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ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

ASC BANGKOK 2019

Highlights of this year's Annual Scientific Congress

PLANS FOR THE FUTURE

Introducing President Tony Sparnon and Vice President Richard Perry

POSITIVE CHANGE

Surgeons contribute to New Zealand's new gun laws

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Cover and above: Thai performers entertain at the RACS ASC Congress dinner

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College should embrace diversity in all its forms, says in-coming President

Working in the smallest subspecialty of the smallest surgical specialty, general paediatric and burns surgeon Mr Tony Sparnon this year becomes the seventh surgeon from South Australia to become president of RACS.

Born in the small South Australian town of Woomera, he brings to the presidency a determination to incorporate the views of surgeons working in remote, regional or smaller specialities and subspecialties into all College business.

Mr Sparnon was educated at Pulteney Grammar School and the University of Adelaide and received his FRACS in 1983 before undertaking overseas postings as Senior Registrar at Our Lady's Hospital in Dublin, Ireland, and at the Hospital for Sick Children, Great Ormond Street, London.

After a period as the Nuffield Research Fellow at the Institute of Child Health, University of London, Mr Sparnon returned to Adelaide in 1987 as Senior Visiting Paediatric Surgeon at the Women's and Children's Hospital, a position he held for more than 30 years. During this time, he was also Head of the Paediatric Burn Service for 17 years and is presently the hospital's Senior Consulting Paediatric Surgeon.

With a keen interest in surgical education, Mr Sparnon is a former Censor in Chief, Chair of the Court of Examiners, Chair of the Board of Paediatric Surgery and Senior Examiner in Paediatric Surgery, a past president of the Australian and New Zealand Association of Paediatric Surgeons and a life member of the Australian and New Zealand Burns Association (ANZBA).

He has published two book chapters on the surgical care of burns, more than 40 peer-reviewed papers on a wide range of paediatric surgical topics and, with a career-long commitment to public health advocacy, served as a director of the Child Accident Prevention Foundation of Australia.

He is also a graduate of the Australian Institute of Company Directors.

Both as Adjunct Professor of Paediatric Surgery at the National University of Malaysia and presently the International Advisor for Masters in Paediatric Surgery, Mr Sparnon has given considerable time to the education and training of surgeons in Malaysia.

Through programs funded and organised by ANZBA, Mr Sparnon has participated in a number of overseas surgical team visits to treat burns patients and up-skill local staff in South Africa, Bangladesh, China and Malaysia.

Speaking to *Surgical News*, Mr Sparnon said that as president he particularly wanted to champion the cause of diversity within the profession in all its guises.

While he is proud of the progress the College has made in recent years to address the gender imbalance within surgery, Mr Sparnon said more still needed to be done both in relation to diversity and to promote the interests of surgeons who worked outside the major urban centres and surgical specialties.

"I intend to work to ensure that everyone who wishes their voice to be heard, will be heard," Mr Sparnon said.

"We've done a great deal to address gender issues and while there has been progress, more needs to be done. We also have to broaden our views on what diversity truly means.

> "I think we have to find ways to better represent the needs and opinions of surgeons working in isolation – whether that be surgeons working in remote or regional settings or surgeons working in small subspecialties. I believe it is vital to provide true representation to all Fellows, not just those working in the major specialties in an urban environment."

"I think we have to find ways to better represent the needs and opinions of surgeons working in isolation – whether that be surgeons working in remote or regional settings or surgeons working in small subspecialties. I believe it is vital to provide true representation to all Fellows, not just those working in the major specialties in an urban environment.

"We need to develop forums or systems that allow us to hear what these surgeons have to say and learn from them what the College can do to improve their working lives and support their Continuing Professional Development."

Mr Sparnon said his involvement in the surgical training of students in Malaysia and his surgical burn team visits abroad had clarified his views on the importance of the RACS Global Health projects.

As surgical leaders within the Asia Pacific region, Mr Sparnon said it was crucial the College remained focussed on training and education and enhancing the surgical skills of local medical staff.

"Many countries in the region have great respect for how RACS selects, trains and assesses our surgeons and many of our neighbours are seeking our assistance in implementing a similar system," Mr Sparnon said.

"As surgical leaders in the region, our prime focus should be helping our neighbours to improve their systems of professional development and training and skills acquisition by teaching these skills when we are visiting and bringing their surgical leaders to Australia.

"As an educational institution, I believe we can have the greatest impact on improving patient care in resource-poor countries by up-skilling the local medical workforce, mentoring local surgeons and fostering surgical leaders."

Mr Sparnon lives in the beautiful Adelaide Hills hamlet of Hahndorf with his wife Jacqui. A keen horse rider, he keeps three horses upon his small farm property and every few years travels to Montana in the US to ride in the "big sky" country. He is also a talented gardener and has won multiple trophies at the Adelaide Show for his prized liliums.

Mr Sparnon said it was a great honour to have been elected as President of RACS, particularly as a paediatric surgeon from South Australia.

"Durham Smith and Anne Kolbe have been the only previous paediatric surgeons and it is a thrill to join them," he said.

"There have only been six previous presidents from South Australia and the last two, Mervyn Smith and Andrew Sutherland, are heroes of mine. I feel enormously privileged to have the opportunity to follow in their footsteps."

Karen Murphy
Surgical News journalist

IMAGE: RACS President Mr Tony Sparnon with Professor Paul Lai, President for the College of Surgeons of Hong Kong and Past President Mr John Batten. Photograph taken by Mr John Aloysius Henderson.

College a crucial connection point for all surgeons, says new Vice President

Newly-elected Vice President of RACS, New Zealand colorectal surgeon Mr Richard Perry, has three passions which drive him in his role on the College Council – maintaining surgical standards, enhancing the cohesion of the surgical profession and maximising the value of global health projects.

A Fellowship-elected Councillor, Mr Perry has chaired various committees at RACS including the Professional Development and Standards Board, the Fellowship Services Committee, the Prevocational and Skills Education Committee and the Australian and New Zealand Surgical Skills Education and Training Committee.

Committed to supporting surgeons across the Asia-Pacific region, Mr Perry led a surgical workforce capacity building team in Myanmar and continues to visit each year to teach and train.

With a keen interest in information technology, he has been involved in software development since his school days, has produced several commercial programs including the practice management system currently in use at his clinic and is closely engaged in RACS Project Sonic which seeks to enhance IT systems across College platforms.

He also has broad interest in governance and is a Chartered Member of the Institute of Directors in New Zealand and a Fellow of the Australian Institute of Company Directors.

Mr Perry became the first surgeon in New Zealand to perform a laparoscopic rectal prolapse procedure in 1991 and the first minimally-invasive colonic resection in 1992.

Having received his FRACS in 1986 after graduating from Otago University Medical School, he was then awarded a Health Futures Fund Fellowship to Creighton University in Omaha, Nebraska. This was followed in 1989 by a United States National Institutes of Health Fogarty Fellowship to the Mayo Clinic in Rochester, Minnesota, where he gained world-leading experience in colorectal surgery and anorectal and pelvic floor disorders.

Since his return to New Zealand in 1990, Mr Perry has performed more than one thousand laparoscopic operations for colorectal resection for bowel cancer, diverticular and inflammatory bowel disease and endometriosis and has won international recognition in the field of laparoscopic colorectal surgery and anorectal physiology.

He has published more than 30 peer-reviewed papers, contributed to surgical textbooks and has been a guest lecturer at hospitals and universities in Canada, Germany, the United States and the United Kingdom.

Mr Perry is currently in private practice with his own colorectal and endoscopic clinic and is a visiting consultant surgeon at St Georges and Southern Cross Hospitals in Christchurch, New Zealand.

Speaking to *Surgical News*, Mr Perry said his time on the College Council had reinforced his view that the role of RACS in maintaining professional standards has never been more important.

"The standards we enforce are crucial in terms of patient safety and yet our role is often under-valued by various stakeholders in health and medicine," he said.

"We are often asked to compromise these standards by hospitals, government organisations and jurisdictions and even surgeons themselves for a variety of reasons, so it's important that RACS stands up for standards.

"However, we don't have any legislative control over standards, all we can do is educate and persuade those stakeholders about the importance of knowing that all Fellows of the College have the skills and professionalism to provide world-best care to their patients."

Mr Perry said he was also committed to enhancing the cohesion of surgeons across New Zealand and Australia, across specialties and particularly between generalists and specialists.

He said RACS played an important role in acting as a common connection point between all Fellows.

"The specialist societies are crucial in terms of surgical education and they deserve great respect for all that they do, yet we currently work in an environment of growing tension between generalists and specialists," Mr Perry said.

"There has been a general decline in respect for generalists both within surgery and the broader community but they play a vital role in many settings, from triage in urban centres to treating a wide range of surgical patients in regional and rural environments.

"As Vice President I would like to create more cohesion and more respect for all surgeons in all practice settings."

Mr Perry also said he was a great supporter of the work done through the College's Global Health department but that a more strategic approach to overseas aid was required to maximise benefits.

He said that while there were five billion people around the world unable to access surgical care, Australia and New Zealand had a responsibility to help and that the type of assistance provided needed to be strategic, focused and capable of delivering long-term benefits.

"We are gaining increasing respect from some government agencies for our global health work and if we can develop new projects with greater strategic awareness, that respect will grow and we will be better placed to teach and train our colleagues across the Asia-Pacific region," he said.

"Many of our training and education projects are seen as wonderful examples of soft diplomacy and regional cooperation and yet often the value of this work is underestimated.

"I would like to see that better recognised, not just within foreign affairs circles but by society more broadly because it is work that we can be proud of both as a College and as Fellows of the College."

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Mr Perry is married with three adult children. His father Edward Perry was a surgeon and College examiner and his son, William, is currently doing a Fellowship in colorectal surgery in Oxford, England.

He lives in Christchurch with his wife Julia and spends one week each month living and working in beautiful Wanaka, a resort town on the South Island that is the gateway to the Southern Alps' Mount Aspiring National Park, an awe-inspiring wilderness of glaciers, forests, mountains and lakes.

There, he snow skis in winter and water skis in summer to keep fit while back home in Christchurch he and Julia are keen supporters of the New Zealand Symphony Orchestra and New Zealand Opera.

Karen Murphy
Surgical News journalist

A week in Bangkok

According to Forbes magazine Bangkok has welcomed more international visitors than any other city in the world over the past three years. The myriad of cultural attractions and contrasts on offer, the city's renowned hospitality and its growing reputation as an international conference destination, made Bangkok a superb location for the 88th RACS Annual Scientific Congress (ASC).

There were many highlights throughout the week including the handover of the RACS presidency from Mr John Batten to Mr Tony Sparnon. Our new President paid tribute to both his predecessor and outgoing Vice President Dr Cathy Ferguson, for their exceptional leadership and for the humility and grace they demonstrated throughout their tenure.

Mr Batten said the opportunity to lead the College had been an honour and a privilege, and he leaves the role in excellent hands with Mr Sparnon. Although Mr Batten's term as President is now finished, he will remain actively involved with the College as the new President of the Foundation for Surgery.

The general feedback received from the ASC was that the program was of an exceptional quality, and that most found it to be a useful experience they can learn from and take back to their practice.

Congratulations and thank you to the conveners of the event, Mr Nigel Willis and Mr Craig MacKinnon, as well as the many section conveners. Congratulations also to the staff that ably supported them, particularly the conference and events team and the New Zealand office.

Having bid farewell to Bangkok, work is already underway to ensure that the 89th ASC is every bit as successful. We look forward to welcoming you all again to the next congress in Melbourne in 2020. ▶

IMAGE (left): Past RACS Vice President Dr Cathy Ferguson

Convocation and opening night ceremony

The opening night convocation was a great opportunity to welcome many new Fellows to College and to wish them well in the next phase of their journey. The majority of the 249 Fellows who have achieved their Fellowship since the last ASC were able to attend the ceremony, as were many of their families and friends.

A number of outstanding Fellows and friends of the College were also recognised at the ceremony, with several worthy recipients receiving awards and commendations for their contributions to surgery.

ABOVE (Clockwise from top left) Past President Mr John Batten; new Honourary Fellows Professor Papaarangi Reid and Ms Margaret Rode; Mr Ross Ferguson; Mr Jonathan Koea; RACS President Mr Tony Sparnon.

BELOW (Clockwise from top left): New Fellows convocated at RACS 2019 ASC.

Syme Oration

The Syme Oration is the most senior address in RACS annual calendar and was delivered by Professor Sir Malcolm Grant CBE (pictured with Mr John Batten). Sir Malcolm was appointed founding chairman of NHS England when it was set up as an independent body in 2011, and recently completed a seven year term. He was previously the President and Provost of University College London (UCL) for 10 years, through a period that saw significant growth and a soaring international reputation, particularly in medical and life sciences.

Sir Malcolm spoke of 'doctoring in an age of data' and how the future practice of surgeons, particularly the many new Fellows in the audience, will be affected both positively and negatively by big data collections.

IMAGES: Left: Entertainment at RACS ASC Congress dinner; Centre: Mr Nigel Willis; Right: Dr John Aloysius Henderson.

Scientific program

One of the biggest drawcards of the ASC has always been the unique gathering of Fellows, Trainees, International Medical Graduates and presenters from all over the globe, covering all specialties and subspecialties. This year's ASC was no exception and provided the perfect environment for delegates to interact and learn from one another.

'The Complete Surgeon – Backing the Future' was the theme for the week, and this was reflected throughout the presentations. As we look to the future, we need to equip ourselves with the best possible care for our communities. The historical trend has been to increase subspecialisation which can place that care at risk. It is therefore critical that all surgeons maintain their ability to think and act within and across our specialties rather than only being proficient in a narrow field. At the same time surgeons must be cognisant of the skills that other specialists can add to the care of their patients.▶

IMAGES: Above: Dr Heather Logghe talking with delegates, Right: Dr Nicola Dean, AVM Tracy Smart, Associate Professor Angela Ballantyne, Professor Papaarangi Reid (photographer: John Aloysius Henderson); Below: Professor Alistair Woodward and RACS President Tony Sparnon (photographer: John Aloysius Henderson). Left: ASC delegates.

Section dinners and address to the Foundation for Surgery by Dr José Ramos-Horta

Bangkok is famous for its cuisine and its wide array of rooftops bars and restaurants. Many of these locations provided a lovely setting for the various section and conference dinners held throughout the week.

Among the dinners was the Foundation for Surgery Thank You Dinner, where former Timor-Leste President and Nobel Peace Prize winner, Dr José Ramos-Horta, was the guest of honour. In an inspiring speech, Dr Ramos-Horta highlighted the importance of striving for ongoing peace and the importance of healthcare and education. He gave his personal thanks to donors for making such a difference in Timor-Leste. Dr Ramos-Horta's speech is available in full on the RACS website.▶

IMAGES (Clockwise from top-left): Welcoming the guests; Speech by Dr José Ramos-Horta; Dr Cathy Ferguson; Foundation Chair Professor Kingsley Faulkner; Mr Richard Perry with delegates; Past President Assoc. Prof. Michael Hollands.

Indigenous breakfast

One of RACS key priorities is a commitment to improving the health outcomes of our Indigenous populations in Australia and Aotearora/New Zealand. The Indigenous breakfast proved the perfect way to begin the day's Indigenous Health program and to celebrate the awarding of the Honorary Fellowship to Professor Papaarangi Reid. Professor Reid's research interests include analysing disparities between Indigenous and non-Indigenous citizens as a means of monitoring government commitment to Indigenous rights. She has provided mentoring and inspiration to young Māori doctors and medical students over several years. ▶

IMAGES (clockwise from top-left): Guest speaker Professor Papaarangi Reid; Indigenous breakfast attendees; Delegates attending Indigenous breakfast; Emma Espiner, medical student embracing Professor Reid; Aboriginal, Torres Strait Islander and Māori ASC Award winner group; Prof Kingsley Faulkner presenting awards to Miss Mairarangi Haimona, Dr Lincoln Baltus and Dr Jordan Cory.

