Anaesthesia

THE MAGAZINE OF THE NEW ZEALAND SOCIETY OF ANAESTHETISTS • AUGUST 2022

Dr Wayne Morriss:

The first Kiwi President of WFSA and how we can address global challenges in Anaesthesia

Our final update from President, Dr Sheila Hart

PLUS:

0

An update from WFSA Global Health Committee NZ Anaesthetist on board Mercy Ships



Medtronic

The right fit for your routine.

McGRATH[™] MAC video laryngoscope

Better airway visibility drives better first-pass intubation success.¹ The McGRATH[™] MAC video laryngoscope combines your core laryngoscopy skills with our evolved technology.



More pixels

than the previous generation device, providing a crisp image with higher resolution enabling more detail to be captured on the screen*.



Brighter LED

than the previous generation device, providing more uniform illumination and the a warmer tone which provides more natural colouration*.



Light spread

than the previous generation device, expanding the field of view so you to see more with the same size screen*.

McGRATH



Choice for routine intubation

The new normal for intubation – engineered for everyday use.



Understand the benefits of the McGRATH[™] MAC video laryngoscope.

Scan the QR code to sign up for a free trial.

ation of the McGRATH™ MAC and Macintosh laryngoscope for tracheal intubation. Br J Anaesth. 2020; 125(1): e209aryngoscope As compared to the previous version of the McGRATH™ MAC video laryngoscope

eu to fun province province and an enterna entern Enterna enterna

AUGUST 2022 | ISSUE 63

CONTENTS

REGULARS

4

6

12

14

22

24 25

8

10

13

16

18

20

23

- President's column News in brief NZSA trainee column NZSA Executive Member profile NZSA Global Health Committee NZATS column webAIRS news **FEATURES** With Education and Advocacy: WFSA's new President, Dr Wayne **Morriss** An update from the World Federation of Societies of Anaesthesiologists A fellowship in Toronto - BWT **Ritchie Anaesthesia Scholarship** recipient Tze Ying Decarbonising Healthcare in Aotearoa: Energy **Combined Scientific Congress 2022** Mercy Ships in Africa -NZ Anaesthetist Dr Rebecca Brinkler Q&A with PACT fellow Dr Cecilia **Bartley**
- 26 Book review





Our final update from President Dr Sheila Hart



16

Decarbonising Healthcare in Aotearoa: Energy



23

Q&A with PACT fellow Dr Cecilia Bartley

Publication dates and deadlines

Copy due by: 8 November 2022 10 March 2023 10 July 2023 Published: December 2022 April 2023 August 2023

Contributions and feedback

We welcome your comments on the magazine. If you would like to contribute ideas and/or an article please contact editor: comms@anaesthesia.nz

Level 1, Central House 26 Brandon Street, Wellington 6011 PO Box 10691, The Terrace, Wellington, 6143 Phone: +64 4 494 0124 | Fax: +64 4 494 0125

Connect with your audience - advertise with New Zealand Anaesthesia!

Our advertising rates are very competitive. Find out more by contacting Pam Chin: pam@valleyprint.co.nz

Magazine advertising is available on both standard and premium pages. Options include full page, half page and quarter page. Complimentary advertising is also included in our E-Newsletter (E-Zine) – conditions apply.

Magazine content may be reproduced only with the express permission of the NZSA Executive. Opinions expressed in New Zealand Anaesthesia do not necessarily represent those of the NZSA.

@theNZSA f New Zealand Society of Anaesthetists
 in New Zealand Society of Anaesthetists
 www.anaesthesia.nz

\succ President's Column



Well, it feels a bit like Déjà vu. When I wrote my last column I noted that we were reaching the peak of Omicron cases and would soon be past the worse, yet here we are again, at the time of writing we are entering the predicted second wave of Covid-19 cases with the BA.5 variant now prevalent. It feels like we are being hit harder this time, with sickness rates through the roof and palpable fatigue. This is

compounded by the workforce crisis that many are working with every day.

Despite nationwide pressure from many of our healthcare associations and organisations, the Government remain steadfast in avoiding calling it a crisis. The previous few weeks have seen a lot of noise in the media on this, particularly calling on support for our nurses and other allied staff. The New Zealand Women in Medicine (NZWIM) Charitable Trust conducted a survey that received more than 900 responses from doctors working across 30 different areas of medicine. Their collated results were released with an open letter to Prime Minister Jacinda Ardern and Health Minister Andrew Little amongst others. Almost all respondents said there was either 'definitely a crisis' (93.5%) or 'probably a crisis' (6.3%) in the health workforce in New Zealand, clearly revealing the desperate conditions evident in both primary and secondary healthcare. NZSA released a public statement in support of this letter, including our voice alongside those desperate for a workforce plan from our government.

In July, with the disestablishment of DHBs, we moved to one centrally coordinated health system, Health New Zealand (Te Whatu Ora) working alongside Te Aka Whai Ora (Māori Health Authority). With four regions advising Health New Zealand and Te Aka Whai Ora on healthcare needs in their community. Many of us have concerns about this change at such a critical time, with the pandemic and staffing issues meaning the capacity for extra when it comes to engagement may not be there. Later in the month Chair of Health New Zealand, Rob Campbell, stated in an interview with the AM Show that 'the health system is currently stretched and using "sticking plaster" measures to cope. One of the things that have happened in the past is that people from Ministers through to people on the front line have taken stopgap [solutions] short term, what I call sticking plaster solutions, and you end up with a pile of sticking plasters. If you do that, you've got to go back and say, are we doing the right things in the right places in the right way? So, we've got to do that while we're managing to keep the ship afloat. The sticking plaster things are things like paying extra rates for people to cover shifts, like bringing in people who are tired and would be better off not working," he said. "We don't have any choice at the moment and in many situations, we are relying on the enormous goodwill and dedication of our staff. We would much prefer not to be doing that but what else can we do." Let us hope that good will continues, and the ripping off of those plasters is not too painful! The healthcare workforce strategies recently announced by the Health Minister may offer some relief but we will not see significant changes in the immediate future, I do hope these reforms will offer their promised and much-needed long-term solutions to current conditions for all healthcare workers and see more consistent and equitable care for our patients.

Joint Meeting of NZSA and ANZCA

Recently NZSA Executive Committee and ANZCA NZ National Committee held our annual joint meeting in Wellington. We welcomed two guest speakers, hearing from the Health Quality and Safety Commission (HQSC) and PHARMAC. It is incredible the amount of work the HQSC is doing in its goal to improve patient safety: Systems review, Bowel screening review, National trauma network and advance care planning to name just a few areas. PHARMAC provided a thorough update, allowing us to further understand and provide feedback on changes to device procurement and ordering. The joint meeting was a much-appreciated opportunity to connect with our colleagues at ANZCA.

Combined Scientific Congress

A much-anticipated event is the upcoming Combined Science Congress here in Wellington (and online) in October. An outstanding line-up of local and international speakers will be delivering highly informative, insightful and inspiring clinical content. We aimed to put together a programme highlighting that patient outcomes are best when attention is given to all the different components of anaesthetic care. The programme includes a strong perioperative focus from world-leading keynote speakers who will discuss new directions in preoperative optimisation, and the latest in intraoperative practice, and postoperative care – including the exciting role of new technology.

In addition to a stimulating scientific programme, the congress also offers a valuable opportunity to connect with our colleagues in a format that we have not been able to,

⁶⁶Many of us have concerns about this change at such a critical time, with the pandemic and staffing issues meaning the capacity for extra when it comes to engagement may not be there.²⁷



President Sheila Hart & Vice-President Moragn Edwards.

for some time. As a Wellingtonian I am thrilled our wonderful city is playing host for this CSC, Wellington has much to offer visitors (but do remember to bring your warm clothes!). The social programme includes what will be a spectacular Gala Dinner at the Dominion Museum on the Saturday evening and a Weta Workshop-themed family fun movie night at the Embassy Theatre on the Sunday.

I urge all members to make the most of this event and come along, it will be fabulous to see you there.

In October, during the CSC, NZSA will be holding its AGM. Recently we have sent out a call for nominations for officers and executive committee members. All current executive committee members will be re-standing for election. An online form has been emailed to all members.

