 19th century

Interested in joining the Academy of Surgical Educators?

The Academy of Surgical Educators was developed by RACS to foster and promote the pursuit of excellence in surgical education. The Academy helps to support and develop all who are interested in surgical education whether they are surgeons, trainees, International Medical Graduates or non-surgeons.

The Academy is open to anyone who has an active interest or involvement in surgical education or training in Australasia as well as internationally. We encourage you to join to benefit from the broad range of activities and resources available to members.

To apply for membership to the Academy, please provide the following to the Academy secretariat via email to **ase@surgeons.org**

- A covering letter explaining your reasons for applying for membership
- Your curriculum vitae (no longer than 2 pages)
- Two referees
- Your RACS ID number

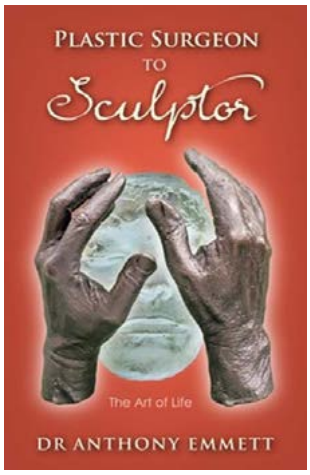
ACADEMY OF SURGICAL EDUCATORS
Royal Australasian College of Surgeons

Donations to the Library collection

Plastic Surgeon to Sculptor: the Art of Life by Dr Anthony Emmett

Dr Emmett describes the book as follows: *"This is an ideas book, a book of techniques, surgical techniques, sculptural techniques, mental techniques, and retirement techniques. In it you will find many facets of interest. Look at the area which interests you and ignore the rest. Open it anywhere. It is a biography."*

The book's introduction provides some background of its author: *"my interest in seeing my father as the GP-Surgeon of the town, made me decide on a surgical career by the age of 9 years, and the enjoyment of studying the anatomical structures of the body followed through my student years into my surgeon years, and into my sculptural period."*



At 270 pages the book has scope to explore Dr Emmett's beliefs around 'the joy of the creative moment'. Chapters include plastic surgical techniques including Chapter 2 - Understanding the Self-Image, and Chapter 5 - Sculpture of the Living. Many chapters are devoted to a wide range of materials and techniques for the sculptor. An extensive list of further reading is also provided.

Donated by the author.

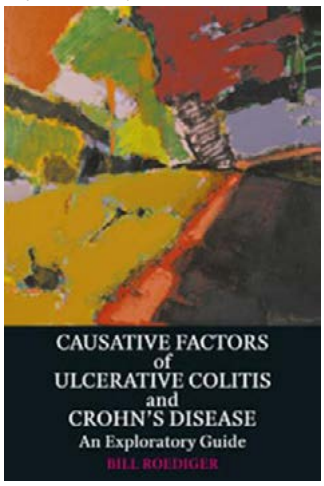
Causative Factors of Ulcerative Colitis and Crohn's Disease: An Exploratory Guide by Bill Roediger

Bill Roediger is a clinical scientist who has researched Ulcerative Colitis and Crohn's Disease for forty years using mainly patient-derived observations.

The causation of two inflammatory bowel diseases, ulcerative colitis and Crohn's disease, are usually considered unknown. This book was collated from the published scientific literature and observations that brought new avenues of thought on the disease processes of ulcerative colitis and Crohn's disease.

Ulcerative Colitis

Following the unexpected observation, made in the early 1980s, that bacterial products (short chain fatty acids) nourish the lining cells of the large bowel, it became possible to define biochemical alterations in these cells associated with ulcerative colitis. Agents that mimicked the biochemical alterations (nitric oxide with hydrogen sulphide) were subsequently found and also established to be derived from bacteria. These injurious agents are generated by bacteria from high protein diets, typical of Western diets. Countries where low protein and high carbohydrate diets are consumed, such as rural Africa, have a negligible incidence of ulcerative colitis. Bacteria in the human colon that produces nitric oxide still needs to be defined.