Sir Edward (Weary) Dunlop Memorial Lecture

Lieutenant General Nopadol Wora-Urai (pictured), a highly decorated local Bangkok surgeon, delivered the Sir Edward 'Weary' Dunlop Memorial Lecture. In his presentation he highlighted the bond forged between Australia and Thailand through the Weary Dunlop Boonpong Exchange Fellowship. The program brings young Fellows of the Royal College of Surgeons in Thailand (RCST) to Australia to assist and observe under the supervision of a local mentor. Photographer: John Aloysius Henderson

John Mitchell Crouch Fellowship and Lecture

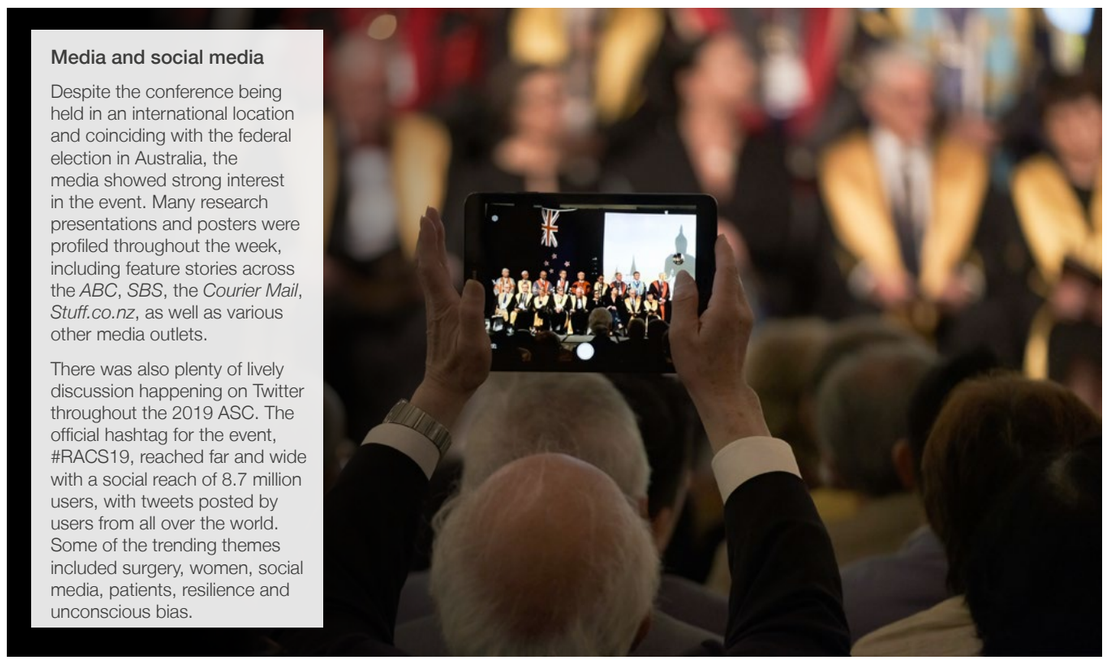
Associate Professor Antonio Di Ieva (pictured), who was awarded RACS most prestigious award – the John Mitchell Crouch Fellowship – went on to deliver the John Mitchell Crouch Lecture. Associate Professor Di Ieva concluded his presentation 'Computational modelling in neurosurgery: An exemplary paradigm shift' with the prediction that artificial intelligence is unlikely to replace surgeons, however surgeons who use artificial intelligence in their practice will replace those who do not. Photographer: John Aloysius Henderson.

IMAGES:
Top left: Women in Surgery Breakfast – Dr Heather Logghe, Dr Nikki Stamp and Dr Jane Strang; Above: RACS President Mr Tony Sparnon (photographer: John Aloysius Henderson)

Media and social media

Despite the conference being held in an international location and coinciding with the federal election in Australia, the media showed strong interest in the event. Many research presentations and posters were profiled throughout the week, including feature stories across the *ABC*, *SBS*, the *Courier Mail*, *Stuff.co.nz*, as well as various other media outlets.

There was also plenty of lively discussion happening on Twitter throughout the 2019 ASC. The official hashtag for the event, #RACS19, reached far and wide with a social reach of 8.7 million users, with tweets posted by users from all over the world. Some of the trending themes included surgery, women, social media, patients, resilience and unconscious bias.



Women in Surgery's Super Thursday a success

For the first time at an Annual Scientific Congress, the Women in Surgery Section (WiSS) held their own all-day program. Dubbed 'Super Thursday', the program commenced with the annual Women in Surgery breakfast and throughout the day featured sessions on social media, diversity, facing challenges and unconscious bias.

Instigated by section convener Dr Jane Strang, the program proved highly successful in terms of both attendance and the discussion and positive feedback generated across social media.

Dr Strang said the day was an important opportunity to create a visible presence for women in surgery and she hoped it would become a regular feature in future years.

"The reason I was keen to extend the program was that I have been involved in the Women in Surgery Section for a long time, and I have seen more and more issues arise that I think need to be discussed.

"In many respects people are crying out for change which has been a little bit slow in coming. I thought that bringing these issues to the forefront and introducing new ideas to the conference would be a great way of making progress…"

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"In many respects people are crying out for change which has been a little bit slow in coming. I thought that bringing these issues to the forefront and introducing new ideas to the conference would be a great way of making progress," Dr Strang said.

Among the speakers was international guest, Dr Heather Logghe, who instigated the #ILookLikeASurgeon hashtag on Twitter in 2015. The hashtag has subsequently gone viral with thousands of surgeons, both female and male, uploading pictures of themselves to celebrate diversity in the profession, and highlighting the many different faces of the modern world of surgery. Dr Logghe's story will be profiled in a feature article in the next edition of *Surgical News*.

Another highlight of the day was the presentation of the inaugural Women in Surgery essay prize, which was awarded to Jessie Zhou for her essay *Are surgery and social media incompatible?* (available to read on the RACS website).

The program also featured a keynote lecture from the WiSS Chair and RACS Councillor, Dr Christine Lai, on the importance of promoting female leadership, and having strong male and female role models to inspire the next generation.

– With Mark Morgan, Communications and Policy Officer, South Australia

IMAGES:
Top: Dr Heather Logghe, Dr Nikki Stamp and Dr Jane Strang on stage at the Women in Surgery breakfast. Below: delegates gather for the annual Women in Surgery breakfast.

Congratulations to the Best Research Paper Prize winners at 2019 ASC

Section	Name	Presentation
Bariatric Surgery	Dr Jamie-Lee Rahiri	Does Ethnicity Influence the Likelihood of Referral and Acceptance on to a Publicly-Funded Bariatric Surgery Program?
Cardiothoracic Surgery	Dr Aditya Benjamin	An initial experience with surgical management of rib fractures
Colorectal Surgery	Dr Glen Guerra	Establishing and characterising a panel of human anal SCC cell lines
Endocrine Surgery - Basic Science	Dr Gabrielle Hiks	Elevated levels of soluble programmed cell death ligand 1 (sPD-L1) are associated with reduced survival in papillary thyroid cancer
Endocrine Surgery - Clinical Research	Ms Grace Yin	Association between serum parathyroid hormone level and risk of cerebrovascular disease: A systematic review and meta-analysis
General Surgery - 1st prize	Dr Mohammad A Amer	Bias in surgical randomised trials: a meta-epidemiological study using laparoscopic versus open surgery as an example
General Surgery - 2nd prize	Dr Pramudith Sirimanna	Development of a rating scale for objective assessment of performance in laparoscopic appendicectomy surgery
General Surgery - 3rd prize	Dr Laila Sheikh	Take it or leave it: Does the management of the mesoappendix in acute appendicectomies matter?
HPB Surgery	Dr Chathura Ratnayake	Sarcopenic obesity is a significant risk factor for postoperative morbidity after pancreatic surgery
Paediatric Surgery	Dr Sharmann Tan Tanny	The state of the paediatric acute scrotum in Australia
Plastic & Reconstructive Surgery	Dr Lydia Park	The effectiveness of a See and Treat model in skin cancer management
Surgical Education	Ms Sarah Rennie	Supporting undergraduate medical students in surgery – is it time for a different teaching model
Surgical Oncology	Dr Sheliyan Raveenthiran	IDENTIFY: The Investigation and DEtection of urological Neoplasia in paTIents reFerred with suspected urinarY tract cancer: A multicentre analysis
Upper GI Surgery - 1st prize	Dr Tim Hsu-Han Wang	Impact of ICC Density and Aging on Slow Wave Velocity in the Human Stomach
Upper GI Surgery - 2nd prize	Dr Yazmin Johari Halim Shah	Gravity mediated drainage as mediators of functional outcomes following oesophageal reconstruction
Upper GI Surgery - 3rd prize	Dr Aaditya Narendra	Oesophago-gastric & pancreatic cancer incidence & survival vary by travel time to a high volume centre

Victorian general surgeon conducts unique cancer vaccine trial

Victorian general surgeon and PhD student Dr Toan Pham has used RACS scholarship funds to help create a revolutionary cancer vaccine and establish a Phase 1 clinical trial.

Known as the MYB and PD-1 Immunotherapies Against Multiple Oncologies Trial (MYPHISMO), the cancer vaccine is a leading example of "benchtop to bedside" translational research, having been engineered and manufactured by scientists and surgeons in a hospital-based laboratory.

Called the TetMYB vaccine, it is designed to treat MYB proto-oncogene overexpressing cancers including colorectal cancer (CRC) and salivary gland adenoid cystic carcinoma (AdCC) by stimulating the body's immune system to kill tumour cells that display large quantities of MYB on their surface.

Dr Pham is a Colorectal Trainee and Clinical Fellow of the University of Melbourne. He is the current recipient of RACS' Paul Mackay Bolton Scholarship for Cancer Research (2019-2020) and the former recipient of RACS' Tour de Cure Cancer Research Scholarship (2018).

As part of a translational research collaboration at the Peter MacCallum Cancer Centre (PMCC), he is now conducting the safety trial of the vaccine in cancer patients while also conducting experiments to determine its potential efficacy in treating colonic adenoma.

Dr Pham said that while cancer vaccines had generated great scientific interest in recent years, they had so far demonstrated limited clinical benefit possibly because of the immune suppressive mechanisms within the tumour micro-environment.

He said that one possible explanation could be due to the body's natural 'brakes' which protect against potentially out-of-control immune responses. These 'immune-checkpoints' also weaken the cancer-fighting immune responses stimulated by vaccines.

The new immune checkpoint blocking antibodies, which have seen great successes in melanoma, renal and non-small cell lung cancers, were used with TetMYB vaccine in this study.

"The MYB gene encodes a DNA binding transcription factor that plays an important role in cellular proliferation and differentiation and is now considered to be a *bona fide* oncoprotein," Dr Pham said.

"When it is over-expressed it drives cellular growth which can eventuate in the promotion of tumour growth.

"Unlike foreign pathogens, tumour antigens such as MYB are 'self' and thus only weakly immunogenic due to immune tolerance and so we included tetanus peptides to break peripheral tolerance by associative recognition, hence the name TetMYB.

"Our published pre-clinical data has shown that the TetMYB vaccine can afford both prophylactic and therapeutic protection in multiple transgenic and cell-line-based CRC pre-clinical models.

"We know that while protection by the TetMYB vaccine is lost when tumour burden is high, it can be restored when combined with immune checkpoint blockade.

"We have shown that this combination cures up to 50 per cent of mice with established colorectal cancer."

Dr Pham is conducting his PhD research at the PMCC under the supervision of Professor Robert Ramsay, the Head of the Differentiation and Transcription Laboratory, along with that of fellow research leaders Professor Alexander Heriot, the Clinical Director of Cancer Surgery, medical oncologist Associate Professor Jayesh Desai and molecular biologist Dr Lloyd Pereira.

He said that the positive results of laboratory tests of the vaccine on murine models that replicated human colorectal cancer had won the team funding and ethics approval to establish the human trial.

Dr Pham said the MYPHISMO trial will involve 32 patients divided into two stages.

The first group of twelve patients will be given escalating doses of the vaccine in combination with immune checkpoint inhibitors, to determine the maximum tolerable dose.

Once the researchers understand the maximum dose toleration, the remaining 20 participants will be treated at this dose to further assess safety and potential efficacy.

Dr Pham said the PMCC team was currently half way through the dose escalation phase of the trial with the remaining 20 patients being recruited throughout next year.

While the trial goes on, he is now also investigating the use of the vaccine as a prevention against adenomatous polyps turning into colorectal cancer using genetically modified mouse models.

This research has garnered widespread international recognition, having been presented in a Plenary session at Digestive Diseases Week and earning prizes at both the American Society of Colon and Rectum Surgeons' Annual Scientific Meeting and the Memorial Sloan Kettering Annual Advances in Colorectal Oncology meeting.

"This is extremely exciting and unique work not only because we are the first to target MYB but because the vaccine was discovered, designed and made in an Australian laboratory," Dr Pham said.

"This is unique because usually this sort of science is driven by the major pharmaceutical companies working with research laboratories but we did it ourselves even though it took us over six months to set up the laboratory, establish a clean space necessary for drug development and create the vaccine."

"This is unique because usually this sort of science is driven by the major pharmaceutical companies working with research laboratories but we did it ourselves even though it took us over six months to set up the laboratory, establish a clean space necessary for drug development and create the vaccine."

ACADEMIC HIGHLIGHTS

- 2019 – 2020: RACS Paul Mackay Bolton Scholarship for Cancer Research
- 2019 – 2020: National Health and Medical Research Council (NHMRC) Postgraduate Scholarship
- 2018: Attending Physician's Choice Award Memorial Sloan Kettering Cancer Centre Annual Advances in Colorectal Oncology, USA
- 2018: RACS Tour de Cure Cancer Research Scholarship
- 2018: American Society of Colon and Rectal Surgeons – Midwest Society of Colon & Rectal Surgeons William C. Bernstein, MD, Award
- 2018: Peter MacCallum Foundation – New Investigator Grant
- 2018: Medtronic/CSSANZ Colorectal Research Grant

Karen Murphy
Surgical News journalist

New surgical skills learning model could free up busy surgeons

Medical students can gain basic and intermediate surgical skills through a process of peer review and self-criticism in conjunction with focused faculty feedback, according to Queensland general surgery Trainee Dr Guy Sheahan.

Dr Sheahan has spent the past two years exploring new methods of teaching surgical skills to medical students as part of a Masters of Education Degree with financial support provided via a Foundation for Surgery Fellowship in Surgical Education.

In an era of minimally-invasive surgery, Dr Sheahan said medical students and junior doctors have less exposure to open surgical procedures than previous generations but still need to gain those skills. While simulation and digital platforms allowed students to learn basic surgical procedures, giving them exposure to operations often took up valuable time in theatre and slowed down busy surgeons.

Dr Sheahan set out to determine if particular surgical techniques could be mastered through peer-review and self-analysis as compared to being taught by medical faculty alone. He also conducted research to find out if teaching such methods as critical self-analysis in the skills acquisition process could help create reflective clinicians capable of adapting and responding to changes in the medical environment without the need for hierarchical direction.

Dr Sheahan conducted his two-year Masters of Education research at Queen's University, Kingston, Canada, under the supervision of Professor Richard Reznick, the Dean of Health Sciences, and Dr Boris Zevin. Returning to Queensland earlier this year, Dr Sheahan is now a SET 4 general surgery Trainee at the Robina Hospital in Queensland.

His work – *Faculty versus structured peer feedback for acquisition of basic and intermediate level surgical skills* – has been published and presented at international meetings.

Dr Sheahan's research was centred upon a prospective randomized non-inferiority trial comparing peer feedback and faculty feedback with first and second year medical students who were learning skin lesion excision and closure and single-layer hand-sewn bowel anastomosis.

Students were first shown what a poor result looked like in comparison to an excellent result and were then asked to conduct the procedures over five attempts and analyse their own performance through a combination of self-assessment and peer input. Faculty then assessed results to see if opinions on the results matched.

Speaking to *Surgical News*, Dr Sheahan said his research aimed to find out if there were effective ways for students to access, practice and build up foundational open surgical skills in an era of minimally-invasive surgery.

He wanted to determine if surgical skills could be taught without an expert standing over a student's shoulder guiding them through various procedures and if teaching people how to critically assess results could change their ability to assess their own performance.