We will also announce the winner of our Presidents award at the AGM, so do nominate colleagues that you feel may be deserving of this (see the website for more details – www.anaesthesia.nz/research-awards-prizes)

Magazine Highlights

My congratulations to Dr Wayne Morriss, the first New Zealand President of WFSA. In this issue, Wayne shares his experiences with global aid and how these have influenced his thoughts on addressing global challenges in Anaesthesia. This inspires an international theme prevalent in this magazine. The Global Health Committee offer their regular update, we profile PACT fellow, Dr Cecilia Vaai-Bartley who is completing her MMed training in Fiji, we have insight into volunteering onboard Mercy Ships Africa who were recently visited by Waitemata Anaesthesia Specialist Dr Rebecca Brinkler and an update from Tze Ying Chan who is completing her fellowship in Toronto Canada.

This will be my final President's Column for the magazine. The next issue will be an update from the current Vice-President and Waitematā Obstetric Anaesthetist Dr Morgan Edwards who assumes the Presidency in October. Morgan has represented New Zealand Anaesthetists during the pandemic as a spokesperson for Covid information and is a strong advocate for pregnant women and their whānau. Recently she has been a large part of the team behind NZSA's new podcasts and webinar resources for our members. I am looking forward to supporting her in the Presidency role come October.

Sheila Hart, NZSA President

New Staff Members

Since the last issue of NZ Anaesthesia we have welcomed two new members to the team, Deanna Smit and Rebecca Burton. A warm welcome to both Deanna and Rebecca.



Deanna has joined NZSA as the new Membership Manager. This role provides high level membership management services and Deanna will be your key contact for all things membership related. Part of her remit will be to investigate benefits

to enhance your membership with the Society. Deanna's background is in operational management within the health sector, including aged care, where she was instrumental in introducing the pioneering 'De Hogeweyk' model of dementia care to New Zealand. Outside of work, Deanna spends time with her two giant breed dogs and, as a keen baker and cook, is developing her '2 Big Dogs' range of cakes and sourdough breads.



Rebecca joins as the new Marketing & Communications Advisor. Within her role she will be looking after our communications, publications, managing our social media channels and marketing activity. Rebecca joins us from Scots College where she was the Director of Marketing & Development. With a background in Graphic Design, Marketing

and Communications Rebecca is looking forward to utilising principles from these in her new role. She is a keen runner and like most Wellingtonians enjoys trying out the newest local eatery.

Social Media Guide



Photo by Tracy Le Blanc.

N7SA June the In released a social media guide for all members. The use of social media can have many benefits for the medical profession including the sharing of knowledge and expertise, clinical combating learning, health misinformation and connecting with colleagues personally

and professionally. However, it is vital this tool is used correctly and risks are managed to ensure professional codes

of conduct are not breached, professional integrity is not undermined and that patient doctor, collegial or professional trust are not compromised.

The published guide acts to offer an overview of key advice and pointers on how to engage in social media in a professional, positive manner. Enabling members to maximise the benefits of social media whilst upholding professional and ethical standards. The guide can be found in the members resources section of the NZSA website.

Webinar

In July we held our first NZSA webinar. For the inaugural webinar Dr Morgan Edwards interviewed Dr Sheila Hart, Dr Mike Ng and Dr Felicity Dominick who shared their perspectives and experiences with overseas fellowships. Following the interview trainee members were able to gain more information through a live Q&A. We are grateful to the panel, MC Dr Jonathan Panckhurst and NZSA staff members Becs Nodwell and Michele Thomas who were integral in creating this latest resource for our members.

Any trainee members interested in watching the recording can find the video link in the member resources section of the website.

As part of providing education and networks for our members we hope to be hosting more webinars in the future. Watch our social media channels to see what's coming up.



LifeBox-Smile Train Pulse Oximeter

Lifebox and Smile Train, the world's largest cleft-lip and palate organisation, have worked together since 2011, distributing more than 2,000 pulse oximeters across Smile Train's networks. Recently they have launched the LifeBox-Smile Train Pulse Oximeter. A low-cost, high-quality device designed specifically for use in low resource settings to scale up access to pulse oximetry for anaesthesia and critical care.

As part of the Smile Train-Lifebox Safe Surgery and Anaesthesia Initiative LifeBox will distribute 11,000 pulse oximeters across 20 countries making surgery safer for over 14 million surgeries safer over the next three years.



Stimpod NMS450X Objective NMT Monitor

The first dual sensor capability in one system:

The **Stimpod NMS450X** can utilise either a costeffective, reusable **AMG** sensor or an advanced, single-use **EMG** sensor for the ultimate in provider preference, cost-of-care optimisation, and paralytic/ recovery drug budget management.

AMG

Acceleromyography

Ulnar, Tibial and Facial Nerve Monitoring

EMG

Electromyography

Total hand restriction – monitoring

OneTouch NMT Full Case Monitoring | Train of Four | PTC | SMC | Double Burst | Tetanus | Single Twitch

© Stimpod is a registered trademark of Xavant Technology (Pty) Ltd. Teleflex is a registered trademark of Teleflex Incorporated or its affiliates. © 2022 Teleflex Incorporated. All rights reserved. MCI-100763-EN-AU · REV 0 · RC/PDF · 03 22 PDF



leleflex

Distributed by:

 Teleflex Medical Australia · Level 4 · 197 Coward Street · Mascot 2020 · New South Wales · Australia

 Customer Service Tel. 1300 360 226 · austcs@teleflex.com · www.teleflex.com.au

 Teleflex Medical New Zealand · 300 Richmond Road · Grey Lynn, Auckland 1021 · New Zealand

 Customer Service Tel. 0800 601 100 · nzcs@teleflex.com · www.teleflexmedical.co.nz

With Education and Advocacy

The first Kiwi President of WFSA and how we can address global challenges in Anaesthesia



Christchurch Hospital Specialist Anaesthetist and University of Otago, Christchurch Clinical Associate Professor, Dr Wayne Morriss has recently become the President of the World Federation of Societies of Anaesthesiologists (WFSA), the first New Zealander and only the second from Australasia in the organisation's almost 70-year history.

Education and equipping others with the skills to share their knowledge are a significant part in Wayne's contribution to the specialty of Anaesthesia globally. In a discussion with Wayne, he shares more on the important role education plays in the development of Anaesthesia and how his experiences have played a part in this.

Following training in Christchurch and Melbourne, Wayne undertook a two-year role in Fiji as a Senior Lecturer at the Fiji School of Medicine, now Fiji National University, and worked at the Colonial War Memorial Hospital. The time in Fiji offered valuable experiences for Wayne. "Teaching at the Fiji School of Medicine helped me to become a more flexible teacher and that's been really important for my university teaching back in NZ as well as all the other teaching activities I have been involved with around the world". He also made valuable connections and relationships throughout the Pacific region.

Wayne gained insight into the challenges facing healthcare in the Pacific and he shares that these challenges are consistent across many low- and middle-income countries. "We don't have enough anaesthesiologists or anaesthetists worldwide to provide care for surgery, pain management, and intensive care. The only way we are going to fix that is to train more people and advocate for our specialty – help governments, the public and others in healthcare to understand the importance of anaesthesiology in overall healthcare delivery."



In Fjji during the Covid-19 pandemic in 2021, with Dr Luke Nasedra.



World Health Assembly 2019.

First joining the WFSA's Education Committee in 2008 at the World Congress in Cape Town, Wayne has been involved in the establishment and delivery of numerous training and education programmes: Essential Pain Management, Primary Trauma Care, Safer Anaesthesia from Education (SAFE) and the WFSA Fellowship Programme. "For me it's not just about improving the knowledge and skills of the individual but supporting colleagues to be leaders and teachers in their home countries".

"Courses like the Primary Trauma Care course in the Pacific are an example where the focus is on training local doctors and professionals to be the teachers - the instructors who train others - and then you get a snowball effect. Local instructors understand the local issues, they can come up with solutions to those issues, and they are going to provide training for their community that is appropriate and context-specific."

These programmes also reduce professional boundaries. The Paediatric Anaesthesia Fellowship in Nairobi, Kenya was set up in 2013 to provide subspecialty training for anaesthetists in East, Central and Southern Africa. Dr Christopher Chandra was one of the first graduates of the programme and he returned to his home country, Zambia, as the first paediatric anaesthetist for a country of almost 20 million people. "He [Christopher] now has a network of people that he knows in Africa and other parts of the world."