Crohn's Disease

Crohn's disease manifests in a biphasic clinical pattern: a mild early 'infective' stage responsive to antibiotics and a later 'antigenic' phase unresponsive to antibiotics but responsive to immune suppression. One organism, *Mycoplasma fermentans*, that follows this pattern can be detected in Crohn's disease. These bacterial observations need to be verified by further analyses.

The introduction of this book tells us that each of the 19 chapters is headed by a non-technical outline to facilitate understanding of the chain of thoughts of the more technical sections of some chapters. These require a basic understanding of biology.

Each chapter provides a list of references.

Donated by the author.

60th Victorian Annual Surgical Meeting

"TRAUMA SURGERY IN 2018"
Contemporary Surgical Management of Severe Trauma
Royal Children's Hospital – Education Centre

19 - 20 October 2018

photo by John Gollings

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https://tinyurl.com/VicASM18Abstracts

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#VicASM18
www.surgeons.org

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

IN MEMORIAM

Our condolences to the family, friends and colleagues of the following Fellows whose death has been notified over the past month:

John Robert Oakley (TAS)

Bruce Shepherd (NSW)

Bruce Neil Procter Benjamin (NSW)

Informing RACS

If you wish to notify the College of the death of a Fellow, please contact the manager in your regional office:

ACT: college.act@surgeons.org
NSW: college.nsw@surgeons.org
NZ: college.nz@surgeons.org
QLD: college.qld@surgeons.org
SA: college.sa@surgeons.org
TAS: college.tas@surgeons.org
VIC: college.vic@surgeons.org
WA: college.wa@surgeons.org
NT: college.nt@surgeons.org

In memoriam

RACS publishes abridged Obituaries in *Surgical News*. We reproduce the first two paragraphs of the obituary. The full versions can be found on the RACS website at: www.surgeons.org/member-services/in-memoriam/

Bruce Shepherd

Orthopaedic Surgeon and Founder of The Shepherd Centre

1932 - 2018

Dr Bruce Shepherd AM, founder of leading children's charity The Shepherd Centre, died on Friday, 25 May 2018. His tireless work as a pioneer of support for hearing impaired children transformed him from a high profile medical advocate to an iconic Australian.

Receiving the news that your child is deaf can be heartbreaking for parents. But it was this devastating moment, when Dr Bruce Shepherd's children were born profoundly deaf, that triggered a lifetime of advocacy for early intervention services for hearing impaired children.

Dr Shepherd's extraordinary achievements have helped Australia become one of the best places in the world to be born deaf. His legacy means that, through The Shepherd Centre, Australia provides services equal to those anywhere else in the world.

Dr Shepherd described himself as an 'interfering man'. He certainly interfered with determination when it came to safeguarding the health system, the delivery of world-class health care to all Australians and access to early intervention services for deaf children.

Edward Marzec

Ear, Nose and Throat Surgeon

1948 - 2017

Edward Marzec was the eldest of three children, born 27 November 1948 in Germany where his parents had been taken as forced labour during the war. His father, a captured Polish soldier and his mother, who was taken from a Russian orphanage, met when working on adjacent farms.

Edward was born while they were waiting to be relocated to a new country. He was just 14 months old when the little family arrived in Melbourne on the SS Goya in 1950 with nothing to their name, no English language, trade or skills, and lived in a very frugal manner initially in a tent on a block of land at Royal Park on which Ed's father gradually built a house room by room. No doubt his parents' example was a factor in the development of Ed's prodigious work ethic.

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"Travel grants are the stepping stone for younger Fellows"
– Pecky De Silva, Younger Fellow

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All costs for the Foundation for Surgery are provided for by the College so that 100% of your donation achieves its maximum benefit to the community.

100% of your donation assists in addressing critical surgical need

"We are not a team because we work together. We are a team because we trust, respect and care for each other,"

Vala Afshar