> "Surgeons, in particular, need to constantly improve their performance and techniques through self-assessment but we don't teach these skills."

"Surgeons, in particular, need to constantly improve their performance and techniques through self-assessment but we don't teach these skills," he said.

He found that students were able to accurately assess their own work through self-critique and with the input of their peers.

"For the Trainee, this approach will help them develop more self-reflective and critical appraisal skills of their own technique and builds on existing motivation Trainees have for learning technical skills," Dr Sheahan said.

"For the education provider or hospitals, this approach fits neatly into the Competence Based Medical Education (CBME) framework and can be used as evidence of demonstrated competence.

"Additionally, the skills developed will be beneficial when self-assessment becomes incorporated into CBME while this demonstration of the validity of peer assessment for the practice phase of skill acquisition reduces the staff and organisational burden of supervision.

"I believe the structured practice phase, as outlined in my research, will improve skill acquisition in the early years of medical education thus leading to higher operating theatre utilisation and subsequent cost savings."

Dr Sheahan explained that similar research conducted with surgical Trainees could determine if there was a difference between junior and senior learners and whether his model could allow Trainees to learn some surgical skills independently.

"This could be valuable in some clinical situations such as when busy Trainees cannot get to a skills session – that time will not be lost but could be replaced through more independent learning," he said.

"At the same time, Faculty could have a degree of confidence that Trainees will be able to improve their skills independently and self-assess those skills accurately either by themselves or with the input of their peers."

Dr Sheahan also said his work could have implications for distance and remote learning. A reduced need for Fellows to teach basic techniques could allow them to focus on honing skills and teaching more complex surgical procedures.

Dr Sheahan has presented his work at both the 2018 Association of Surgical Education meeting in Austin, Texas, and the 2018 Queen's University Surgical Education Symposium. His research has also been accepted for presentation this August at the Association for Medical Education in Europe (AMEE) conference in Vienna. Findings from his work have been published in the *American Journal of Surgery* while submissions to other specialist journals are pending.

A medical officer in the Army reserve and an Associate Lecturer at the University of Queensland, Dr Sheahan hopes to specialise in trauma surgery after completing his training while maintaining a strong involvement in surgical education.

He thanked RACS for the support provided to him.

"It was a challenging couple of years because my wife Rebecca was completing a Fellowship in Intensive Care in Toronto, we had a toddler and I had to commute three hours each way to get to Queen's University," he said.

"Still, while it was demanding, it opened our horizons in terms of medical research and learning and gave us the chance to work with some of the best researchers and teachers in North America."

Academic Highlights

- 2017: Queen's University grant for research of simulation-based Resident Training
- 2015: RACS Fellowship in Surgical Education
- 2009: Queensland Health Rural Scholarship Scheme

Karen Murphy
Surgical News journalist

WA surgeons transform sarcoma surgery with bypass innovation

A team of surgeons from Western Australia has transformed abdominal sarcoma surgery by adapting a cardiac bypass machine used in some liver transplant procedures to allow for continuous blood flow through the heart while the inferior vena cava (IVC) is clamped or removed.

The new percutaneous cannulation bypass technique keeps patients haemostatically stable while teams of surgeons conduct long and radical resections to remove massive abdominal tumours, compromised organs and vascular structures.

The modified bypass machine takes the blood from the patient via a canula placed in the femoral vein and returns it through a canula in the jugular vein.

The machine uses a centrifugal pump, does not require anti-coagulation medications and can be connected to an ECMO (extracorporeal membrane oxygenation) machine if blood oxygenation is required.

They also believe the new system may prove useful across a range of complex abdominal surgeries which involve compromised or obstructed vascular structures.

In 2015, Western Australia became the first state in Australia to establish a State Sarcoma Service with all WA sarcoma patients referred to the Sir Charles Gairdner Hospital. The team now conducts one abdominal sarcoma resection each week, with one patient in every four to six weeks requiring the stability provided by the new bypass system.

According to members of the team, being able to keep sarcoma patients stable during procedures that can take up to 16 hours allows them both to reduce patient risk in theatre and treat patients with tumours otherwise deemed to be inoperable.

Earlier this year, the WA Sarcoma Service conducted marathon surgery using the new bypass system to save the life of Mr Wayne Gair who presented with a 12kg abdominal sarcoma.

> "When you clamp the IVC, blood flow to the heart obviously changes dramatically with all the safety issues that go with that, but this bypass procedure dramatically changes both what we can do and the time we have to do it in because the patients are so stable."

Ten patients with massive abdominal sarcomas have now been successfully treated using the new bypass technique at the Sir Charles Gairdner Hospital in Perth.

The team behind the new technique comprises Director of Cardiothoracic Surgery, Dr Mark Newman, Colorectal and Sarcoma surgeon Professor Rupert Hodder and Vascular surgeons Professor Shirley Jansen and Dr Joe Hockley.

Since its introduction last year, they have conducted a review of national and international research literature and believe that the use of the adapted cardiac bypass system for the surgical management of abdominal sarcoma patients is not a standard approach to removal of these challenging tumours and has great potential.

The idea of the adapted cardiac bypass technique arose when team members met in 2017 to discuss a serious adverse event that occurred while surgeons were attempting to remove a large abdominal tumour.

Speaking to *Surgical News*, cardiothoracic surgeon Dr Mark Newman said he came up with the idea of providing veno-venous bypass based on the system used in some liver transplantations because both procedures required the ability to block the IVC.

He said operations to remove massive abdominal sarcomas were some of the most complex and difficult surgeries now conducted and required a range of surgical specialties to remove diseased anatomy.

Until now, the central challenge facing surgeons and anaesthetists lay in keeping the patient stable enough, long enough for them to do that work.

"This technology has been around for 20 years in transplant surgery but we are the first, as far as we know, to adapt it for use in abdominal sarcoma surgery," Dr Newman said.

"When we realised that the sarcoma team were having difficulty keeping patients stable while undergoing these major procedures, I suggested adapting the bypass system used in liver surgery, and it's been very successful.

"Keeping these patients haemostatically stable means that surgeons conducting these major tumour resections are far more comfortable operating much longer and taking the time they need to both remove the tumour and conduct extensive resections to get safe and sufficient margins.

"Before this, patients were experiencing tachycardia, acidosis or variable blood pressure which both increased the risks to them and increased the difficulty for anaesthetists working to keep them stable.

"The new percutaneous cannulation technique involves the surgeon placing the canula in the femoral vein, the anaesthetist placing the canula in the jugular vein while a clinical perfusionist is in constant attendance."

Dr Newman said the ten surgeries so far conducted using the technique would become the basis of a range of research papers and presentations.

Professor Rupert Hodder is a consultant colorectal surgeon at the Sir Charles Gairdner Hospital and a member of the GI sarcoma team.

He and Dr Hockley presented details of the new bypass technique at the Australian Sarcoma Group Annual Scientific Meeting held in Perth in October last year and said that two registrars were now writing research papers on the new system.

He said the life-saving innovation arose out of simple conversations between colleagues.

"We'd had an adverse event, we wanted to learn everything we could from it but most of all we wanted to make sure we did everything to try to prevent it from happening again," Professor Hodder said.

"Surgery is the only viable treatment for sarcoma yet some patients present with such massive tumours that we always have to weigh up the risks associated with surgical treatment.

"When you clamp the IVC, blood flow to the heart obviously changes dramatically with all the safety issues that go with that, but this bypass procedure dramatically changes both what we can do and the time we have to do it in because the patients are so stable."

Professor Hodder said patients selected for bypass were those with sarcomas near or involving major vascular structures such as the IVC or aorta.

He said one of the great benefits of the adapted technique was that most hospitals had the required equipment.

"This bypass procedure means we have a better chance of removing the sarcoma and thereby extending the lives of our patients because it allows us to go deeper and wider and take longer in theatre," Professor Hodder said.

"I think it may also be of interest to surgeons conducting complex kidney surgery, complex cancer surgery involving vascular structures and major pancreatic surgeries."

Professor Hodder said the team was very proud of the advance and said it reflected both collegiality and original thinking.

"We didn't come up with this through a research centre or with dedicated funding. We came up with it over a cup of coffee and a discussion between colleagues from different specialties about how we could improve the care we give our patients."

Karen Murphy
Surgical News journalist

VERITAS

A research collaborative inspiring a new generation of Victorian Trainees

In 2015, Austin Hospital based general surgical Trainees and their mentors were inspired to reconsider Trainee engagement in surgical research, and to develop the capabilities of the next generation of Australian and New Zealand surgeons.

Mr Stephen Hornby, a UK Trainee spending a year as an upper GI surgeon at the Austin Hospital, shared his experience of the Birmingham based West Midlands Research Collaborative (WMRC) – a Trainee-led clinical trials network – with local general surgical Trainees. This set in place the foundations for one of Australia and New Zealand's first Trainee-led networks.

Before 2015, the exposure of surgical Trainees to collaborative and large scale research at the Austin Hospital, and arguably elsewhere in Australia and New Zealand, was limited. Trainee research was usually small scale, single centre retrospective studies. The WMRC experience as the first Trainee-led research collaborative in the UK, and its track record of delivering successful Trainee-led multi-centre randomised controlled trials of surgical interventions, provided the template for change.

Trainee involvement in clinical research is now considered to be part of a comprehensive surgical training program and a structure has been developed to support Trainee-led research – VERITAS (Victorian Collaborative for Education, Research, Innovation, Training and Audit by Surgical Trainees) – Victoria's first Trainee-led surgical research collaborative.

Focusing on questions that general surgeons want answered, VERITAS is managed by a committee of seven surgical Trainees in different stages of their general surgery training and supported by two consultant mentors; Mr Krinal Mori and Associate Professor Vijayaragavan Muralidharan.

VERITAS provides the framework for Trainees to collaborate within the training network, and also nationally and internationally with other networks, to deliver practice changing large scale clinical research studies. Collaboration delivers large data sets from multiple sites and enables Trainees to gain valuable research experience whilst tackling larger scale and more meaningful research projects, for which all contributors received authorship recognition.

Trainee leadership also offers opportunities to engage with novel technologies. For example, the VERITAS SOS study (Surgical Outpatient Study) aims to characterise Trainee experience in outpatient clinics. The network has developed its own webpage accessed via smartphones for data collection, which has been underway at the Austin and Northern Hospitals for six months and is currently expanding to other sites around Australia.

VERITAS is one of a growing number of Trainee-led research collaboratives in Australia and New Zealand. RACS has been quick to recognise the potential of these Trainee-led research collaboratives and has supported the establishment of Clinical Trials Network of Australia and New Zealand (CTANZ) to foster the development and growth of Trainee-led research collaboratives. As part of this, CTANZ seeks to network the networks and has been instrumental in facilitating links with other general surgical networks and also Trainee networks in other surgical specialties. Solving the common challenges encountered by the research collaboratives and sharing solutions, CTANZ provides support and strength across the Trainee collaboratives now established in Australia and New Zealand.

With the strong interest in Trainee-led research collaboratives from Trainees and surgeons, and the support from RACS via the CTANZ, the future of Trainee-led research in Australia and New Zealand looks bright.

For further information about CTANZ please email: CTANZ@surgeons.org

Dr Sean Stevens
VERITAS Trainee network lead

SURGICAL SNIP

Pancreatic cancer resource offers strength to patients and families

People living with pancreatic cancer have helped develop an Australian-first online resource – the PanSupport web-app – which provides a hub of advice, resources and information to allow pancreatic cancer patients to live as well as possible. Topics include symptoms and care, accessing support groups, legal and financial advice, and looking ahead to end of life care.

Pancreatic cancer patient, lawyer and Melbourne father Graham Wells, 56, is among those who have contributed to PanSupport's design and development since the project began two years ago.

"PanSupport is a very good resource, with advice provided by experts as well as people with the lived experience of pancreatic cancer," Mr Wells said.

"It provides a much more holistic way of not just dealing with a diagnosis but the various life challenges that take place, whether they be financial or emotional, and it gives insights both to patients and their loved ones."

University of Melbourne Chair in Cancer Nursing, Professor Meinir Krishnasamy, who led the website's development, said it was a place of respite from the overwhelming statistics confronting approximately 3,100 Australians diagnosed with pancreatic cancer every year.

"These patients experience significant symptom burden and poor prognosis. PanSupport provides the advice and assistance they need, when they need it, no matter where they are. It is a safe, supportive space, acting as an 'online companion' from diagnosis onwards," Professor Krishnasamy said.

PanSupport was produced by University of Melbourne in collaboration with key partners Pancare Foundation, RMIT University and Peter MacCallum Cancer Centre.

For further information, visit pansupport.org.au

Quality Improvement Program pays off

The introduction of a United States-based surgical data collection and analysis program to four New South Wales hospitals is clearly identifying where room for improvement lies.

The collaborative of four NSW hospitals, comprising a mix of metropolitan, regional and varying sizes, joined the American College of Surgeons National Surgical Quality Improvement Program in 2015. They now receive, every six months, high-quality, risk-adjusted clinical data that can be benchmarked amongst the four hospitals as well as against more than 800 hospitals in North America.

The most recent results, for the 2017 calendar year, showed the NSW collaborative was an outlier for urinary tract infections, surgical site infections, pneumonia and 30-day readmissions. All of these are being addressed with changes to care bundles.

Being part of the program is not cheap but the NSW participants believe the benefits – significant reductions in adverse events and reduced morbidity with resultant savings – far outweigh the costs.

Four more NSW hospitals, including the two major paediatric hospitals, have joined the program and it's planned to expand to 25 hospitals within the next two years, capturing more than 75 per cent of surgical activity in NSW public hospitals.

Full article in *ANZ Journal of Surgery (Volume 89, Issue 5)*: https://onlinelibrary.wiley.com/doi/10.1111/ans.15117

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

IN MEMORIAM

Our condolences to the family, friends and colleagues of the following Fellows whose deaths have been recently notified.

2018

Peter Cant (UK)

Colin Moore (SA)

2019

David Birks (VIC)

Kevin Fabian Bleasel (NSW)

Roger Chambers (NZ)

Warwick John Cook (NSW)

John Herron (QLD)

Daryush Aderbad Irani (UK)

Campbell Maclaurin (NZ)

Michael Moreny (QLD)

Anthony Power (NSW)

Charles Roe (QLD)

Professor Donald Trunkey (US)

Hugh Williams (ACT)

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

Leading the way with our RACS Faculty Charter

The surgical profession has a long history of caring for patients by educating future generations of surgical Trainees and handing down knowledge, skills (technical and non-technical) and above all a professional approach. How a surgeon performs as a clinician, a leader, and an educator are predicated on life-long learning and reflective practice.

RACS is the leading advocate for surgical standards, education and professionalism in Australia and New Zealand. It is our professional responsibility to continue to set the standard for the education, training and professional development of our surgical workforce to optimise patient care.

RACS Faculty Charter Key Principles:

- Adhere to and promote course principles and methodology
- Acknowledge and respect the views of all course attendees
- Respect and accept the responsibility of facilitator, teacher and mentor
- Prepare and plan for allocated teaching responsibilities
- Respect the professional boundaries between student and teacher
- Commit to and be actively engaged for the duration of each course
- Effectively and appropriately communicate with course attendees
- Be respectful and aware of the different beliefs, backgrounds, values and cultures of all course attendees
- Be mindful of their importance as role models
- Give feedback, in a respectful manner, on participants' progress and performance including assisting in remediation where necessary.
- Encourage honesty, be factual, objective and constructive when providing feedback and undertaking assessment of course participants
- Actively discourage and refrain from discrimination, bullying and sexual harassment.

If you are interested in viewing the charter in full, visit www.surgeons.org and enter 'Faculty Charter' into the search function.

The RACS Education Portfolio introduced a Faculty Charter in 2012, which has recently been expanded to all RACS educational activities. Within the charter our values and standards are made clear to ensure that Fellows teaching our courses, in workshops and at events are exemplar faculty members. Our objective is to obtain the highest standard of surgical education possible.

The RACS Faculty Charter outlines the professional behaviours expected of our faculty. The expectations set out in the charter include themes of respect to all stakeholders within our educational sphere, a commitment to active engagement during the course, and to foster exemplary role modelling behaviour. This highlights an exciting time to be a member of faculty, leading the way for positive cultural change within the surgical profession.