Following four years as a member of the WFSA Education Committee, Wayne became the Chair of the committee in 2012 and a member of the WFSA Board. Today, he is the longest standing Board member by four years and during his time on the Board he has seen the organisation strengthen. "The period 2012 onwards has been a hugely important period for the WFSA. We appointed our first CEO in 2013 and we really expanded the advocacy and the educational programmes of the WFSA."

In 2016 Wayne was elected Director of Programmes with oversight of the WFSA committees and programmes, and then in 2020 was elected as one of two presidents for the 2020

 2024 term. Professor Adrian Gelb, based in San Francisco, handed over the reins at the beginning of July.

Over the years, the WFSA's presidency has been somewhat dominated by those from Europe, the UK and North America. However, Wayne feels that being from New Zealand has some advantages. "When attending many of the higher-level meetings people quite like the fact that somebody is from New Zealand. It's somewhere different and we're seen as having an independent voice."

As a leader it is important for him to be a voice of experience, "I've always been keen not to be a theoretical ivory tower kind of guy. I have done a lot of teaching in various low-resource countries around the world. I've met a lot of people and for me it's really important that I have walked the walk and I don't just talk the talk".

Looking forward, his goals, and those of the WFSA are "pretty simple". "We need to continue working to strengthen the anaesthesia workforce". "Firstly, we need to work hard with partners to develop the workforce and take the opportunity to push advocacy messages about the importance of anaesthesia. The fact that many anaesthetists were involved in the response to the pandemic is helpful for us when talking to WHO. Secondly, we [WFSA] have also been working hard to improve availability of education resources and opportunities for colleagues worldwide and this links back to strengthening the workforce. And thirdly, I think it is really important for the WFSA to improve diversity and opportunities at all levels of the organisation. We are making progress and are also working hard to strengthen communication between the WFSA and the member societies like the NZSA."

When asked who have been influential in his life, of course as an educator himself, his thanks extend to the support of his mentors and colleagues in both Christchurch and Melbourne.



Teaching on RWAC 2013.

In addition he highlighted three individuals: "Dr Sereima Bale, my colleague in Fiji. I was a visitor for a couple of years, but Sereima played an incredibly important role in the development of Anaesthesia in the Pacific over many years. Professor Garry Phillips, who invited me to be a postgraduate examiner in Papua New Guinea, for his quiet way of working with PNG colleagues and really getting things done. And Professor Alan Merry who was my Kiwi colleague on the WFSA Board for eight years."

Hear more about Wayne's journey in the latest episode of the NZSA podcast. In this, NZSA Vice-President Dr Morgan Edwards has interviewed Dr Wayne Morriss diving deeper into his time in Fiji, the role of WFSA, his goals in his new role and advice for those starting their career journey.

PART 3 WORKSHOP AT CSC

A workshop for advanced trainees - Life beyond the training scheme Sunday 23 October 10.45am – 5pm

The Part 3 course is a one-day workshop that has been developed to help advanced trainees towards their next steps as study and training comes to an end, with information on:

- CV and interview skills
- Getting started with a fellowship
- Working in private practice
- Tips towards achieving work-life balance and juggling family and career
- Opportunities that are available to you outside the operating theatres

This workshop is planned to be informal and interactive, provide opportunities to ask questions and initiate discussions, to seek advice and opinion from senior colleagues - many of whom are actively involved in the recruitment process.

Advanced trainees are encouraged to bring CVs and questions, and to start preparing for the next big adventure.

Workshop facilitators are: Neroli Chadderton, James McAlpine, Victoria Lyon



Register with your CSC registration at

WWW.CSC2022.CO.NZ

World Federation of Societies of Anaesthesiologists

The World Federation of Societies of Anaesthesiologists (WFSA) is the foremost global alliance of anaesthesiologists, with 132 member societies representing over 140 countries and hundreds of thousands of anaesthesiologists.

The WFSA was formed in 1955 at the first World Congress of Anaesthesiologists in the Netherlands. NZSA formally joined WFSA in 1960.

With over 5 billion people without access to safe and affordable anaesthesia services, WFSA's mission is to unite and empower anaesthesiologists around the world to improve patient care.

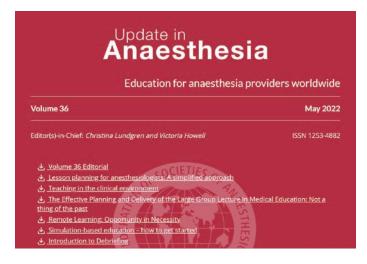
WFSA's programmes tackle the key barriers to access and are run in partnership with its member societies and other organisations that share its goals. It delivers this change through programmes in education and training, Advocacy, Safety and Quality, and Working Together. See footnote for WFSA website links with further programme information.

The importance of strengthening the anaesthesia workforce worldwide is central to WFSA's approach. It is best reflected in its education and training activities which include face-to-face training and digital programmes such as the Safer Anaesthesia From Education (SAFE) courses. SAFE has now trained over 5000 anaesthesia providers in 43 low- and middle-income countries in obstetrics, paediatrics, and team training (SAFE OR). Each programme is supported by local and international anaesthesiologists who generously volunteer their expertise. WFSA donor-supported fellowship programmes have provided both hospital and research-based fellowships to over 400 participants from 62 countries in a wide range of specialties.

Click for CME

WFSA has also prioritised free to access online education resources through its various digital channels, including its website and social media platforms.

Update in Anaesthesia (UIA) provides concise and clinically relevant articles for anaesthesia professionals. Volume 36 on Education and training in anaesthesia and COVID-19 was



published in May 2022. The UIA virtual library now has over 600 articles freely available for download at https://resources. wfsahq.org/update-in-anaesthesia.

Anaesthesia Tutorial of the Week is published online and shared to a mailing list of over 19,000 individuals. To browse the 475+ editions of the tutorial and register for the mailing list visit https://resources.wfsahq.org/anaesthesia-tutorial-ofthe-week

You Tube Channel: The WFSA has also expanded the number and scope of videos available on its popular YouTube channel: www.youtube.com/c/WFSAorg. The channel contains over 150 education and advocacy films in English, French, and Spanish which are viewed an average of 130,000 times per month. To further instil the invaluable information learnt at last year's World Congress of Anaesthesiologists (WCA), the 100 most popular WCA lectures and presentations are available on the channel. These films appear alongside the popular series of subtitled educational videos on adult and paediatric anaesthesia.



Advocating for Global Anaesthesia

WFSA is the leading international advocate for anaesthesia and perioperative care as a core component of global health. It is in official liaison with the World Health Organization and holds a consultative status with the United Nations Economic and Social Council (ECOSOC). During the recent World Health Assembly in May 2022, the WFSA issued joint statements on anaesthesia's role in pandemic preparedness and emergency response and the steps needed to improve the professional wellbeing of health workers. WFSA is an active and vocal delegate in the annual WHO Western Pacific Regional Meeting and will be participating in the next meeting in China in October 2022.

Independent from its work with multilateral agencies, the WFSA also leads the World Anaesthesia Day campaigns on October 16 every year. Campaigning packs on the 2022 theme of Medication Safety will be shared through WFSA's social media channels and mailing lists during August.

Collaboration is key

Much of what the WFSA does is based on collaborations with our member societies. WFSA's approach and work is dependent on the engagement, and generosity of individuals from our member societies who volunteer their time, expertise, and dedication to make up the WFSA's elected Board, Council and Committees.

Committees cover areas such as Education, Professional Well Being, Obstetric Anaesthesia, Publications, Quality and Safety of Practice, Paediatric Anaesthesia, Scientific Affairs, Pain Management, Constitution, and Intensive and Critical Care Medicine.

The activities and decisions prioritised by the Board, Council, and Committees are supported by a small Secretariat of 10 staff members based in London, UK.

How can NZSA members can get involved?

NZSA is an established member of WFSA, and so by default, all members of NZSA are a part of WFSA. NZSA members are welcome and encouraged to volunteer for projects, teaching, writing for ATOTW, global advocacy, and fundraising. Volunteers are the foundation of what WFSA does, and the organisation could not succeed without them.