The charter also highlights the support that our faculty members can access, be it having a mentor during a course, feedback by medical educators to help enhance their teaching skills, or peer-to-peer feedback amongst facilitators.

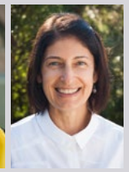
We believe that with this charter, we are in a better position to support faculty development, encourage interested fellows in becoming faculty, and build excellence in surgical education.

RACS provides courses across all nine surgical competencies and recognises that our Fellows have strengths in certain areas. We encourage you to embrace those strengths and follow the long tradition of sharing your knowledge and skills with peers and colleagues.

If you are interested in becoming a member of our faculty, please contact:

Rob Di Leva – Professional Development
PDActivities@surgeons.org

Alicia Savale – Skills Training
SkillsT.staff@surgeons.org



Associate Professor Kerin Fielding
Chair, IMG Assessment
Dr Sally Langley
Chair, Professional Development and Standards

– With Andrew Rose, Professional Development and Skills Training

Surgeons contribute to New Zealand's new gun laws

New Zealand Fellow James McKay recently gave New Zealand parliamentary select committee members a unique and graphic insight into patients' injuries that surgical teams confronted as a result of the Christchurch mosque shootings on 15 March this year.

Dr James McKay and RACS Executive Director Surgical Affairs (NZ), Mr Richard Lander (pictured), represented RACS at the committee's hearings of invited oral submissions on changes to tighten New Zealand's gun laws after the mass shootings. RACS also provided a written submission.

IMAGE (l-r): James McKay and Richard Lander.

Dr McKay was the on-call trauma surgeon at Christchurch Hospital on the day of the shootings which resulted in 48 critically injured patients being received at the hospital in less than an hour.

His description of the significant injuries that victims suffered due to the type of ammunition and firearms used by the shooter moved several MPs almost to tears. Dr McKay's presentation received extensive online, television and press coverage.

Dr McKay told the committee that all the victims cared for by hospital staff had suffered penetrating injuries from what looked like high-velocity weapons. This type of firepower is meant to kill, with hollow-point bullets designed to shred as much human tissue as possible.

There were significant chest, lung and major blood-vessel injuries which required emergency life-saving surgeries, often multiple times in multiple patients.

He said there were multiple abdominal injuries with injuries to bowel and stomach, resulting in significant contamination of body cavities and wounds that needed multiple surgeries to clean, disinfect and remove bullet fragments. Many victims suffered nerve damage, including to the spinal cord, leaving them significantly and permanently disabled.

Mr Lander spoke to the committee about a mass shooting and the victims he had triaged and helped care for as a junior doctor in 1976 in Harare hospital, Zimbabwe. "I thought it couldn't happen here, but it did," he said.

New Zealand's Parliament overwhelmingly approved new gun laws within one month of the massacre. These ban military-style semi-automatic firearms and severely restrict ownership and use of semi-automatic firearms. Parts, magazines and ammunition which can make a gun illegal are also banned and there are greater penalties for people breaking firearm laws.

Further proposed changes to the laws will be put before Parliament in the middle of the year. It is understood these will propose a national gun registry and changes to the gun owner registration process.

Mr Richard Lander
RACS Executive Director Surgical Affairs (NZ)

– With Philippa Lagan, Policy and Communications officer, New Zealand.

Lifelong learning

Quality Professional Development supplied by RACS

Courses for:

Surgical educators, Leading teams, Communication and feedback

CPD approved courses

Courses for every stage of your career

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

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)

1 June	Adelaide	SA
7 June	Gold Coast	QLD
10 June	Perth	WA
17 June	Wellington	NZ
29 June	Newcastle	NSW
3 July	Brisbane	QLD
17 July	Waikato	NZ
10 August	Melbourne	VIC
19 August	Sydney	NSW
24 August	Hobart	TAS
30 August	Hamilton	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)

1 June	Canberra	ACT
14 June	Melbourne	VIC
15 June	Melbourne	VIC
22 June	Brisbane	QLD
24 June	Sydney	NSW
28 June	Adelaide	SA
27 July	Christchurch	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

23 July	Brisbane	QLD
7 August	Melbourne	VIC

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

Surgeons as Leaders in Everyday Practice

Friday 7 to Saturday 8 June	Gold Coast	QLD
Friday 21 to Saturday 22 June	Perth	WA
Friday 16 to Saturday 17 August	Wellington	NZ
Friday 30 to Saturday 31 August	Adelaide	SA

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 influence a leader's 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 their own workplace.

Safer Surgical Teamwork (SST)

Wednesday 19 June	Melbourne	VIC

SST (previously known as Safer Australian Surgical teamwork 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.

Process Communication Model Seminar 1

Friday 21 to Sunday 23 June	Melbourne	VIC
Friday 26 to Sunday 28 July	Wellington	NZ

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. Partners are encouraged to register.

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.

Process Communication Model Seminar 2

Friday 13 to Sunday 15 September	Melbourne	VIC

The advanced three day program allows you to build on and deepen your knowledge while practising 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 focusing 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.

Clinical Decision Making

Friday 26 July	Canberra	ACT

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.

SAT SET Course

Friday 12 July	Gold Coast	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

Friday 12 July	Gold Coast	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 College 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.

Non-Technical Skills for Surgeons (NOTSS)

Friday 9 August	Perth	WA

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.

Please contact the Professional Development Department on +61 3 9276 7440, PDactivities@surgeons.org or visit the website at www.surgeons.org and follow the links from the Homepage to Activities.

PROFESSIONAL DEVELOPMENT WORKSHOP
DATES: June – August 2019

ACT		
Clinical Decision Making	26 July	Canberra
NSW		
Foundation Skills for Surgical Educators	29 June	Newcastle
Foundation Skills for Surgical Educators	19 August	Sydney
NZ		
Foundation Skills for Surgical Educators	17 June	Wellington
Foundation Skills for Surgical Educators (Trainees only)	17 July	Waikato
Process Communcation Model Seminar 1	26-28 July	Wellington
Surgeons as Leaders in Everyday Practice	16-17 August	Wellington
Foundation Skills for Surgical Educators	30 August	Hamilton
VIC		
Safer Australian Surgical Teamwork	19 June	Melbourne
Process Communcation Model Seminar 1	21-23 June	Melbourne
Academy of Surgical Educators Studio Sessions	7 August	Melbourne
Foundation Skills for Surgical Educators	10 August	Melbourne
WA		
Foundation Skills for Surgical Educators	10 June	Perth
Surgeons as Leaders in Everyday Practice	21-22 June	Perth
SA		
Foundation Skills for Surgical Educators	1 June	Adelaide
Surgeons as Leaders in Everyday Practice	30-31 August	Adelaide
QLD		
Foundation Skills for Surgical Educators	7 June	Gold Coast
Surgeons as Leaders in Everyday Practice	7-8 June	Gold Coast
Foundation Skills for Surgical Educators	3 July	Brisbane
Keeping Trainees on Track	12 July	Gold Coast
SAT SET	12 July	Gold Coast
Academy of Surgical Educators Studio Sessions	23 July	Brisbane
TAS		
Foundation Skills for Surgical Educators	24 August	Hobart

Register online

For more information phone **+61 3 9276 7440**, email **PDactivities@surgeons.org**
or visit our website
http://www.surgeons.org/for-health-professionals/register-courses-events/professional-development/

Skills training courses 2019

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

RACS has officially launched the 10th Edition of Emergency Management of Severe Trauma across Australia and New Zealand. 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

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
JUNE - SEPTEMBER 2019 | *Available courses

ASSET	www.surgeons.org/asset
Thursday, 8 August – Friday, 9 August	Perth
Friday, 9 August – Saturday, 10 August	Wellington
Friday, 16 August – Saturday, 17 August	Melbourne
Friday, 23 August – Saturday, 24 August	Brisbane
Friday, 13 September – Saturday, 14 September	Sydney
CCrISP	www.surgeons.org/ccrisp
Thursday, 15 August – Saturday, 17 August	Wellington
Friday, 23 August – Sunday, 25 August	Perth
Friday, 30 August – Sunday, 1 September	Brisbane
Thursday, 5 September – Saturday, 7 September	Auckland
Friday, 6 September – Sunday, 8 September	Sydney
CLEAR	www.surgeons.org/clear
Friday, 21 June – Saturday, 22 June	Sydney
Friday, 19 July – Saturday, 20 July	Perth
Friday, 16 August – Saturday, 21 August	Auckland
Friday, 20 September – Saturday, 21 September	Sydney
EMST	www.surgeons.org/emst
Friday, 23 August – Sunday, 25 August	Gold Coast
Friday, 23 August – Sunday, 25 August	Dunedin
Friday, 30 August – Sunday, 1 September	Melbourne
Friday, 13 September – Sunday, 15 September	Sydney
Friday, 13 September – Sunday, 15 September	Auckland
Friday, 20 September – Sunday, 22 September	Wagga Wagga
Friday, 20 September – Sunday, 22 September	Sydney
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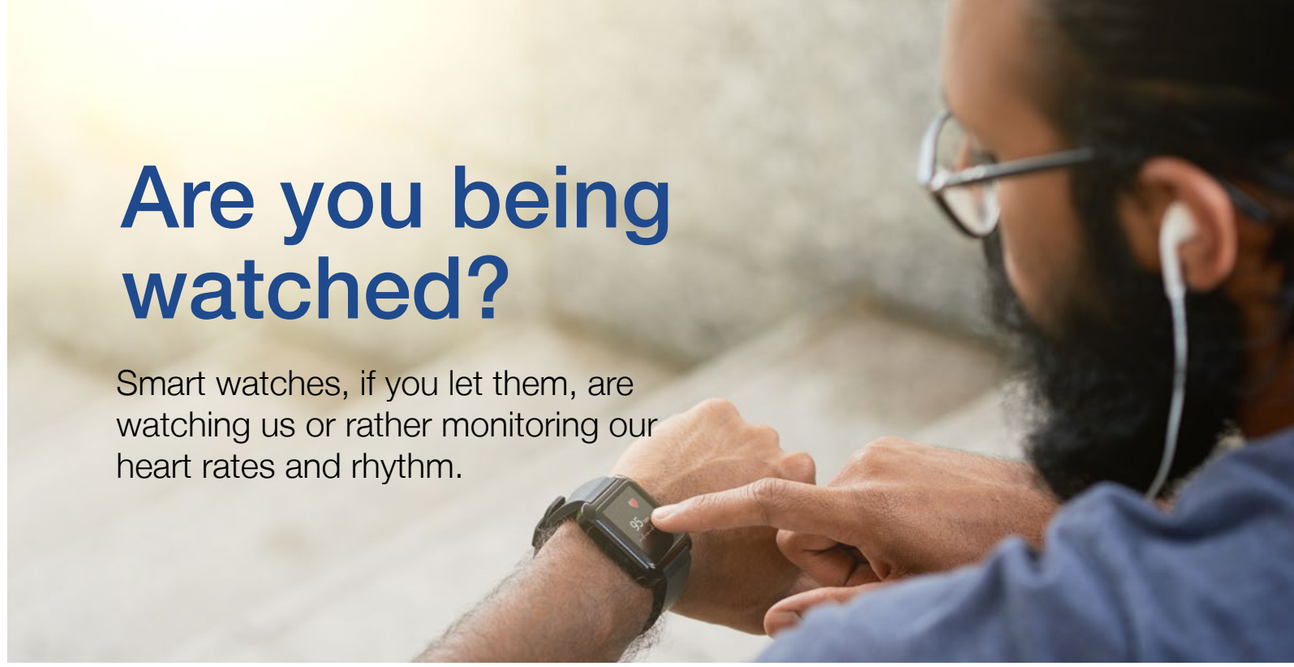


Are you being watched?

Smart watches, if you let them, are watching us or rather monitoring our heart rates and rhythm.

An apple a day used to be said to keep the doctor away. This no longer holds true. Dr Fi Brille ate some dodgy food, and during the awful night of expulsions that ensued, was notified by her watch of a rapid, irregular heart rate (HR). Her watch ECG app diagnosed Afib – so she phoned the next morning for an emergency consultation. Though dehydrated, the worst of her D&V was over, but she still had a tachycardia (regular).

She's not been the only watch detected case in the last couple of months – I've had Dr C A Darci as well. Atrial fibrillation has significant implications for stroke risk, other embolic disasters and likely long-term anticoagulation. The Apple watch (series 4) claims it can now detect it with 98.3 per cent sensitivity (true positive rate).

Smart watches, if you let them, are watching us or rather monitoring our heart rates and rhythm. They do this by sophisticated photo plethysmography. The photodiode sensor uses green light to monitor rate during activity and infrared when inactive to detect arrhythmias. We might not yet live in a nanny state despite recent political fearmongers, but it's getting ever closer. Your watch will not only monitor your heart rate, but can display an average rate, a graph, identify arrhythmias and send notifications. The Apple 4 watch even generates a lead 1 ECG!

Clinical studies on Apple and FitBit watches are accumulating. One ANZ study, published in 2018, compared 102 hospitalised patients comparing smart watch heart rate monitoring with continuous ECG. The watch was accurate with heart rate in sinus rhythm and patients with atrial flutter. In slower AF the watches were not so smart, underestimating rate, but there was 98 per cent accuracy when the AF rate exceeded 100 beats per minute.

Three years ago (2016), a study on smart watches also included the Samsung Gear S and the Mio Alpha as well as the other two smart watches. Healthy volunteers were monitored by ECG during running, sitting and cycling. The watches were comparable, accurate at recording heart rate (1-9% percentage error) but less good at measuring energy expenditure (9-43% percentage error). However, despite statistical agreement between the smart watches which tended to under-record, the variation still ranged from -27 to + 13bpm, and -267 to + 67 kcals. The technology is continually improving with a 2018 study showing RR variability to be very low and Bland Altman plot correlations achieving 0.9 (excellent). However, energy expenditure measurement by smart watches is still not accurate enough for use.

Interestingly, HR variability reports are used to plot stress (such as one in six cardiologists performing procedures), and the Apple watch is getting smarter at detecting this. So your watch could also be watching how stressed you are, and this monitoring might be informative providing you are not too stressed by looking at the watch all the time or having to jump at every email or text message. The watch might not be measuring your catecholamines, but through your heart rate and its variability it's watching your stress responses. But do you really want to know? That might depend on your mental health and/or blood pressure.

The fit but over intense Dr Darci uses his watch to navel gaze his heart rate during exercise, but also to gauge his cardiovascular fitness by measuring its rate of decline when recovering. He was literally alarmed when the watch clocked his tachycardia. His blood pressure and electrolytes proved normal. He passed a stress test with flying colours, underwent 24hr ECG monitoring without an arrhythmia, so we've let him return to the gym with or without his watch.

Dr Fi Brille also had a normal BP, but slightly abnormal electroytes. Her rate and rhythm had recovered when I saw her that morning, but over the following weeks she had other bouts of AF, detected by both her watch and 24-hour monitoring. She's considering her options.

Do you wear or want a smart watch? What do you want it to watch, and for how long will it ask your permission by asking you to press the app? Your ECG on your wrist for all to see? These 'wearable devices' represent a great advance for those who need monitoring. But what will they do to those of us who don't? Being alarmed at an alarm might just be too much stress for yours truly.

DR BB-G-LOVED

A brief history of RACS Pathology Museum 1962-1993

In the 1870s Professor William Osler who was teaching at McGill University, Montreal wrote: "As is our Pathology, so is our Practice."

In the early 1960s, this sentiment resonated with the College Council. The Education facility in the new west wing was envisaged as a *local equivalent of the Institute of Basic Sciences at the English College*[i] and surgical pathology was to be an integral part of a basic medical sciences course.

Consequently, to prepare for the new Education Centre, Professor E.W Gault (FRACS) was appointed in July 1962 as the Curator of the Pathology Museum. Ted Gault (1903-1982) had spent most of his career as a pathologist and worked as a medical missionary in India. In 1946, he became the Foundation Professor of Pathology at the Christian Medical College, Vellore.