A truly global congress

The WCA 2024 is the 18th World Congress of Anaesthesiologists, taking place in Singapore from 3 – 7 March



2024. This will be the first WCA Congress to be held in person since 2016. Dubbed the 'Olympics of Anaesthesia', and with over 110 countries represented at the virtual congress held in 2021, WCA is the largest and only truly global congress of its kind. Find out more at www.wca2024.org

Francis Peel & Lauren Hyland WFSA, July 2022

Follow the links below to access WFSA's programmes mentioned within this profile

Education and Training:

www.wfsahq.org/our-work/education-training

Advocacy: www.wfsahq.org/our-work/advocacy

Safety and Quality: www.wfsahq.org/our-work/safety-quality Working Together:

www.wfsahq.org/our-work/working-together

Safer Anaesthesia From Education (SAFE):

www.wfsahq.org/our-work/education-training/safe-training



NZSA Trainee Column

Prioritising Fatigue



Aidan Ward NZSA Deputy Trainee Representative

I am a hypocrite sitting writing about fatigue post night shift. Ironically this seems as though it sums up the general state of affairs currently. Less than ideal, do your best to keep the glass half full.

> Often experienced, seldom acknowledged fatigue is halfway to burnout and requires attention before physical and mental health impacts are realised, cue crisis and further attrition of staff.

Fatigue is an extreme tiredness resulting from physical and mental exertion and has

the effect of lessening one's response to, or enthusiasm for, something due to overexposure. Fatigue can lead to a loss of situational awareness, slow reactions to changing situations, poor decision making and failure to notice an impending confliction, all of which are pivotal to safe anaesthesia.

There are many contributing factors that we cannot solve immediately as the health system we operate within appears increasingly broken despite the prospect of reform. But despite my doom and gloom narrative I genuinely believe that some onus and responsibility for our wellbeing sits personally, ambivalence is not defensible and as such, identifying factors that contribute to fatigue and more broadly wellbeing may help to target measures to improve them.

I also accept that it is unhelpful to say 'try and get eight hours of sleep or enjoy hobbies and a fulfilling life outside of work' because these are wonderful aspirational goals and often incompatible with each other.

Risk mitigation strategies can be helpfully applied in this context, fatigue can be accepted, removed, transferred, or reduced.

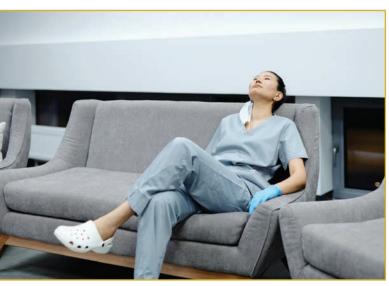


Photo by Cedric Fauntleroy.

When considering what I can do to immediately improve my situation the following is easily apparent.

Reduce: Limit screens in bed and in particular social media at the start or end of a day to reduce rapid cycling. This occurs when our brains switch between subject matter, such as cute puppies to the next teen dance fad, priming the brain to speed up when it should be slowing down.

Transference: Eat well, feel well. The link of nutrition, as opposed to mere calories and energy levels, sleep and productiveness is well established. For me this extends to the time considering what to cook, which can now be outsourced to any number of food delivery services, accepting that the cost associated with this is value added to other areas of life.

Remove: Plan for downtime. Schedule it like an immovable mountain of a meeting. The challenge here becomes keeping it protected in the current disarray of extra shifts and external pressures, it is something I am notoriously bad at particularly if I do not have certain plans. "Plan for downtime. Schedule it like an immovable mountain of a meeting."

Other areas of change with benefit could include:

- Further sleep hygiene practices including regular bedtime routines where possible around shift, call work and family commitments (particularly young children) and even lighting choices.
- Balancing high demand tasks with low alternate complex and simple tasks or cases on a list.
- Stretches, meditation or some sort of regular movement.
- Seeking a professional opinion from a GP, life coach, or fatigue management specialists even exist.

This is nothing groundbreaking, it is generally obvious with a little personal consideration and introspection. The real challenge lies in the action required and the realisation that prioritisation of action will ultimately result in less fatigue and a more fulfilling waking life in the current working climate.

That ambulance at the bottom of that cliff needs to 'return to route' before the GPS voice becomes very unhappy.

Once we consider the value added of prioritising time to recharge and prevent being drained so rapidly, the seeming oxymoron of yet another time-consuming task resolves itself.

Advanced Trainees: See page 9 for information on the Part 3 Course at CSC 2022

Toronto Cardiac Anaesthesia Fellowship - Tze Ying

I started my fellowship here at Toronto General Hospital (TGH) in the Peter Munk Cardiac Centre in November 2021.

TGH is a tertiary/quaternary care hospital and a referral centre for organ transplants, cardiac surgery and other complex surgeries. TGH offers fellowships in Cardiac, General (Advanced Clinical Practice), Abdominal Organ Transplantation, Airway, Thoracic (including lung transplants), Malignant Hyperthermia, and Pain. It has recently been awarded fourth place in Newsweek's 'World's Top 10 Hospitals'.

The fellows practice under level 1:2 supervision. There is always a staff anaesthesist to support you, usually supervising two operating rooms at a time. My fellowship in cardiac anaesthesia started with 1:1 supervision for four weeks before progressing to 1:2. Our usual procedures include coronary artery bypass, valve surgery, minimally invasive cardiac surgery, adult congenital, transcatheter aortic valve implantations, cath lab procedures, pacemaker/ICD insertions and removals, and heart assist devices.

Cardiac fellows also do pre-assessment for the cardiac procedures. However, like all busy hospitals you may end up anaesthetising or performing assessments for other specialties. This has also seen me involved with a lung transplant, breast surgery, plastics, vascular and urology. The exposure to complex patients and procedures has been extensive and is a real benefit of spending time here.

The teaching is focused on helping fellows pass the Advanced PTE exam and obtain certification. In addition to general teaching there is an established programme for echocardiography, weekly didactic teaching and case reviews. Cardiac fellows are rostered onto a week of transoesophageal echo imaging and reporting for all required cases that day. This team is supported by a cardiologist who helps direct intraoperative clinical decision making.

The cardiac fellowship is set up with a built in service to the cardiovascular intensive care unit, a valuable experience. Cardiac fellows also do cardiac OR calls and in general are called in for heart transplants, dissections, off pump coronary

challenging cases, but generally you induce with a surgical nurse assisting you, whose experience can vary.

A marked change in practice for me here is that fellows perform checks between cases (daily checks are performed by an anesthetic assistant). Equipment has to be gathered, checked and set up which can mean early starts hunting for pumps that work or restocking missing equipment and drugs. There is no access to IV paracetamol or parecoxib in the OR and there is minimal TIVA and no preprogrammed models on the infusion pumps to run them.

There are opportunities for research and research fellowships here. I have written a research proposal but the process for application can take many months. Fellows are allocated academic days, but these are not protected, and we often get called back to OR.

Moving countries for a fellowship is always an adventure, with the pandemic adding an additional layer of complexity. The omicron variant and Toronto's fifth wave started soon after we arrived and led to a reduction in operating room numbers. There were door checks, online self-assessment tools and a very organised distribution of RATs and vaccinations for staff.

Now three quarters the way through UHN recently transitioned to a whole new patient management system and it was rather remarkable given the complexities involved.

Financially the fellowship and move to Toronto requires preplanning. Toronto is an expensive city to live in, so we are very grateful to the BWT Ritchie Trust and the ANZAEC for the scholarship.

The fellowship continues to be a worthwhile and enlightening experience. It has offered exposure to complex patients and procedures and working in a different healthcare system, with different processes, equipment, and health goals. I have also learnt you do need a 'thick skin' for the operating room dynamics and communication, the days can be very long and on calls tiring but we get to live in Canada and experience -20°C and all the fun that comes with that too!

artery bypasses and can be called in for other cases if it's busy.

One of the differences in practice is the lack of dedicated anaesthetic technicians for each case. There are anaesthetic assistants that help place IV arterial lines and preoperatively and run sedation for cases with staff supervision. Thev can be called to assist in



Tze Ying Chan in Toronto.



With the echo team. It can get quite crowded.

NZSA Executive Member Profile

Dr Lynette McGaughran



Dr Lynette McGaughran on the Kepler Track.

Where were you born and raised?

Hamilton. I attended Hillcrest High School, though never completed my final year. After leaving I worked in a number of areas including medical typing at Pathlab and placing telephone bets for customers at the TAB! I found my way back to education and healthcare, training as an Anaesthetic Technician after my eldest son turned five and started school.

Where did you study medicine and what training path did you take?

University of Auckland. Graduate entry pathway after completing a Bachelor of Applied Science (Human Anatomy & Physiology) at AUT.

What led you to choose anaesthesia as your specialty?

I spent many years denying I was going to be an anaesthetist, as that's what everyone expected of me having worked for five years as an Anaesthetic Technician prior to medical school. It was quite late on when as a third year RMO that the pressure really came on to choose a specialty. I had enjoyed so many areas of medicine, but none appealed to me long term. I knew that I loved the teamwork environment of theatre, as well as the physiology and pharmacology in action and the procedural skills and using my hands that anaesthesia offered.

Who was most influential during your training?

I would have to say that was now retired Waikato Hospital anaesthetist, Dr Greg Spark. I worked with him often when I was an Anaesthetic Technician, and the tips and tricks that he taught me back then have proved immensely useful in my practice since.

What is the most satisfying aspect of your work?

Some anaesthetics are more 'fun' than others, but I try to find some satisfaction every day. Sometimes it is found in the procedures and busyness of a major case, other times it is simply making the surgical experience less daunting for an anxious patient.

What motivated you to join the NZSA Executive?

To be honest, I have never been on a committee in my life! I've never considered myself to be a 'committee person', but when I was asked if I would consider taking on the Assistant to the Anaesthetist portfolio with the NZSA I didn't hesitate. Though it has been many years since I worked as an Anaesthetic Technician myself, I still feel a strong connection to this important group of allied health colleagues and am honoured to take on a role where I can support and advocate for them at a national level.

What major changes are there in this area that NZSA can keep its members informed of?

Anaesthetic Assistant training in New Zealand is undergoing a major change, with both the transition of Anaesthetic Technician training from the diploma course to a Bachelor of Health Science in Perioperative Practice, and the introduction of a Registered Nurse Assistant to the Anaesthetist (RNAA) training programme. Existing Anaesthetic Technicians are now also able to complete additional training to extend their scope of practice into PACU, and perform PICC line insertion in hospitals that support this. All these changes are leading us toward an Anaesthetic Assistant workforce who are more flexible in meeting the wider needs of perioperative care.

It is to be expected that the road through this change may be bumpy at times and helping to smooth the path and ensure that high quality Anaesthetic Assistants continue to be trained in New Zealand is a role and responsibility we all share. The first Perioperative Practice degree candidates have commenced their clinical placements, so keep an eye out for them in your hospital, and please give them lots of support and encouragement!

You are undertaking overseas work soon, where are you heading and how did this interest in overseas medical aid start?

I'm not really sure where it comes from, maybe my Mum who has always looked after the 'oldies' and still volunteers twice a week in charity stores even though she's now in her 70's herself! But I remember at Medical School hearing about Medecins Sans Frontiers (MSF) and just knowing that I wanted to do that one day.

I have previously worked in ICU-based aeromedical retrieval and with the New Zealand Air Ambulance Service, and I really enjoyed the challenges of providing care in a resource-limited environment, and the way it brings you back to first principles and forces you to think outside of the box.

I will be spending July working in the Cook Islands, before heading to Afghanistan on my first mission with MSF. There, I will be providing anaesthesia care in a maternity hospital in the city of Khost. I'm sure I will face many and varied challenges during the mission, and I hope that I can teach and support local staff even a small fraction of what they will be teaching me.







What career would you have chosen besides medicine?

Medicine is the only career I wanted since I first decided on it when I was about 14, although it certainly wasn't the most direct path that I took! What I learned from other jobs I had in the interim as well as from being a parent has been invaluable, but even on a bad day at work I can't imagine myself doing anything else.

Number one tip to de-stress when not working?

For me the best stress-relief is making myself puff and sweat in the outdoors! I love to run anywhere, but especially on trails, and to go on multi-day hikes. I have more recently taken up mountain biking and climbing and am really enjoying the different ways these let me explore our amazing country.

What has been your best travel destination in New Zealand?

There are so many amazing places in New Zealand, and everywhere I go I come away with a list of more things I want to do! At the end of summer, I took three weeks leave and based myself in the Queenstown/Te Anau area. I completed the Humpridge, Kepler and Routeburn Tracks as well as the Alps to Ocean cycle trail and a few day adventures in between. It really is a beautiful area to explore, even if you don't plan on being as active as me!

Left: Whanganui Journey. Above from top: Humpridge Track; Separation Point on Abel Tasman.

Decarbonising Healthcare in Aotearoa #1: Energy

By Dr Rob Burrell

Chair of the NZSA Environmental and Sustainability Network



The Environmental and Sustainability Network has contributed a regular column to this publication since the network was formed. It has been a satisfying opportunity to get our message out, counterbalanced by an insecure dread that nobody reads it. In the days of blogs and social media, it remains an old-fashioned but dependable method to communicate. We have

covered a number of topics, from drug waste to sustainability tips and tricks. This is the first in a series to try to untangle what we need to do to address the really big stuff: to decarbonise healthcare in Aotearoa. We hope we can explore in some depth the challenges that are ahead of us, from the unique perspective that is Anaesthesia. In the first of these articles, we will start with perhaps the easiest topic, energy.

Within the Ministry of Business, Innovation and Employment lives a body with a stunningly beige name: NZ Government Procurement. Its job is to negotiate and create national-scale contracts. It is the much larger but softly spoken brother of Pharmac. Government agencies such as schools and ministries and hospitals are required to purchase their goods and services through contracts made by NZGP. These 'All of Government contracts' are typically at a price lower than the very best that could be negotiated by individual organisations, by what is said, to about 5%. Government departments buy cheaper office supplies, cheaper cars, cheaper electricity and gas and coal and petrol than anyone else can. Given that government agencies spend ~20% of GDP, or \$51 billion on procurement of goods and services, the AoG contracts, like Pharmac contracts (\$1-2 billion), have helped to get us the most bang for our taxpayer bucks. The problem with fabulously cheap energy costs, is that low prices (even with the Emissions Trading Scheme charges) are poor incentives for change in our industry. Low energy prices will not drive decarbonisation in healthcare.

We do have the Climate Change Response (Zero Carbon) Amendment Act, which requires that we reduce greenhouse gas emissions by 30% below 2005 levels by 2030, soon, and to net zero by 2050. And it establishes the Climate Change Commission, which is stacked with heavy hitters who are taking their responsibilities seriously. The Climate Change Commission challenges the government to set budgets for carbon, to force down our carbon emissions. If the purchasing arm of Government is unlikely to force us to change, another unit, again with the involvement of MBIE, certainly will. It is called the Carbon Neutral Government Programme, and again is an all of government approach, this time to reduce carbon intensity. By the end of 2025, government departments, including hospitals, will have to pay to offset their carbon footprint. By the end of 2025, carbon prices are likely to be \$200-250 per tonne. How will that affect hospital finances?

In 2001, the most widely used greenhouse gas accounting standards defined three different kinds of CO2 (and equivalent) emissions, to allow businesses to report and manage their footprints. Scope 1, is emissions directly from company activity, such as burning fossil gas to make steam in a boiler. Scope 2 emissions are those made indirectly, on behalf of the company, such as the CO2 created by burning fuel to make electricity by a power company. About half our DHBs have been measuring and managing down their Scope 1&2 emissions for some time now. For instance, Counties Manukau Health's emissions for 2019-20 were the equivalent of 11 426 tonnes of CO2.

DHBs have not been measuring Scope 3 emissions, but when they do, are likely to find emissions increase by a factor of 4-6. Scope 3 emissions are those not directly from the company, but rather from the products and suppliers and waste in the organisation's value chain. In the case of healthcare, it includes travel, disposables, implants, drugs, and outsourced corporate and clinical activity. Offsetting all of that is going to be problematic, and very expensive.