When the Education Centre was built it was to include a pathology laboratory, museum and teaching unit. In the interim Professor Gault was installed in the attic and allocated funding of up to £1,500 to provide essentials for a laboratory.

The foundation stone for the new west wing of the College was laid by Sir Robert Menzies in March 1964 and noticeably, attendees at the ceremony were invited to attend a pathology display in the basement of the south wing (currently the RACS Museum).

In February 1965, Lord Casey, who was soon to become the Governor General, opened the new College buildings – an open quadrangle combining the west wing with the Great Hall located on the eastern side. The Pathology Museum and its associated laboratories had now found a new home – spacious accommodation on the second floor of the west wing (now the CEO and President's area).

By the late 1960s, the pathology section of the Basic Medical Sciences department had a Director, I.C Heinz, Anatomy Prosector, F.J Gray (later Director of Surgical Anatomy) and a new Curator, G.W Trinca. In a report to Council in 1968, it was stated that:

A series of displays in the museum have been maintained and considerable use of the museum has been made by candidates studying surgical pathology for the final Fellowship examination.

What did the RACS Pathology Museum contain? An example is the General Surgery section which was divided into four sub-sections: Diseases of the Breast; Diseases of the Thyroid; Traffic Accident Trauma; Miscellaneous.

Cases included:

Specimen 488: Undifferentiated carcinoma of the thyroid

Specimen 1006: Motor car accident (1968) with operative removal of a kidney

Specimen 1816: Small inguinal hernia, followed by hydrocoele of the cord

Specimen: Struck by car while on footpath. Post mortem revealed delayed splenic rupture

The Pathology Museum survived until 1993 when most of its specimens were transferred to the Harry Brookes Allen Museum of Anatomy and Pathology at the University of Melbourne. The decision to close the museum was controversial and was not without its detractors, most notably, its long-term Curator, Gordon Trinca. Its demise was precipitated by several factors. The generous space allocated to the museum was needed for the ever-expanding College and the collection was deteriorating, with many specimens in 'cloudy' pots requiring conservation. Surgical training was beginning to change and with it, the role of pathology. Other institutions like the University of Melbourne whose Pathology department began in 1853, had a good collection of specimens. Monash University's medical school which originated in the early 1960s, also had a pathology department.

It is important to note that museums are an educational resource and, this brief history of a College museum provides an interesting insight into surgical training in the latter half of the twentieth century.

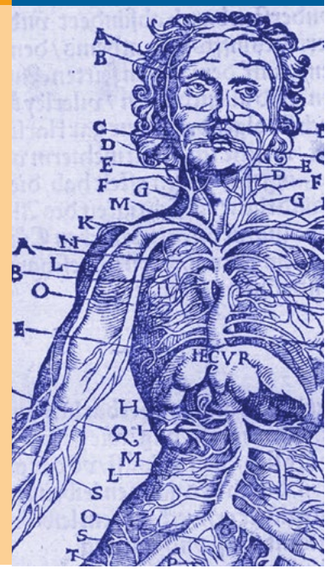
– Elizabeth Milford
RACS Archivist

IMAGES (clockwise from top left): Pathology Museum, General Surgery display; Pathology Museum; RACS Melbourne office – west wing circa 1965.

i A.W Beasley, The Mantle of Surgery, Melbourne, 2002, p. 128

2020 | COWLISHAW SYMPOSIUM

RACS



RACS is seeking a Convenor for the 2020 Cowlishaw Symposium.

The Cowlishaw Symposium was initiated in 1996 to make the Cowlishaw Collection of historical medical books better known to Fellows, Trainees and bibliophiles. Invited speakers are asked to present papers on medical history and materia medica based on books in the Collection.

The Kenneth Fitzpatrick Russell Memorial Lecture is incorporated into the Symposium.

The Symposium is held in Melbourne, usually in October.

The Convenor must be a Fellow of the College, and needs to be energetic and persuasive, possess excellent organisational skills, and have an ability to work with a small team and meet deadlines. An interest in medical/surgical history is an advantage. The position is an honorary one.

Expressions of interest close on 30 June. If you are interested in playing a vital role in one of the principal events in the history of medicine calendar, please contact Geoff Down, College Curator, +61 3 9276 7447 or geoff.down@surgeons.org

Are you an ACS member?

Join the ANZ Chapter of the American College of Surgeons and be part of the group that maintains strong links between the Colleges. Fellows and Trainees of RACS intending on gaining ACS Fellowship are also encouraged to join.

Email your details to the Secretariat:
anz_acs@surgeons.org

Sydney team with new treatment for essential tremor

Since news emerged of the successful introduction into Australia of a non-invasive MRI guided ultrasound procedure to treat essential tremor, scores of patients have approached the team at St Vincent's Hospital in Sydney for help.

Now the team behind the procedure – neurosurgeon Dr Ben Jonker (pictured, left), neurologist Dr Stephen Tisch and neuroradiologist Dr Yael Barnett – face the task of assessing dozens of patients for their potential suitability.

According to Dr Jonker, however, they had anticipated this public reaction and, knowing they only had the resources to treat between 25 – 50 patients in the first year, they established protocols to help guide patient selection.

First, the essential tremor must predominantly affect the limbs (usually arms) rather than head or voice, it must be severe and impact daily function, it must be unresponsive to pharmacological treatments and it must significantly affect quality of life sometimes to the point of causing social isolation.

The new treatment was introduced in November 2018 via a $6 million MRI-guided Focussed Ultrasound (MRgFUS) that uses high frequency ultrasound beams to burn a tiny lesion in the thalamus to block tremor signals.

Patients are conscious throughout the procedure, able to give real-time feed-back to surgeons and neurologists and see a significant reduction in their tremor even while placed in the stereotactic frame.

Dr Jonker sees this technology as a natural extension to his specialist practice treating movement disorders including essential tremor and Parkinson's Disease through Deep Brain Stimulation (DBS) and Stereotactic and Functional Neurosurgery.

Having received his FRACS in 2009, he left Australia to take up a Fellowship in Stereotactic and Functional Neurosurgery at the University of Calgary, Canada, and a Fellowship in Stereotactic Radiosurgery at the UCLA Medical Centre in Los Angeles.

He now works out of St Vincent's public and private hospitals and the Royal Prince Alfred Hospital and is a clinical senior lecturer at the University of Sydney.

Dr Jonker said it had taken more than a year to source the funding to both buy the machine and subsidise procedures, present a business case to hospital administrators, establish ethics protocols and recruit the first patients.

Since then, six patients with severe tremors have been successfully treated.

"Clinical trials have been conducted overseas which show this procedure to be safe and effective and it has FDA approval in America but widespread public funding is not yet available in Australia," Dr Jonker said.

"It would be wonderful to be able to offer this more widely and we are working on that at present."

Dr Jonker said he became involved in introducing the new technique because it built on his work treating movement disorders through functional neurosurgery.

"I was exposed to deep brain stimulation (DBS) as a registrar at Sydney's North Shore Hospital and I was hooked," he said.

"Stereotactic and functional neurosurgery greatly appealed to me because it is the only area of neurosurgery where we work directly with the micro-circuitry of the brain.

"It is also an area of neurosurgery where disabling conditions are routinely and quickly improved resulting in very happy patients.

Dr Jonker said patients undergoing MRgFUS are perhaps amongst the most satisfied.

"We have seen that patients who have had this new stereotactic procedure (MRgFUS) look ecstatic the following day - more so than with open surgery - perhaps because the process takes less out of them."

Now, one-quarter of Dr Jonker's practice involves focussed radiation for brain tumours and focussed ultrasound for essential tremor with the remainder of his time spent in theatre doing more conventional open surgery, particularly providing DBS or excising tumours.

He said the new MRgFUS procedure involved placing the patient's head into a stereotactic headframe which focusses high frequency ultrasound waves of 650khz onto a tiny target and which uses water to control temperature because of the large amount of energy being used.

Using MRI imaging, the team locates the area of the thalamus which controls movement, then conducts a series of low-energy tests to assess the functional impact of the treatment before increasing the ultrasound waves to burn a lesion of between two and three millimetres.

"Essential tremor is caused by a derangement in some of the movement control circuits travelling through the thalamus," Dr Jonker said.

> "Essential tremor is caused by a derangement in some of the movement control circuits travelling through the thalamus (and) by creating a tiny lesion, we can block the signals causing the tremor."

"By creating a tiny lesion, we can block the signals causing the tremor.

"The most common risk in terms of side-effects is some initial unsteadiness but the risk of brain haemorrhage with this procedure is thought to be close to zero.

"However, trials have shown that the risk of an adverse outcome rises substantially if we treat both sides of the brain which means that if a patient has tremor in both hands, we will treat only one side – usually the dominant hand.

"This also means that we cannot use this technique for people with a head or voice tremor or where we want to treat tremor on both sides and in those cases we would typically use DBS.

"So far, we have had great success in the patients we have treated which is wonderful for them and for people with essential tremor in Australia."

Dr Jonker said the team at St Vincent's were now in the process of designing research projects based on the new procedure.

He said the machine used also offered an exciting range of future treatment possibilities. He said it had the capacity to break the blood-brain barrier which could revolutionise the delivery of drug therapies to treat brain tumours or even Alzheimer's disease.

He also said that advances were being made across a range of neurological conditions including brain machine interfaces such as research into devices which could be implanted to help restore sight to the blind.

"While I expect there will always be a role for conventional open operative procedures, the most important thing is to be the advocate for the patient – and keep an open mind as to what the best technology might be to address their clinical problem."

Karen Murphy
Surgical News journalist

General surgery Trainee breaks barriers

Final year general surgery Trainee Dr Helen Ballal initially came to Australia from England during maternity leave to visit her husband who was completing a Fellowship in Upper GI surgery at Freemantle Hospital.

However, the big blue skies, beaches and beauty of Western Australia created such a stark contrast to the darkness and cold of English winters that nine years later she is still here.

Now, she has four children with her husband Mo Ballal, has obtained permanent residency and hopes to receive her FRACS later this year.

Dr Ballal received her medical degree at the University of Newcastle Upon Tyne, before completing her basic surgical training at the Mersey Deanery, Liverpool.

She then began MD research (PhD equivalent) at the School of Cancer Studies at the University of Liverpool, evaluating the biological pathways of response to chemotherapy in breast cancer which she finished last year.

Between her arrival in Perth in 2010 and the start of her Australian surgical training in 2014, Dr Ballal worked as a Breast Fellow at the Sir Charles Gairdner Hospital while she waited to gain permanent residency.

By the time she was accepted into the RACS Surgical Education Training program, Dr Ballal was the busy mother of four children aged under six years.

"I came to Australia for a short visit with my husband during maternity leave with our first child and stayed," she said.

"Mo and I decided that it was far easier to try and find some work/life balance here in Australia than in England if only because we can spend more time outside with the kids than we ever could in England when it can get dark by 4pm for long stretches of the year.

"It wasn't easy when I began training – we had to make the decision to outsource whatever could be outsourced and our family life requires a lot of planning and organisation – but we've been extremely fortunate to have the help of wonderful baby-sitters and nannies.

"Perth is so beautiful – it was just too hard to leave."

Currently, Dr Ballal is finishing the last of her general surgery rotations at the Fiona Stanley Hospital, the Royal Perth Hospital and the St John of God Murdoch Hospital.

She plans to specialise in breast and endocrine surgery after receiving her FRACS.

"My career dedication has always been to breast and endocrine surgery, an interest that extends from theatre to the research laboratory," she said.

"My MD research was entirely laboratory-based and involved doing real-time Polymerase Chain Reaction, genetic cloning and sequencing of DNA.

"I have a great interest in this field because the biology of the disease is fascinating and there is so much we still don't know such as why various cancers behave in different ways.

"I also enjoy getting to know my patients, many of whom we can successfully treat now, and I'd like nothing more than to combine both aspects by undertaking translational research so that I can act as a bridge between the bench and the bedside."

Dr Ballal said while she had received great support from colleagues and other surgeons since she arrived in Australia, she believed there was still more work to be done by various stakeholders to make surgical training easier for mothers.

"More needs to be done to make pregnancy and maternity leave a positive, viable option for Trainees," she said.

"I've seen some women come back to work too soon after having a baby because of training schedules and I believe there needs to be more flexibility around this so that Trainees are not made to feel that a pregnancy is an inconvenience to be overcome.

"Hospitals also need to provide more flexible training places if they are serious about making surgery an attractive career choice for more women."

Dr Ballal is one of only a few female Muslim surgical Trainees currently working in Australia. She wears the hijab during ward rounds – to the surprise of some patients – but not when she is scrubbed.

"It has become easier to wear the hijab in Australia but it does make you stand out," she laughed.

"I don't wear a scarf or long-sleeved garments when I'm operating so patients can get a surprise when they see me in my usual clothes.

> "I do face some casual racism at times from patients but hopefully by giving them good surgical care, I can break down some prejudices and open some minds.
>
> "Hopefully, that has already happened and I can say without hesitation that I have never experienced any obstacles from the College or senior Fellows because of my religion or dress."

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Dr Ballal said that while the mass shooting at the Christchurch mosques earlier this year had been cause for deep sorrow for Muslims around the world, she had received great kindness from colleagues and friends across Perth.

"It was very warming to find people wanting to reach out and show their support for me afterwards so at least some good has come out of such a horrible tragedy, even on just a small personal scale."

Dr Ballal said she hoped to apply for a Breast Reconstruction Fellowship next year after she received her FRACS in July.

Karen Murphy
Surgical News journalist

Melbourne team conduct rare surgery designed with the aid of 3D biomodeling

A team of Melbourne surgeons has recently conducted a rare series of procedures – using advanced 3D imaging and printing technology pioneered in Australia – to repair the face and skull of a child born with an unusual and complex combination of craniofacial deformities.

Last year, the team of craniofacial and neurosurgeons treated toddler Jack Kalangis who was born with a life-threatening fronto ethmoidal encephalocele and a malformed skull that was too small for his brain – a condition known as a micro-cranium or microcephaly.

The team from the Royal Children's Hospital (RCH) in Melbourne knew immediately upon the child's arrival from Vanuatu that they could not treat the brain herniation – a fairly rare procedure – until the toddler's skull had been enlarged.

However, they wanted to treat him fairly quickly to release the pressure building up behind the herniation, as revealed by x-rays and MRI scans.

Using three-dimensional scans to create a replica of Jack's skull, they designed a posterior cranial vault expansion to give Jack's brain more space. They also planned the second-stage reconstructive procedure to remove the brain herniation that protruded between the eyes and across the nose, then seal Jack's brain dura and rebuild his face.

The team was led by Professor Tony Holmes who worked alongside the RCH's Craniofacial Surgery Section Chief, Dr Jonathan Burge, and neurosurgeon, Dr Alison Wray.

In August last year, Dr Burge and Dr Wray began the process of expanding Jack's skull by mobilising the entire bones comprising the back of his head and then reattaching them with expandable metal screw devices, known as distractors, at each side of the skull.

The distractors, used to lengthen the skull bones, were turned each morning and night to create a tiny 1.2 mm gap each day, slow enough to allow for new bone growth to occur during the process known as osteogenic distraction.

After almost a month, Jack's head had expanded by the necessary 3cm required to give him enough brain space and allow for the encephalocele to be repaired.

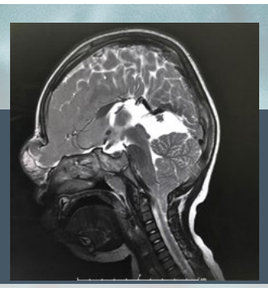
Then, in November, Professor Holmes, Dr Burge and Dr Wray dissected and mobilised the orbits and the anterior skull at the top of the child's face to display the internal path of the herniated brain. The abnormal external skin and neural tissue was removed from between the eyes and the nose. Dr Wray then replaced the herniated brain back into the dural covering and delicately sealed it off before the others began the complex reconstructive surgery.

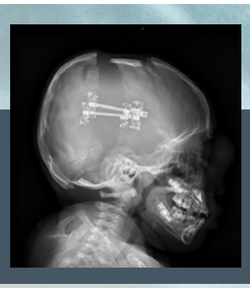
In a combined procedure that took 14 hours, the craniofacial surgeons lowered, reshaped and narrowed the orbital bones to cover the opening left by the encephalocele. The forehead, which had been deformed by the brain herniation, was reshaped and secured. Extra bone from the skull was used to rebuild the nose.

Speaking to *Surgical News*, Professor Holmes described this rare and complex procedure as a great success.

He said that an extensive review of literature had found no other cases presenting with Jack's unusual combination of inadequate head size associated with this type of encephalocele. Usually a small head is associated with poor or inadequate brain development which was not the case with Jack.

> "We've been conducting complex craniofacial reconstructive surgery at RCH since 1979, but Jack is the first to come to us with this pattern of malformations."





Jack's MRI – before and after

(L) Note frontal encephalocele and small head; (R) Jack's expanded posterior skull xray; expanders in-situ.

"We've been conducting complex craniofacial reconstructive surgery at RCH since 1979, but Jack is the first to come to us with this pattern of malformations," Professor Holmes said.

"We knew we had to expand the skull first to prevent any incipient pressure before we could even begin reconstructive surgery.

"We also needed to know exactly how best to conduct that surgery.

"Fortunately, some years ago, a Melbourne neurosurgeon, Dr Paul D'Urso, developed an interface which allowed digital data from high resolution CT scans to be read by a 3D printer to create accurate replica models of specific bone anatomy.

"It was roughly 40 years ago since the first CT scanners, and high resolution scanners only developed in the late 80s. Highly accurate 3D printing of biomodels (stereolithography) developed in the early 90s and Paul's research was at the forefront. Back then, Paul printed out a resin model for us of a patient's skull which was very similar to Jack's.

"We operated on the model first and realised exactly what we need to do to get the optimal aesthetic and functional result. The subsequent patient surgery worked extremely well and for many others over the years. Paul tells me that our initial procedure was the first craniofacial operation specifically designed with a 3D model that was so accurate.

"Dr Burge and I operated on a similar model of Jack's face and skull to design his reconstructive procedure. It seems fitting that the technology pioneered in Australia has been used again for Jack's unusual case."

Professor Holmes, AO, established Melbourne's first Craniofacial Unit in 1979 upon his return from post-Fellowship training at Harvard Medical School and he remained head of the unit until 2009.

He was the Director of RCH's Department of Plastic and Maxillofacial Surgery from 1990 until 2003. In 2012 he was the inaugural Harvard Plastic Surgery Residency Visiting Professor in Boston.

Professor Holmes has trained more than 35 craniofacial Fellows and in 2001 he and his RCH colleagues published a paper in the *Journal of Craniofacial Surgery* which remains a benchmark for correcting these types of encephaloceles. The refinements of correction described were mainly developed with the use of 3D models.

Professor Holmes said fronto ethmoidal encephaloceles were caused by a failure of the front end of the neural tube to form properly and close during early foetal development.

He said he treated around one or two children each year with anterior encephaloceles – mostly from the South Pacific and South East Asia – but none with such complex surgical needs as those presented by little Jack's particularly small head.

"These encphaloceles can be life-threatening because a simple bump, cut or accident can easily penetrate the thin layer of skin covering the brain and there is no protection against infection," Professor Holmes said.

"However, Jack was the first time we have seen a frontal encephalocele patient with early signs on scans showing extra pressure building up in the cranial cavity because of his micro-cranium."

Professor Holmes paid tribute to Dr Peter Howe, a specialist craniofacial anaesthetist, who kept Jack stable through the long procedures.

"Our specialised crew, both in the operating theatre and the ward, are outstanding; Craniofacial Surgery is a team event," he said.

"This year is the 40th birthday of the Craniofacial Unit at the RCH and I can't think of a more fitting way to celebrate than to have completed such a successful and unique craniofacial reconstructive procedure," he said.

Jack and his mother were brought to Australia by the Children First Foundation and the 3D models of his skull were created and donated to the RCH by Anatomics. The distractors were donated by KLS Martin Australia.

Professor Holmes said that while Jack's brain had developed slightly abnormally due to the malformations of his central nervous system and his skull, he was now meeting all his normal developmental milestones and was safely back in his small island home.

Karen Murphy
Surgical News journalist

News round-up

Update from Queensland

Dear Colleagues, as I hand over the role of Chair to Professor Deborah Bailey in May, this may be my last duty as State Chair in Queensland. I present to you the program for this year's Queensland State Conference.

The State Conference will be held at the Sheraton Grand Mirage Gold Coast on 12-14 July 2019.

As in previous years our conference is synchronised with the Queensland State Surgical Forum on Friday 12 July, finishing in the mid-afternoon to be followed by the finals of the Neville Davis and RACS Papers prizes. The quality of these papers in recent years has been outstanding. It is a credit to the growth in realisation of the value of research and integration.

The Conference will be combined with the Surgical Directors Leadership Forum which was a successful format in Cairns in 2017. Some components of the Directors Forum will be in the Queensland State Surgical Forum. The College Vice President, Dr Richard Perry, will be in attendance representing College Council and we thank him for the time he will devote to attend from New Zealand.

The program for the Queensland State Surgical Forum is still being finalised by the Surgical Advisory Committee. Included will be a presentation by Professor Russell Strong on our recent Surgical History. This will be complemented by presentations and discussions on future directions in Quality Improvement with particular regard to NSQIP (National Surgical Quality Improvement Program) and GIRFT (Getting it Right First Time) – a new initiative from Queensland Health and a Ministerial priority for 2019. This was recently presented to a number of facilities in Queensland by Professor Tim Briggs from the United Kingdom. There will also be a presentation from Professor David Fletcher on the *Role of Surgical Directors.*

The Conference theme on the Saturday and Sunday is the *"Life Cycle"* of a Surgeon from Student/Intern years through to Senior Surgeon and Retirement. There will be presentations and discussions on the numerous roles played and challenges faced in a *Surgical Life*. These range from flexible/alternative training models to the challenge of *Professional Accountability and Assessment of Surgical Performance*.

A number of thought-provoking presentations are planned:

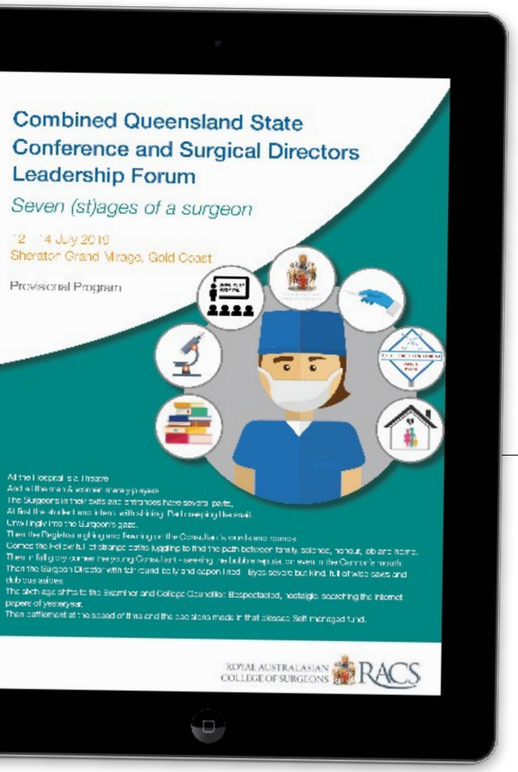
- Professor Mark Smithers, Sir Hugh Devine Medalist – Mentoring and role modelling
- Dr Stefan Hajkowicz, CSIRO Data61 Unit – Global megatrends in healthcare
- Drs Eric Levi, Rhea Liang and Prof Richard Turner – Work life balance, Resilience and why women leave surgical training
- Dr Rupert Sherwood, RANZCOG – The ageing surgeon.

Other highlights include sessions 2 and 5. Session 2 focuses on competency based and flexible training with a number of practical examples on flexible training models being presented. Session 5 will look at the complex areas of surgical performance, surgical behaviour and accountability.

Additionally, the David Theile Lecture will be given by Associate Professor Barry O'Loughlin and Dr Neil Wetzig will be our Honoured Guest. Both are surgeons who have had a substantial impact on surgery here in Queensland and abroad.

Colleagues, I urge you to attend your own Queensland State Conference as well as the Queensland Surgical Forum on Friday 12 July. Please also support the presenters in the Neville Davis and RACS Papers Competitions.

Further information on the conference can be found at www.surgeons.org/qld

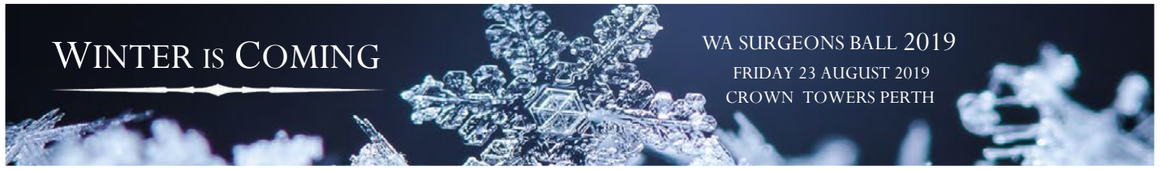


Dr Brian McGowan
Chair, Queensland State Committee

From the ACT

A surgical skills workshop, held in May at the Australian National University's Anatomy Laboratory, saw eight Trainees benefit from the opportunity to practice their surgical skills for general surgery.

The workshop focused on the advancement of anatomical training and surgical procedures for early career clinicians, providing a unique opportunity to practise these skills on human cadavers. This was the first anatomical workshop hosted by ANU Medical School (ANUMS) and a "soft opening" for early career surgical skills workshops in the future.



Winter is coming and so is the 2019 RACS WA Surgeons Ball

Winter does not have to be filled with dullness. RACS WA is preparing to take you on a unique winter experience where elegant and mysterious meets spectacular, at the upcoming RACS WA Surgeons Ball 2019, to be held on Friday 23 August 2019 at Crown Towers.

Providing a rare opportunity for Fellows from across all surgical specialties to come together in a relaxed social setting, the WA Surgeons Ball also provides an opportunity for funds to be raised for a worthwhile cause. Proceeds raised from this year's event will go to Australian Doctors for Africa, a worthy global medical project founded by one of our local orthopaedic surgeons, Mr Graham Forward. Funds will be raised specifically for the Somaliland Specialist Training Program.

The previous WA Surgeons Ball in 2017, held in support of the Foundation for Surgery, raised a significant amount of funds to send surgeons to Papua New Guinea for Neurosurgery support and to Timor for an ENT support program.

If you are after a truly enjoyable evening with a few surprises along the way, we encourage you to join us. You could win some fabulous raffle prizes from an extensive offering courtesy of our generous partners.

Tickets are on sale via the RACS WA website or you can contact the WA office for more information. Our tip is to book early as this event is proving to be an extremely popular fixture and tickets will sell out. Don't forget to get a table of 10 together to receive a discounted rate.

– WA Surgeons Ball Committee

Join us at the 2019 VIC ASM

Surgical Oncology Synergy and Cooperation 11-12 October

We invite you to the 2019 Victorian Annual Surgical Meeting to be held in Albury-Wodonga this October. It is a privilege to convene this meeting and present accomplished speakers who will discuss selected topics in relation to 'Surgical Oncology Synergy and Cooperation'.

Our program to address synergy in oncology includes four main sessions: breast cancer, neuro endocrine tumours, colorectal cancer and head and neck oncology.

Cancer treatment is evolving. Early accurate diagnoses (including cytogenic and immunochemistry) and staging is of vital importance; multi-disciplinary team discussion and planning is crucial with current multi-modality treatment options.

One third of Australia's population live in non-metropolitan areas. Synergy of medical services is essential in regional and rural areas. Many people benefit and prefer to have the best possible medical care provided locally with certain treatment modalities centralised. The aim is to establish optimal diagnostic and treatment pathways through communication and collaboration between regional and metropolitan centres.

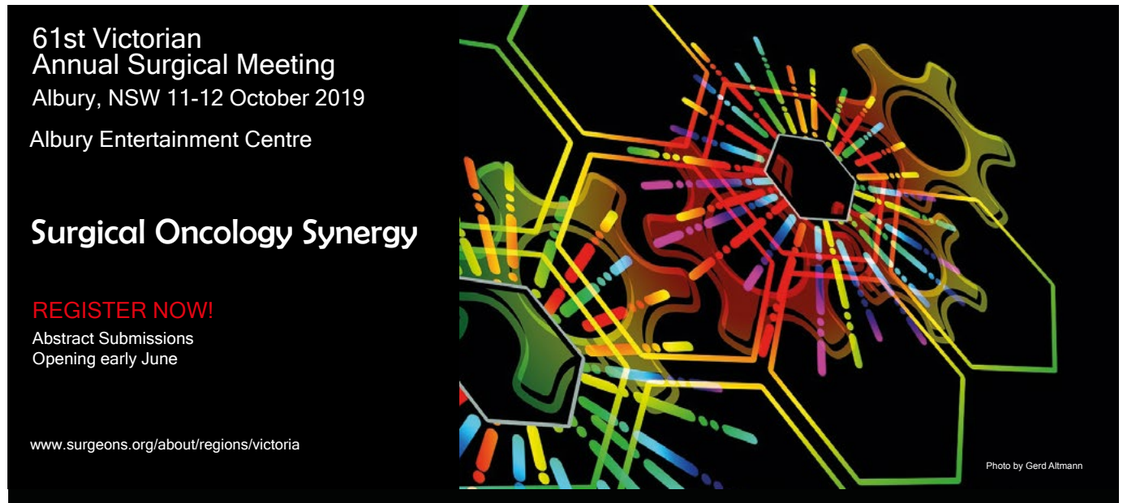
Medical services in Albury Wodonga, supporting a catchment area of 250,000 people, include intensive care, coronary angiography, medical and radiation oncology etc.

Albury-Wodonga is at the centre of a heritage-rich and naturally stunning region, with charming townships and quality regional produce. Award winning wineries are located within a 100km radius and outdoor adventures offer skiing at nearby snowfields, hiking, mountain bike riding, kayaking and more.

Looking forward to seeing you in Albury in October.

To Register: www.tinyurl.com/VICASM19

Dr Heinrich Schwalb
Convener



“Kids and Quad bikes don’t mix.”

Sadly, on 13 April this year, a 9-year-old boy in Sandford, Tasmania died when his quad bike rolled on top of him. The same day a 7-year-old boy in Dingup, Western Australia died from the same injury.

Over the past ten years, 700 children have presented to Victoria emergency departments with quad bike injuries. This means a child quad bike injury every five days. Many of these children will have life-long disabilities from these accidents.

Updated Safe Work Australia quad bike fatality data is now showing three out of six recorded fatalities in 2019 are children under 16.

Quad bikes were known and advertised as all-terrain vehicles (ATV). They appear to be safe, and they are easy to operate. However, the facts and research suggest otherwise:

- Quad bikes are inherently unstable vehicles at low and high speeds.
- A bump to the height of 10 cm at low speed can cause a roll over, such is the instability of quad bikes.
- Children lack the cognitive ability of safe decision making to ride these vehicles safely.
- Children lack the physical strength and size that is recommended to control a quad bike.
- Quad bikes are not suitable for all terrains. More than one third of quad bike fatalities occurred on terrain where an incline was noted. Over 50 per cent of fatalities occurred on uneven ground.
- Over 60 per cent of fatalities involve a roll-over.
- Only 10 per cent of quad bike fatalities were known to be wearing a helmet.
- Almost 50 per cent of fatalities occur when the bike is not being used for work.
- None of the fatalities mentioned any form of rollover protection on the vehicle.

There are no regulations or restrictions on use of quad bikes on private properties in Tasmania.

A Tasmanian coronial inquest in 2016 conducted by Coroner Simon Cooper into seven quad bike related deaths in the state between 2012 and 2015 recommended:

- Mandatory training and licensing for all quad bike users.
- Use of suitable helmets.
- Banning the use of adult quad bikes for those under the age of 16.
- Banning the use of youth bikes for those under the age of 6

Unfortunately, none of these recommendations have been implemented. The report has been shelved and the Tasmanian government is now awaiting a review of the recent Australian Competition and Consumer Commission investigation report.