The energy used to run hospitals and healthcare fits in to Scopes 1 and 2. Many North Island hospitals burn reticulated natural (fossil) gas for heating, some even for on-site generation of electricity. Many South Island ones are still burning coal. These Scope 1 emissions are in addition to the Scope 2 emissions from remote electricity generation, which is (only) 85% from renewables. Over the next few decades, this proportion should rise, with a current (possibly aspirational) government target of 100% by 2030. This country needs to be building wind farms and some kind of dry year storage as quickly as possible but dithering and perhaps dissembling by Rio Tinto at their aluminium smelter has not made planning easy for generators, or the government.

Another partner in the CNGP is EECA, the Energy Efficiency and Conservation Authority, funded by a levy on fossil fuels, charged with creating a sustainable and renewable energy future. EECA facilitates energy audits, systems optimisation, and public sector decarbonisation.

The strength of this relationship will be demonstrated by success in reducing the energy intensity of our hospitals (or increasing the energy efficiency). Middlemore Hospital has an energy intensity of "300kWh/m2. Because it burns gas to make its own electricity, another metro hospital has an energy intensity twice that. US hospitals run "700kWh/m2, a European



"That is an almost 80% reduction in energy emissions, by 2035. And it certainly follows the trajectory laid out by the Zero Carbon Act. To the surprise of many, none of these projects involves a solar panel, photovoltaic or thermal. No windmills on the roof, not even building better greener buildings, which we will surely do.""

hospital ~250kWh/m2, and for comparison, an office building might require ~100, a passive house <15.

Over the next few years, significant workplace changes will happen, largely without us even noticing. For an example of this, let's look at the work done by EECA, for Counties. Having mapped the energy flows, investigated the plans for expansion, recladding and insulating, and the strategic direction of buildings used, EECA have presented some clear options. Our energy use for buildings creates emissions ~8000 tonnes CO2eq per annum. Five very doable manoeuvres can reduce that by ~35%. Investment is ~\$5M, whilst saving ~\$1M per annum on operating expenses, a return on investment in five years. That's like getting 15% returns on a term deposit, after tax!

Those five manoeuvres are:

- Air conditioning (HVAC) optimisation
- · Window films that reflect and retain heat (low emissivity)
- Installing a heat pump to capture heat from our chiller, that would otherwise be lost
- Electrification of our Central Sterile Supply Department and theatre humidification, decommissioning steam boilers on the Middlemore site
- Doing the same to the Manukau Surgery Centre CSSD and theatres

All this is possible by 2025. Compatible with the life span of the various pieces of plant, affordable, and in fact saves money and the climate. It requires prioritising projects with the shortest period of payback, after establishing exactly what those projects are.

For the decade following, EECA have highlighted the next tranche of opportunities, those with increasingly longer periods of payback. If grasped, they will achieve a 78% reduction on the 2021 baseline, getting annual emissions below 2000 tonnes,

for an investment "\$13M. The annual operating savings are in the realm of \$1.75M. Of course, this programme also minimises the risk of rising carbon prices, because it eliminates fossil gas. In this second tranche, EECA suggests:

- Capturing exhaust heat from hot water using heat pumps on both main sites as soon as possible
- Replacing heating boilers with heat pumps, as our boilers reach end of life
- A biomass boiler
- Heat pumps on our smaller sites such as Pukekohe Hospital

That is an almost 80% reduction in energy emissions, by 2035. And it certainly follows the trajectory laid out by the Zero Carbon Act. To the surprise of many, none of these projects involves a solar panel, photovoltaic or thermal. No windmills on the roof, not even building better greener buildings, which we will surely do. None of this requires new technology or taking risks.

It does require health bureaucrats to commit to sensible investment in infrastructure, at a time when none of us are sure the new system will break away from the bad habits of the old. But even if the new health managers can't get their heads around this stuff, the realities of engineering and the rising price of carbon will force their hands. To Anaesthetists, these kinds of projects are mundane, simple examples of the kinds of plant that allow us to go about our daily work. We will take them for granted.

The road to decarbonising the energy requirements of healthcare in Aotearoa is not a steep one, and is remarkably straight, at least for some years. Unless you're an HVAC engineer, it's actually pretty dull. The changes will come, they will be technically achievable, we won't see them, and they will make a difference.





COMBINED SCIENTIFIC CONGRESS NZSA & ASA • WELLINGTON NZ 21-24 OCTOBER 2022

JOIN US IN PERSON OR VIRTUALLY

Keynote Speakers



Prof. Denny Levett



Prof. Kate Leslie



Prof. PJ Devereaux



Prof. Steven Shafer

International and Invited Speakers



Prof. Pamela Flood



Prof. Andrew Klein



Dr. Wayne Morriss



Dr. Leona Wilson

www.CSC2022.co.nz

2022 Combined Scientific Congress

Hybrid (F2F and online) conference jointly co-hosted by the NZSA and ASA

Tēnā koutou katoa,

We are now just a few months out from the premier Australasian anaesthesia conference of 2022!

The programme is outstanding, what an opportunity to explore an engaging and thought-provoking range of topics from local and international speakers. Whether you can make it in person or are joining us virtually there is something for everyone. A few of our invited speakers are:

- Dr Imran Ahmad Sponsored by Fisher & Paykel Imran Ahmad is a Consultant Anaesthetist at Guy's and St Thomas' NHS Foundation Trust, London, UK, where he is the Deputy Clinical Director for Theatres, Anaesthesia and Perioperative medicine. He has a specialist interest in difficult airway management and is the clinical lead for airway management at the Trust and was the education lead for the Guy's advanced airway fellowship for over 10 years.
- Jehan Casinader Sponsored by MAS
 Jehan Casinader is a journalist, author and mental
 health advocate, named "Broadcast Reporter of the
 Year" at the Voyager Media Awards in 2020, and
 "Reporter of the Year" at the NZ Television Awards in
 2018. Jehan has helped hundreds of Kiwis to share
 their vulnerable and deeply personal stories with the
 rest of the country. He is the author of 'This Is Not How
 It Ends: How rewriting your story can save your life'
 (HarperCollins).
- Dr Leona Wilson Alan Merry Oration
 Born in Timaru, Dr Wilson studied medicine at
 the University of Otago, graduating BMedSc
 (neurophysiology) in 1974, and MB ChB in 1975. A year
 later, she moved to Europe and undertook anaesthesia
 training and experience in London and Amsterdam. In
 1981 she returned to NZ and completed her Fellowship.
 When ANZCA was founded in 1992, Leona was a
 Foundation Fellow then elected to Council in 2000. In

2008, she was elected ANZCA President, making her the first woman, and first New Zealander, to hold the position.

• Dr Tony Fernando - Kester Brown Lecture Dr Fernando is a psychiatrist and sleep specialist and is in the final stages of his PhD at the University of Auckland, studying compassion in medicine. He obtained his medical degree from the University of the Philippines and his psychiatry and sleep training at the University of Pennsylvania. In January of 2017, he received temporary ordination as a Buddhist monk in Myanmar.

If you haven't yet had the chance to do so we urge you to visit the CSC website to view the full programme and read more on the outstanding line-up of speakers (www. csc2022.co.nz) along with all the information you need to plan your trip to Wellington. Keep up to date with us on Twitter, facebook and LinkedIn with soon to be released podcasts with CSC speakers including Morgan Cavelle and Suzi Nou.

Having been unable to get together face to face for some time the CSC Organising Committee has put together an incredible social programme. Don't miss our signature gala dinner on the Saturday evening, with wonderful music from local band Superbad Jazz Band and delicious food, of course. The Health Care Industry reception takes place on the Friday evening, and on Sunday evening we have a family movie night at The Embassy Theatre where Weta Workshop's skilled technicians will help us to create scrapes, scars and chainmaille before we settle in for a movie.

End 2022 on a high note of collegiality, conviviality, and connection – join us at the CSC to support this excellent educational and social event. See you in Te Whanganuia-Tara, Wellington or virtually, on what will be an engaging and interactive online platform.

Ngā mihi nui,

Drs Mark Featherston and Cathy Caldwell CSC2022 Co-Convenors





Dr Cathy Caldwell

Anaesthesia on board Mercy Ships in Africa

It is estimated that 16.9 million lives globally are lost each year from conditions requiring surgical care - more than 32% of all global deaths, according to The Lancet Global Surgery 2030 Report¹.