Simple steps can be taken to reduce the morbidity and mortality of quad bikes:

- Children under the age of 16 do not ride quad bikes.
- Wear a helmet.
- Mandatory training in how to use a quad bike.*
- Critically assess whether a quad bike is the right vehicle for the job.
- Education and increased awareness that rocky, steep, uneven, sandy or muddy terrain greatly increase risk of quad bike rollover.

Sadly, whilst we wait for legislation to be passed, it is only a matter of time before another child dies riding a quad bike.

In Tasmania, members of the RACS community have been active in the media and lobbying state politicians to act. I would encourage you to share these facts with your newly elected member of parliament.

References:

* A national unit of competency (AHCMOM212A Operate Quad Bikes) has been developed and over 230 RTO Australia wide are authorised to deliver this training.

Safe Work Australia – Summary of quad bike fatalities (2011-2018.) www.safeworkaustralia.gov.au/quad-bike-fatality-data
“Quad bikes inherently unstable and not suitable for all terrains: Royal Australasian College of Surgeons” www.examiner.com.au/story/6060646/kids-and-quads-dont-mix/

Mr David Penn
Chair,
Tasmanian State Committee

Update (31 May): NSW Coroner recommends introducing criminal charges for allowing children to ride adult quad bikes. – Ed.

SURGICAL SNIP

Breast conservation treatment unrealised potential for Asian women

Despite increasing evidence that breast conservation treatment (BCT) may be more successful than mastectomy in terms of breast cancer survival in both Western and Asian populations, its potential has yet to be realised in Asia.

It has been thought that Asian women’s smaller breast tissue volume may have been a barrier to BCT, especially for tumours bigger than 2cm. Despite the ability of such approaches as neoadjuvant therapies to reduce the size of tumours and enable BCT, BCT rates reported in South-East Asian centres continue to be markedly lower than elsewhere.

A study was carried out of patients at a Singapore hospital who underwent surgical treatment for breast cancer between 2009 and 2011. Results indicate that BCT is possible for a much higher proportion of Asian women with breast cancer and should be the treatment of choice.

Full article in *ANZ Journal of Surgery (Volume 89, Issue 5)*: https://onlinelibrary.wiley.com/doi/10.1111/ans.15084

Simultaneous knee replacement as safe as single or staged – NZ study

Analysis of information from the New Zealand National Joint Registry (NZNJR) has found that simultaneous bilateral knee replacement surgery is as safe as either single or staged bilateral procedures.

A key concern around single-anaesthetic bilateral total knee replacement surgery (SABTKR) is the reported risk of cardiovascular, thrombo-embolic and wound complications, and increased mortality.

The study found that SABKTR patient outcomes, in terms of mortality and revision risk, compared favourably with outcomes for patients undergoing unilateral TKRs. Patients selected for SABTKR were younger, more likely male and fitter.

The study also found patient survival rates were higher when performing staged bilateral TKR when the second procedure was performed more than 90 days after the first.

Full article in *ANZ Journal of Surgery (Volume 89, Issue 5)*: https://onlinelibrary.wiley.com/doi/10.1111/ans.15160

Coming soon… Improvements to the CPD Program

As part of RACS commitment to deliver education that supports best practice in surgical care, we are reviewing your CPD program.

Change is coming to CPD, driven by our ambition to deliver a flexible CPD program that supports you across all stages of your surgical career.

RACS is now working collaboratively with specialty associations, societies and sections to deliver an improved CPD program that meets your learning needs and provides you with an intuitive and streamlined experience.

We’ll keep you up to date on our progress in the coming months and will be seeking your feedback along the way. Keep an eye out for regular updates in *Surgical News,* Fax Mentis and the RACS website.

Foundation for Surgery
Passion. Skill. Legacy.

The Foundation for Surgery and the D’Extinguished Surgeons warmly invites you

12 noon
Friday 14 June

Lecture:
“Lighter surgical anecdotes – an educational exposè”

This lecture will be delivered by
Assoc. Prof.
Brian Collopy FRACS

RACV City Club,
501 Bourke St,
Melbourne, VIC 3000.

Lunch will be served after the lecture.

Guests welcome.
Please feel free to bring colleagues, friends and family.

Thanks to the D’Extinguished Surgeons for their ongoing fundraising efforts in support of the Foundation for Surgery.

RSVP
foundation@surgeons.org
by 5 June

Thank you to David Kaufman FRACS who in April presented *A fresh look – How a virtual museum can inform the public and project the profession*. Of interest was how RANZCO’s virtual (online) museum helps to inform the public of the remarkable advances and efforts in the evolution of modern medicine through audio and video interviews, presentations, posters and historic lectures.

Foundation for Surgery
Passion. Skill. Legacy.

Securing healthy futures

Developing surgical skills within local communities is one of the greatest challenges, yet most important priorities of the Foundation for Surgery's global health work. Our commitment to this crucial goal means that we must begin to hand over our largest lifesaving health program in Timor-Leste to our local teams.

Since 2000, through the generosity of you, our Fellows, we have been able to train and equip local doctors, nurses and health workers, including Timor-Leste's first six general surgeons, to meet the urgent needs of their Timorese communities.

Our impact on the healthcare system in Timor-Leste has been immense: 12,282 Timorese adults and children have received life-changing procedures, and a further 117,590 consultations have been completed thanks directly to your generosity. This is an incredible achievement, but we must keep going. A staggering 10,000 Timorese could have their blindness reversed with simple eye operations which our local teams across the Pacific, if properly resourced, could perform.

Our work to date in Timor-Leste has set the groundwork for a strong, sustainable future for healthcare in this young nation. However, we risk losing many of the gains you have helped achieve if we are unable to complete our hand over to local staff within our 12-month deadline. The lives of so many will rest on how robust our largest program is when it graduates to a sustainable local-run entity in 2020.

Please support the Foundation for Surgery and **Pledge-a-Procedure**. That is, make a tax-deductible donation of the proceeds from just one of your most common major operations before June 30. Alternatively, giving a one-off donation will make a lasting difference.

Your support will enable the training of more doctors and health workers so they have the skills to meet the health needs of the nation, as well as family health workers to provide services in remote parts of the country, the provision of specialist medications required to treat disease and infection, and the means to set up a steady supply of pharmaceuticals and equipment.

It would be devastating if these crucial final steps were left untaken or lost for lack of funds. This is an issue that goes right to the heart of our commitment as a profession to care for those in great need. Please respond with the same compassion you have always shown toward those in need.

As you know, unlike other charities, **100 per cent** of all donations to the Foundation for Surgery address critical surgical need, so your support can achieve maximum impact in the community. All costs for administering the Foundation for Surgery are provided for by RACS, so that every dollar of your precious donation can go where it is needed most.

Donating is very simple.

Please go to www.surgeons.org/foundation/ to donate and get an instant tax receipt, or complete and return the flysheet form attached to this edition of Surgical News. This simple act will have an enormous impact on the future of Timor-Leste.

Alternatively, if you would like to make **a more substantial personal contribution or even establish your own scholarship,** please contact Jessica Redwood, Manager, Foundation for Surgery, on +61 3 9249 1110.

100% of your donation
assists in addressing critical surgical need

REGISTERED CHARITY · acnc.gov.au/charityregister

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

Vala Afshar

A shared endeavour: RACS invests in partnerships to support cultural change

The increasing evidence base linking patient safety and professional conduct was the focus of recent workshops with some of our important health sector partners.

Professor Jerry Hickson of Vanderbilt University, a world-expert on the link between professionalism and patient safety and long-time adviser to RACS, shared his insights and recent research with some of the hospitals, Specialist Colleges and jurisdictions committed to building a culture of respect.

Professor Hickson's interactive presentation talked about the impact of the Vanderbilt model of professional accountability and experience and how it can support behaviour change. He made the case for employers and RACS to continue to work together, including towards information sharing.

Across two workshops, RACS provided a forum for our partners in hospitals and health services, colleges and other agencies to share ideas about what works, and discuss obstacles to our collective efforts to support cultural change.

A hot topic was complaints management, with discussion focusing on the optimal roles for employers and colleges, and how best to balance effective and timely complaints management and information sharing with fair processes and privacy constraints.

Focusing on patient safety, RACS continues to refine its approach to complaints management. Incrementally, we are working to build an effective and safe complaints process that keeps patients safe and supports individual surgeons to change their behaviour and work towards increased professionalism.

Partners at the workshops shared insights and experiences and explored how a range of tools, including policy change, credentialing and employment contracts, can be used to address historic limitations in information sharing between agencies. We also heard from regulators and lawyers, and the workshop drew on the latest evidence and practice from the United States.

More broadly, workshop participants examined the various strategies being used by employers and colleges to support professionalism and improve patient safety.

A sustained, multi-faceted approach includes investment in leadership, mentoring, policy support, communication and training, and education, all of which have a role in increasing professional accountability.

Immediate RACS past President John Batten reflected on our 'shared endeavour', when many agencies have a shared commitment and different roles in helping build a culture of respect.

Our *Action Plan: Building Respect, Improving Patient Safety* maps out a long term plan to help build a culture of respect in surgery. The College welcomed the opportunity to collaborate and work in partnership towards this shared goal.

RACS is well recognised across the health sector for our work to build respect and improve patient safety in surgery, and public opinion is aligned with our efforts to build a culture of respect.

IMAGE:
Top: Mr Scott Fletcher, Professor Jerry Hickson and Mr John Batten, formalising the signing of MOU between RACS and Tasmania Department of Health. Below: Mr John Batten, Ms Angela McGarry (CEO, CPMC) and Professor Jerry Hickson.

International Medical Symposium 2019

RACS Trainees' perspectives

In recognising the learning needs and the importance of surgical education exposure for Trainees, RACS sponsored a group of Trainees to the International Medical Symposium (IMS) 2019 in Auckland on 22 March. Following an application process, the Trainees below were selected for the sponsorship. Below details their experience at the symposium.

Dr Doruk Seyfi
(SET 1, General Surgery, NSW)

IMS 2019 provided perspective of how artificial intelligence (AI) systems are being refined, that both government and private industries are investing heavily into research and development. The speakers described how AI could be used for image abnormality detection, where we can teach a system to recognise abnormalities on retinal photographs or plain film radiographs. However, the underlying clinical reasoning behind the investigations and how those investigations have led to certain management decisions are well and truly beyond that of AI systems in their current state.

The idea of integrating AI systems in the medical records has excellent potential and teaching a system to document on behalf of clinicians would allow us to focus more on the patients rather than the underlying IT in clinical practice. The idea of having AI systems in multi-disciplinary meetings to assist with objective, patient-individualised, evidence-based decision-making was also discussed. AI systems could provide perspective on the current literature during an MDT meeting where decisions are being made for each patient. However, despite these few examples of AI systems' clinical utility, we must remember that the output information provided to clinicians is only as good as the information the system has received, thus highlighting the importance of good quality data sets and algorithms at interpreting this data. We also need clinicians to understand how AI systems make decisions so quality assurance can be maintained and their reliability and consistency guaranteed.

Dr Ella Darveniza
(SET 2, Plastic & Reconstructive Surgery, NSW)

IMS 2019 highlights included several presentations on AI and the use of simulation to improve our outcomes. These examined the way in which technologies are changing the way we interact with patients and with each other. They highlighted the benefits we can reap from emerging technologies, but also the dangers that they may bring. Patients are keen to embrace technology and they will drive change in our industry. We must be ready to embrace these changes and develop ways in which they can be utilised to best serve our patients.

Finally, it was a very sad but poignant time to be in New Zealand, exactly one week following the Christchurch massacre. The symposium was put on hold to watch the call to prayer ceremony and mourn with the local people, who have responded to the tragedy in such an inspiring manner. It was particularly humbling to talk to some of our surgical colleagues who were directly involved in the care of those who were injured.

Dr Hari Haran Ramakonar
(SET 6, Neurosurgery, WA)

The keynote presentation regarding the influence of artificial intelligence and its expansion into healthcare was extremely eye opening. Particularly the use of artificial intelligence (AI) in diagnostic medicine in areas of how it is impacting areas such as radiology and pathology. It was interesting to see how the radiology college was integrating AI into their training – particularly how to effectively integrate it into their practice. As to how this is going to affect learning and my surgical training, this is a difficult question to answer. I am sure that AI will come more into play throughout my career and I will certainly be more cognisant of its upcoming influence.

Being involved in an international multidisciplinary conference was very fruitful. At my table it was great to interact with physicians, surgeons, psychiatrists and anaesthetists. Furthermore, these colleagues were from Canada, New Zealand and Australia. This provided international and multidisciplinary experience and perspectives. These colleagues were also at different stages of their career, with some who had retired, some in the middle and others just at the start of their career. It was great to see such a keen interest in training and education.

IMAGES: (L) Giant wall mural of signatures by Auckland residents standing in solidarity with Christchurch (following the Christchurch tragedy) (Photographer: Dr Jessica Ng); (R) College Presidents signing the UN Women Empowerment Principle (Photographer: Dr Sarah Rennie)

Dr Brayden March
(SET 1, General Surgery, NSW)

Artificial intelligence (AI) will inevitably become part of daily clinical practice. In its current task and context-specific capacity, AI may be used to accurately analyse images from a variety of clinical settings (notably radiology, pathology, dermatology and ophthalmology). The future possibilities for more advanced AI technology are exciting, but ethical and regulatory issues need to first be identified and carefully considered. Optimising patient-doctor consultation workflow and synthesis of evidence-based treatment recommendations for MDT meetings are two areas I hope AI will have a dramatic impact in future. Trainees should be aware that AI is still a developing technology and remains to be vetted by rigorous clinical trials. As the technology matures, we must be wary of our inherent inclination to trust technology (automation bias), potential risks implementation of such technology may pose to patient safety, and the medico-legal issues created by AIs in healthcare.

Dr Melanie Crispin
(SET 2, General Surgery, VIC)

IMS 2019 was a fantastic conference, focusing on technology in medicine and surgery. An overall theme of the day was unity and inclusivity. After that, the keynote speaker Professor Enrico Coiera brought us up to speed with the current climate of machine learning and artificial intelligence (AI). His research and insights taught us that today, AI is good at single, context specific tasks, but not as good as reasoning through complex tasks. His view, that as clinicians we need to maintain a critical mindset when seeking information, including that from AI technology, was echoed throughout the rest of the conference. I thoroughly enjoyed this conference, I was inspired and challenged by what I heard. I joined Twitter just so that I could follow Professor Coiera – his talk and research were so fascinating I want to know more! I am grateful to RACS for the opportunity to attend this conference.

Dr Jessica Ng
(SET 1, General Surgery, QLD)

IMS 2019 has provided me a thorough insight into challenges and benefits into our current paradigm shift in education. Ideas concerning the use of artificial intelligence in both clinical medicine and academic surgery were explored and novel methods of improving patient care were showcased by international experts from different specialty colleges. The opportunity to attend this meeting has been inspiring and has piqued my interest in incorporating advancing technology into my everyday practice. I am eager to be involved in future changes in surgical education which may offer solutions to the training dilemma of providing utmost patient care despite rising number of Trainees and shorter working hours.

Professor David Fletcher
Chair, Academy of Surgical Educators

Surgeons recognised in 2019 Queen's Birthday Honours list

Australian Queen's Birthday honours

OFFICER (AO) IN THE GENERAL DIVISION

Professor Andrew Victor Biankin AO FRACS (United Kingdom)
Mr Robert Ian Larbalestier AO FRACS (WA)
Mr David Anthony Mackey AO FRACS (WA)

MEMBER (AM) IN THE GENERAL DIVISION

Professor Bruce Black AM FRACS (QLD)
Associate Professor Anthony John Buzzard AM FRACS (VIC)
Professor Jonathan Robert Clark AM FRACS (NSW)
Professor Michael John Grigg AM FRACS (VIC)
Associate Professor Michael John Hollands FRACS (NSW)
Associate Professor Leo Arieh Pinczewski AM FRACS (NSW)

ORDER OF AUSTRALIA MEDAL (OAM) IN THE GENERAL DIVISION

Associate Professor Michael Joseph Denton OAM FRACS (VIC)
Mr David Keith Martin OAM FRACS (SA)
Mr Robert John Stunden OAM FRACS (VIC)

This list is correct at time of printing. Please visit surgeons.org for any updates.

The Windsor dynasty

OPUS LVII (57)

Part Two: The inaugural Henry Windsor lecture presented by Harry Windsor

Following on from my introduction to the Windsor dynasty in the March/April issue of *Surgical News*, I now present a paraphrased synopsis of the inaugural *Henry Windsor lecture* which was presented by Harry Windsor himself at the RACS meeting in Brisbane on 17 October 1970.

Harry's lecture provides us with a comprehensive story of his surgical development – it is too important a topic to be hidden in the archives of the *Medical Journal of Australia* July 1971.

The lecture contains the principles of surgery as gleaned from the experience of a great surgical mind. These principles are still quite relevent to RACS as the sole surgical educational body in Australia and New Zealand.

Harry begins his lecture emphasising the importance of reading, as inculcated in him by his father, and comments that writing is inseparably linked to an important educational contribution.

He reflects on the Johns Hopkins Hospital and its Welsh Medical Library painting of four eminent medical figures; *Welsh* – the great pathologist of the late 19th century and America's first medical statesman, *Kelly* – the outstanding gynaecologist and innovator, *Halsted* – the eminent surgical thinker, and *Osler* – the inspirational teacher. One should read their histories and how their work still has relevance today.

Harry cites the works of French vascular pioneer Alexis Carrel who gained the Nobel Prize in 1912 in Medicine and Physiology. His innovative vascular reparative techniques, were published in the early 20th Century yet took up to 40 years to surface amongst the vascular community. I previously wrote of Walter McGrath trying to stem the flow of a jugular carotid complex all night unsuccessfully – McGrath later remarked if only he had known of Carrel's work earlier.

To Publish or Perish – this trite phrase as we know it is bandied around from pillar to posts. The phrase was initially included in a book by Coolidge, *Life and Letters*, in 1927. *The Academic Man* (1942) was quoted by Harry from a surgical perspective, he records how writing leads to the advancement of science and academic surgery. Thus – to teach, lecture and persuade others has an influence on all including junior colleagues.

Harry goes on to discuss courage reflecting on the need for resilience in the face of clinical setbacks. He quotes amusingly Lord Brock's statement, 'If you haven't suffered, somebody else has done it for you – the patient or the surgeon".

I used to have a rule in surgery myself that if a setback occurrs and the complication arose I would attempt to correct the problem but repeat the gesture only on one more occasion – if this failed I would seek a second opinion.

Harry Windsor refers to the Semmelweiss story – how he popularised the use of lime solutions to sterilise the hands, in the mid 19th century. Students at the Vienna General Hospital's Obstetrical Clinic were reputed to have gone directly from working in the mortuary to delivering babies in the obstetric ward in the same clothing. A mortality rate of up to 15 per cent of mother and babes reflected the failure of simple cleanliness. The patients thus preferred having confinements at home or even in the street, they say rather than being exposed to lethal complications.

Despite reducing the mortality rate in the this clinic by 90 per cent by introducing the lime wash, Semmelweiss struggled against the establishment and the odds even tragically failing to be reappointed to the hospital staff. He has since earned recognition as an early pioneer of antiseptic procedures.

On the local scene, Jerry Moore, the first Plastic surgeon in Australia, who grew up in Queensland, likewise improved the mortality rates in the 1890s for abdominal surgery. He reduced the figure from 90 per cent of 10 per cent at the Royal Melbourne Hospital. Harry, describes these events, reflecting how such courage entices the development of truth and if one is persistent the value of educational improvement is self-evident.

On another issue Harry discusses historically the great personalities of surgery. He quotes Napoleon's surgeon; Larrey, who survived 26 Napoleonic campaigns. Dominique-Jean Larrey (who

IMAGES:
Left: Harry Windsor

Below: Napoleon's Surgeon Dominique-Jean Larrey

Napoleon called "l'homme le plus vertueux" – (the most virtuous man) established the importance of mobile ambulances in war campaigns. This commenced the principal of bringing victims to a centre for definative operative and clinical management.

Harry concluded his lecture by saying that the status of a surgeon is a mixture of the teachings as organised by the College, and the value of personal experience to be conveyed to the younger person to complete their education. Recognising the rewards for contributing to the public health system of inestimable value, he refers to a certain surgical mind tempted by the 'Golden Calf'. Here the income, the social standing and accumulation of wealth are pre-eminent and as relevant today as ever.

Harry goes on to comment on the academic outcome of a surgical graduate, "where those with brilliant backgrounds apparently have an image of not always reflective that academic excellence and beget failure. Sometimes dullards achieve the ultimate success".

And finally he comments on the value of being associated with 'young' minds – continuing to teach. This reinforces the Osler comment 'walk with a young brigade' and then Billroth also said the 'young' fellow worker is a self-educational force.

Yes, RACS is an educational body, but it alone can not convey experience – the essence of life in a surgical dynamic.

Assoc. Professor Felix Behan
Victorian Fellow

Academic gown donation

RACS would like to acknowledge **Dr Ken Merten,** for generously donating his academic gown to the College.

RACS maintains a small reserve of academic gowns for use by Convocating Fellows and at graduation ceremonies at the College. If you have an academic gown taking up space in your wardrobe and it is superfluous to your requirements, RACS would be pleased to receive it to add to our reserve. We will acknowledge your donation and place your name on the gown if you approve.

If you would like to donate your gown to RACS, please contact the Conference and Events Department on +61 3 9249 1248. Alternatively you could mail the gown to Ms Ally Chen c/o Conferences and Events Department, Royal Australasian College of Surgeons, 250-290 Spring St, EAST MELBOURNE, VIC 3002

Another day at the office

But it wasn't really. My usual Wednesday morning consulting session was cancelled. After all, I did not want any more work. I had a leisurely stroll up the Red Arrow, the much loved walk up the hill overlooking the airport in a light drizzle, and on the way down marvelled at a perfect rainbow with my city apartment perched in the middle of it. Cairns, this lovely little city, where the rainforest meets the sea, is full of these surprises. An apple for breakfast, and an hour's music practice. I am trying to play Myra Hess' transcription of Cantata 147, "Jesu Joy of Mans Desiring" and am finding it a struggle. So few notes, but each one a trap. I read the music and play the notes, but struggle to make it sing. The void persists between head and hands. Is there an analogy with surgery?

Anyway, and so to the hospital for my last operating list. Routine, nothing special. Gall bladders, hernias, and to bring things to a fitting conclusion, a set of piles. A few colleagues dropped by to wordlessly shake my hand, and I shared a gigantic chocolate cake for tea with wistful nurses who I had known for 20 years.

I found myself thinking, "I will never do this again" as I tied the elegant two handed knots that have challenged registrars over a lifetime, a continuous suture reversed and tied without interruption leaving a tidy wound, aided by my unusually quiet assistant of 20 years. The craft and choreography of a lifetime. The list began and ended uneventfully. I shook everyone's hand, changed and left. It was over. A lifetime on the edge. I am glad it began, and perhaps more so when it ended.

Why did I become a surgeon? Looking back to my childhood I realised I had no other ambition. I must have had examples around me of surgeons that framed this destiny.

An early memory was watching a neurosurgeon examine my father who had been felled by a golf ball. A few pointed questions, a rapid examination, and measured re-assurance. Some years later I went through the same ritual with the same surgeon, after being hit by a cricket ball. We had no helmets then!

Visiting my mother after a gall bladder operation, I was present when her surgeon came into the room. He was a large, florid and frowning presence. He studied the bedside chart, and then silently contemplated his patient from the foot of the bed. He came up to her and briefly examined her abdomen from which a tube emerged draining clear yellow fluid. He leaned over my mother and said in a gravelly baritone "Now Rowan, everything has gone well, but you are losing quite a bit of fluid through this tube" he paused, for effect, "and now I want you to drink everything that comes out of it." My mother agreed cheerfully enough. She was not a lady for turning but turned she was when she understood what this meant.

I must have been about ten when I was practising my bowling in the garage. Frank Tyson was on everyone's lips at the time, and I was trying to imitate his action. I understood that his front leg was high just before the point of delivery and he generated his pace by bringing it down vigorously. I repeated this and brought my foot down on a patch of oil on the cement, crasheding down. When I recovered my wits my right forearm was bent just short of a right angle. I went inside supporting my crooked forearm and found my mum. Her comment, as she reached for the telephone, was that I had better learn to bowl spin.

I was taken to see a surgeon who had orthopaedic interests. He glanced at my forearm and the xrays, and looked at me, "we can't leave it like this, can we?" I was not so sure but woke up in a cast some hours later. The forearm is still a bit bent, if perfectly functional. I could have become a spin bowler after all!

So, what was all this about? The furrowed brow, the appraising gaze, the measured decision, conclusions made confidently but kindly. Unquestioned confidence and competence. But personal responsibility clearly taken; the overwhelming impression of someone who could make a difference. What I took from this is that notion of personal responsibility. It burdened and marked takers but was a blessing to receivers. In the course of my career, this notion has changed, and the zeitgeist now in increasingly complex systems is necessarily of "pit crew, rather than cowboys" where "systems" seek to diminish both risk and autonomy, and leave personal responsibility in an uncertain place. In the small hours of the morning in large hospitals worldwide these issues are regularly played out. I am re-assured that the surgeons here that I know, handle these challenges well. But for all surgeons the distance between hubris and nemesis remains the matter of an unguarded moment.

So, off to medical school in Dublin I went. In Catholic Ireland the men were separated from the women in these ancient lecture theatres in the first two years. This rule was relaxed in the third year, and the women were distributed through the class on the basis of their initials. Most of the women promptly married the gentlemen next to them. An accomplished Australian (Caroline D for Downes) sat next to

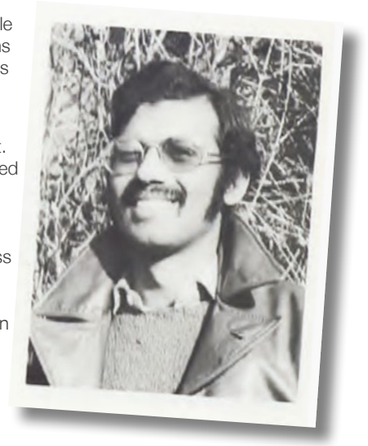


IMAGE:
Far left: on the Red Arrow, Cairns.
Left: From The RCSI (Royal College of Surgeons Ireland) Yearbook 1973.
Right: Professor Alan de Costa with tutors and Trainees at the ASE course, JCU, Cairns.

me, and after a few years we did the decent thing and got married, going on to have seven children who we dragged around the world with us, while we fitted in specialist training. We did our internships in Papua New Guinea (where I first met Ken Clezy, whose example I have long since tried to emulate) then back to Ireland and the UK for further training, returning to Port Moresby as Senior Registrars. By then, 1982, it was clear that the wheels in Port Moresby were falling off and we had no future there; so we headed for Australia. My first job was in the Kimberley based in Derby. It was a rich and memorable period, where I learned for the first time the dramatic beauty of the Australian bush. But I also learned about the difficulties associated with provision of services in remote locations and in Indigenous communities.

I returned to Sydney in 1983 as one of the foundation surgeons of the new Mt Druitt Hospital. We had an excellent group of surgeons from whom I learned a great deal. In late 1999 we made the decision to leave Sydney and go to Cairns, where I have practised since.

Surgical practice in Cairns is never dull. I was a VMO in the Base Hospital and had a busy and varied private practice. My interests in Emergency and Trauma surgery were well catered for and I took a particular interest in surgical patients in our very good ICU. I joined James Cook University (JCU) in 2011 adding a third component to an already busy routine.

I retain my JCU appointment delivering an undergraduate surgical program and engaging in the research process. I continue to direct and enhance our JCU Anatomy of Surgical Exposure (ASE) courses here in Cairns. There is considerable interest in developing these courses in Sri Lanka, where I maintain good contacts. I established a rotation of young Sri Lankan surgeons to Westmead Hospital while in Sydney (with John Fletcher) Alumni from this program are now in senior positions in Sri Lanka and remain good friends who treasure their Australian experience. Our undergraduates go to Sri Lanka with The New Colombo Plan arrangements and I participate in their supervision and contribute to their Surgical Departments. So, I have plenty to keep myself occupied and productive.

But my life as an operating surgeon has ended. Inevitably, a time for reflection. Have I been a good doctor? A good surgeon? The routine successes of surgical practice have blurred into a contented obscurity. The failures remain vivid, and their memory sharper than a serpents tooth. So the answer is; maybe.

Associate Professor Alan de Costa
OAM FRACS

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RACS Scholarship Program: Measuring returns on investment

RACS, through the Foundation for Surgery and the ANZ Scholarship and Grant Program, is privileged to have the financial means to support talented scholars keen to pursue research careers. Under the exemplary stewardship of Professor Kingsley Faulkner, the Foundation for Surgery in 2017 generated funds resulting in 31 research scholarships and grants, consisting of research and travel scholarships and grants with a total value of $2.3 million being offered for the 2017 scholarship year. Ranging from $10,000-$150,000 and spanning one to three and a half years, successful scholars are presented with the opportunity to pursue higher degrees fulltime without the burden or distraction of needing to supplement their incomes.

> "RACS scholarships are more sought after (and difficult to obtain) by surgeons whereas NHMRC has more relevance for non-surgeons and career scientists"

The Scholarships Evaluation and Monitoring Committee (SEMC) ensures that each dollar disbursed to surgical research generates returns beyond its face value. The SEMC objectively measures the return on investment on each scholarship awarded on completion of the award by way of an in-depth annual survey. It measures both tangible and intangible professional and personal benefits enjoyed by the recipient.

Of the 50 scholars (49/50 responses, 98% rate) surveyed who received funding in 2014, 2015 and 2016, 58 per cent (29/50) were represented by General Surgery. The 2016 scholars were also surveyed on their perception of the value and prestige of RACS versus National Health and Medical Research Council (NHMRC) scholarships. The majority's response was eloquently summarised and articulated by a respondent stating that "RACS scholarships are more sought after (and difficult to obtain) by surgeons whereas NHMRC has more relevance for non-surgeons and career scientists.

Most scholars (93.8%; 45/48) felt supported by their supervisors believing that the mentorship they received was an important factor in their success. Equally vital was the availability of technical support and laboratory infrastructure for scholars focused on laboratory-based research. Crucially, they cited that their verbal (83.3%, 30/36) and written (77.8%, 28/36) communication skills had significantly improved. Furthermore, 57.1 per cent (28/49) of scholars had published in peer reviewed journals during their scholarship tenure. Another 34.7 per cent (17/49) had published following their scholarship (with 12 of the 17 scholars having achieved both). A total of 75.7 per cent (28/37) of scholars had established collaborations with other researchers within Australasia, and 59.5 per cent (22/37) had collaborations outside of Australasia. These international collaborations are encouraging indications that the scholars intend to continue career paths as academic surgeons.

In conclusion, the SEMC is pleased to report that the RACS Scholarship Program continues to provide tremendous value directly to research recipients, increasing their skills and capabilities. Indirectly, patients benefit as the volume of peer reviewed publications generated during and after scholarship tenure disseminates speciality relevant knowledge and provides a basis for improved disease treatment and management.

The full report is available in ANZ J Surg. 2019 Mar;89(3):146-147. doi: 10.1111/ans.14888. Royal Australasian College of Surgeons Scholarship Program evaluation snapshot: success breeds success. Tan L, Garrod T, Pleass S, Babidge W, Angus J, Scott DF, Truskett P.

Philip Truskett AM
FRACS

– With Lorwai Tan BSc (Hons), PhD

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A very special thanks to all those who have donated to the Pledge-a-Procedure campaign and helped secure a healthier future for Timor-Leste.

We still have a long way to go to meet our goal, so please donate before **30 June at www.surgeons.org/donations/**

Every donation during this campaign is **matched** by a generous Foundation donor and makes an incredible difference supporting the Timor-Leste program transition to independence. Let's walk with them today. Our sincere thanks to these incredible donors who supported the Foundation for Surgery in March and April:

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