Operating in Sub-Saharan Africa, Mercy Ships uses hospital ships to improve access to safe, affordable and timely surgery, and whole-person care in low-income countries.

The international non-governmental organisation undertakes work focused in three areas; direct medical services during a 10-month field service with a hospital ship in port, medical capacity building and health systems relationship development.

Hospital ship operating theatres

In May, Dr Rebecca Brinkler stepped from her role of Anaesthesia Specialist at Waitemata into a two-week volunteer tour-of-duty as one of three anaesthetists aboard the Africa Mercy, docked in Dakar, Senegal.

Dr Brinkler was impressed with the high level function in the services available in the ship-board maxillofacial and general surgery theatres she worked in.

"The resources within the theatre were better than I expected. We had access to difficult airway equipment such as videolaryngoscopes and fibreoptic scopes, extensive monitoring, a wide range of drugs were available and there was post-operative Intensive Care Unit capacity, if needed. I've worked in low- and middle-income countries in the past that were much more rustic, but these theatres didn't feel much different to home.

"I was particularly impressed with how the team briefings worked on board. Everywhere I've worked uses the WHO Surgical Safety Checklist, but it was done really well on the ship. Perhaps it's because you've got so many new people, you've really got to be thorough."

"We specifically sat down for the team briefing in the morning, and took our time over it. We went through every patient; exactly what the surgeons were going to do, what they needed from the anaesthetist, the post-op plans and medications in detail - for example, non-steroidals, tranexamic acid infusions and antibiotics. I've never worked anywhere that the Checklist has been covered with such detail. This helped me because I was new to the environment. I felt more confident about what I was doing, it enhanced teamwork, made everyone more approachable and developed that important rapport."

Volunteer service highlights

Patient rounds the night before surgery was an unexpected yet surprisingly significant on-board duty for Dr Brinkler.



(Left to right) Africa Mercy anaesthetists Dr Rebecca Brinkler (New Zealand/UK), Dr Maciek Kruzynski (Poland), Dr Andrea Schlüter (Germany) and nurse anaesthetists Loveline Ndashi (Cameroon) and Josefin Lundstrom (Sweden). Photo credit: Mercy Ships

"At home, we often only see patients on the day of their surgery, and you always feel a time pressure to get starting on the operating list. On the ship, patients were admitted to the ward the night before. I could take my time discussing their anaesthetic with them, with the assistance of fantastic local interpreters. I prescribed any pre-meds needed for the morning. It gave me time to make my plan, or discuss with colleagues if it was likely to be complicated."

She adds, "A surprisingly pleasant part of the job was the on-call shifts, which were shared between the three anaesthetists. There are no acute theatres on board, but in case anything occurs with a patient on the ward someone always remains available on the ship outside working hours. There's a little pool on the top deck and a library on board, so I think they were the best on call shifts I've ever done!"

Patients with extreme conditions made anaesthetic challenging

Describing the cases as similar but different from home, she explains, "Pathologies were at a more advanced stage I usually see when we are operating. For example, the lipomas and the facial tumours could be quite large, and children with cleft lip and palate were often older than I've seen operated on at home. I encountered conditions I've never seen before, such as flaps for the treatment of Noma. I enjoyed the experience and the challenge of this work."

"There were three anaesthetists; one in each of the two open theatres, plus an anaesthetic supervisor. For more complex cases it was great to be able to call on that extra pair of hands. The supervisor, who had much more experience working in the ship environment, was a reassuring backup."

The most significant learnings for Dr Brinkler came through sharing techniques and ideas with her international colleagues. "Those conversations are when you pick up tips from other people, and hopefully give them some tips as well. Sharing knowledge is one of the main things that Mercy Ships is trying to achieve in the countries it partners with.

¹ https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60160-X/fulltext



Dr Rebecca Brinkler volunteered her anaesthesia skills for on board the Mercy Ship Africa Mercy in Dakar, Senegal. Photo credit: Mercy Ships.

Dr Rebecca Brinkler is from the UK where she studied medicine in Leeds. She completed her anaesthetic training in North London where she worked as a consultant before moving to New Zealand in 2021.

Multiplying anaesthesia capacity in Africa

Dr Brinkler was on board the Africa Mercy when the new Mercy Ships surgical training ship Global Mercy arrived alongside; sailing into an African port for the first time. She says the vessel's purpose is impressive - to strengthen the medical capacity of the African nations the charity serves through speciality training courses, mentoring and the sharing of surgical-related skills.

"I knew Mercy Ships went in to different nations with the ships to provide surgeries, but I didn't realise how long the commitment was to each country. Of the five-year engagement with a country, the ship is in port providing surgeries for 10

About Mercy Ships

Global health for the last two decades has focused on individual diseases, while surgical care in lowresource countries has not received the attention it needs.

Mercy Ships is an international faith-based organisation that operates hospital ships to deliver free, worldclass healthcare services, medical capacity building, and health system strengthening to those with little access to safe surgical care. Since 1978, Mercy Ships has worked in more than 55 countries, with the last three decades focused entirely on partnering with African nations. Each year, volunteer professionals from over 60 countries serve on board the world's two largest non-governmental hospital ships, the Africa Mercy[®] and the Global Mercy[™]. Professionals such as surgeons, dentists, nurses, health trainers, cooks, and engineers dedicate their time and skills to the cause.

Mercy Ships has offices in 16 countries, including New Zealand and an Africa Bureau.

For more information, visit mercyships.org.nz

months. But that is only a part of the time that Mercy Ships teams are working in the country. A lot of medical capacity building is being undertaken on either side of the ship visit."

"It's all very well us coming in and operating on hundreds of people, but the next day there's going to be just as many people still needing an operation. If there still isn't a surgeon, an anaesthetist, a theatre team, lab team and sterilising available, it doesn't solve the problem."

"It was great to see Mercy Ships make the medical capacity building programme a priority. The only thing that's going to improve access to surgery for the majority in Africa, is improving that capacity across the continent. I hope to return to help Mercy Ships in theatres and with their SAFE anaesthetic education courses in the future."

The Lancet Commission on Global Surgery² found that countries with fewer than 20 specialists (surgeons, anaesthetists, obstetricians) per 100,000 population had lower surgical productivity, higher maternal mortality and overall worse health outcomes. This specialist surgical workforce density is the target for all countries to achieve by 2030, which requires training 1.27 million additional specialists worldwide. The latest statistics indicate Senegal has 1.03 specialists per 100,000³.

More about volunteering with Mercy Ships at www.mercyships.org.nz/make-your-mark/

- 2 https://www.thelancet.com/commissions/global-surgery
- 3 https://www.ceicdata.com/en/senegal/health-statistics/sn-specialistsurgical-workforce-per-100000-population



Doubling the impact, the Global Mercy joined the Africa Mercy in Dakar, Senegal. Photo credit: Mercy Ships



Paediatric anaesthesia courses are provided by Mercy Ships to strengthen local medical capacity. Photo credit: Mercy Ships

Global Health Committee

The GHC is the NZSA's advocacy group promoting links between NZ Anaesthesia and the wider Pacific Anaesthesia Community. Dr James Dalby-Ball is the current Chair of the committee and provides this update on GHC activities.

For the GHC, the focus for 2022 is to re-engage with regional activities that have been somewhat on hold during the COVID pandemic. Our broad scope is to support teaching and training activities, while getting NZSA members involved in the wider Pacific Anaesthesia community.

We are excited to support the Pacific Society of Anaesthetists with the first Pacific Update meeting since 2020. With a theme of 'Resilience and Recovery' this is the first opportunity for Anaesthetists from around the Pacific to reconnect and reflect on these last few challenging years. Sharing lessons learned will allow the development of resilient systems that are appropriate for the Pacific region while focussing on the more general challenges now facing Anaesthetists in their place of work.

To ensure that local SMOs are able to attend, the NZSA GHC has organised locum cover consisting of over 16 SMOs and PFs who will work in Fiji, Samoa and Tonga. Some NZSA members will also be directly involved in the update meeting, while Dr Alan Goodey and a team of NZ-based Anaesthetic technicians will run educational events for biomedical staff. Two NZ-trainees, Dr Charlotte Legge and Dr Aidan McGrinder, have been awarded the NZSA Trainee Travel Grant to attend the PSA 2022 and will report back to members in the next edition of this magazine.

To help build capacity within the Pacific Region, the PACT (Pacific Anaesthesia Collaborative Training) fund was started in 2020. Due to the generosity of NZSA members this fund will enable the first PACT fellow, Cecilia Vaai-Bartley, to complete her MMed training early in 2023. She will be followed

by another Samoan trainee, Dr Esjae Sesega, which will significantly bolster anaesthetic capacity in Samoa and allow in-country training of more MMed students (which currently cannot be done). Further donations from the PACT fund in 2022 will be used to support four Fijian Trainees to complete their training at FNU on the Diploma or Masters programme at a time when the financial impact of COVID is causing several trainees to defer or stop training altogether.

Due to the advocacy of PACT and other NZSA members, the Ralph and Eve Seelye Charitable Trust offered their support to Anaesthesia Training in the Pacific in 2021. We are now delighted to announce that they have very kindly agreed to sponsor a Fijian Trainee, Dr Sweta Mudaliar, for the full Masters programme.

Getting NZSA members involved in its work is something that the GHC sees as a key aim. There are opportunities for both trainees and SMOs to work on projects and on the committee itself. We currently have two trainee positions with Dr Atif Slim, a Hawke's Bay trainee being our latest member. He and Dr Charlotte Legge promote the GHC through the trainee networks and will present the work of PACT at the 2022 CSC in Wellington. We are very grateful to all the anaesthetic departments from around NZ who support members working on GHC projects. The GHC itself is also looking for another SMO member so if you have an interest in this field please contact me, James.Dalby-ball@cdhb.health.nz.

Over the next year we will be looking at more opportunities for members to help support anaesthesia training and teaching within the Pacific region.

Finally, on behalf of the GHC, I would like to thank all NZSA members who contribute to PACT for the impact they are having with their 'coffee a week'.

ANAESTHESIA VISITING LECTURESHIPS

Nominations are open for 2022 Visiting Lectureships.

Due to the ongoing impact on Covid-19 the 2022 lectureships will be virtual.

Heads of departments are invited to nominate members of staff who have given an outstanding presentation at a continuing medical education session and are willing present this again as part of our Visiting Lectureships.

The Aotearoa New Zealand Anaesthesia Education Committee (ANZAEC) established the Visiting Lectureship to promote sharing knowledge and experience through outstanding presentations among anaesthesia departments and practices.

Visit the ANZAEC website for more: www.anaesthesiaeducation.org.nz/visiting-lectureship

PACT Fellow Dr Cecilia Bartley

Dr Cecilia Bartley is the first PACT fellow. She is close to completing her MMed in Fiji and just the third from Samoa to do so.

Where were you born and raised?

I was born in Fiji but raised in Samoa mostly (my father is Samoan, my Mum is part Fijian); all of my schooling was in Samoa except for my first degree which I undertook at University of Otago (Bachelor of Pharmacy).

What lead you to want to work in medicine? And what interests you in the field of anaesthesia?

I didn't really know that I wanted to do Medicine until I was halfway through my Pharmacy degree and wasn't able to change, but I have no regrets doing Pharmacy. After graduating and spending five years in a community Pharmacy in Samoa, I decided to help assist with administration work for my father's business and happened upon an advertisement from the Oceania University of Medicine (OUM) promoting their postgraduate programme. I applied and was successful and continued from there. I find the field of Anaesthesia fascinating and was drawn to it during my house officer years - I was especially interested in an





⁶⁶I also see the difference in how I am viewed within the department from both senior and junior colleagues²⁷

Anaesthesia/ICU role in teaching/training on emergencies and critical care across the whole hospital (e.g. BASIC, PTC, CPR training).

Is there anyone in particular who inspires you or has been a large influence on you?

My father (now deceased) and mother are my daily inspiration, they are both non-medical but have shaped who I am by their examples, support and prayers for all the educational opportunities I have been blessed to have.

What are some of the challenges healthcare workers in Samoa are facing?

There are many challenges for healthcare workers in Samoa; one of the biggest is access to postgraduate training pathways (mostly overseas) and cover for shortages when doctors and nurses need to go away for training.

How will completing your MMed training make a difference for you personally and for your work in Samoa?

Completing my MMed training will make a huge difference for me as it will help me not only in my own work but in teaching/ training others in my department (even my seniors). Already I see the benefits and how much I have improved in my decision-making and communication with other colleagues such as doctors in other departments and nurses. I also see the difference in how I am viewed within the department from both senior and junior colleagues.

How do you feel this will make a difference for your colleagues, or in healthcare in Samoa?

I will be the third person from Samoa to complete my MMed training (my senior colleague just completed hers this year and the first graduate has moved to Fiji) and I feel this will be a huge boost for our small department in terms of attracting and training more registrars; the network that we have developed by doing this training (across the Pacific) has been instrumental in assisting us move forward with specialist training. I think we will also be able to assist other departments who have struggled to get their doctors specialist trained (ie MMed or fellow).

For you, what is one of the most rewarding parts of working in medicine?

One of the most rewarding things is successful patient outcomes and how that makes a difference for patients and their families, especially those who would not otherwise be able to afford going to New Zealand for medical care (majority of the Samoan population!).

NZATS Column



Matthew Lawrence Chairperson NZATS

"There are many directions in life, some good and some bad. What direction you take can rest with many, but sincerely rest's with you."

We may be starting to get a glimpse of light at the end of a very long tunnel. The borders are opening, MIQ is disbanding, and do we have some relative normal living about to descend us?

With announcements daily and changes coming thick and fast, we are all a bit weary and fatigued. Just remember that everyone is in the same boat and under the same or similar conditions, so being kind goes along way.

Business as usual has not been the case over the past months; however NZATS have been working hard behind the scenes, trying to maintain meetings, exams and educational days. These have predominately been in a virtual space either with Zoom or Teams. The executive have been working hard to maintain business with work being done around a new look, fresh website for the profession and our members. We are also looking at introducing a digital CPD platform for members, where members can have access to their log, for example in a digital format. Some small improvements with big gains are the goal for both of these projects.

AUT and NZATS have been working in collaboration looking to promote the profession from academic and professional aspects. We have been working to design and circulate information to various outlets, a national template that showcases the degree programme with videos of Techs performing tasks and interviewed colleagues explaining their roles within the profession. We want to incorporate what we do, how we do it and where we do it to New Zealanders. A big thank you to those who participated to help make this for the profession.

We will be attending some career expos across the Motu as well, showcasing the profession to our school leavers. We believe this holds a great educational opportunity to get information out to our youth. We will work in collaboration with AUT on this venture and I would like to thank AUT for this opportunity.

A special meeting was called in early April. All remits were to make sure NZATS provides education, hosts conferences, and runs meetings, and to look forwards to the future.

Three remits were voted on and all passed the vote. So an increase, 20 years in the coming, of \$20 will be added to the membership of NZATS. Also, with the new degree programme up and running we voted on, and passed, student members to be free with an elected student a seat on the Board. We think this will have a positive result in the relationship between AUT and NZATS, which can only be good for the profession.



New Zealand Anaesthetic Technicians' Society

Looking towards our future as a profession, we considered how things are changing and what direction we are heading. We are entering a new phase within our profession with the introduction of the degree programme; it sits within one of the profession's future. The other are those qualified or who are about to. We all play a role within the profession, simply turning up day in and day out, doing the best for your patients, yourself and colleagues. These simple things do make a difference and we all offer this to the profession.

"AUT and NZATS have been working in collaboration looking to promote the profession from academic and professional aspects."

The future is bright, we have two extended scopes of practice, and I'm sure more to come.

We have a few things coming up: an education morning POCUS, our training and development meeting and our Leaders Forum. With restrictions easing a little, I hope to have these all in person, with face to face connecting once more.

NZATS will be holding our annual conference in the Hawke's Bay this year, I think a grand destination, and we look forward to coming together once again.

Lastly, I would like to congratulate all those who sat their registration exam recently. Well done to everybody to making this yet again a successful event.

Matthew Lawrence NZATS Chair

webAIRS News Lingual Nerve Injury



WebAIRS recently received a report of lingual nerve (LN) palsy associated with a dual lumen supraglottic airway device (DL-SGA). The patient woke with a bilateral lingual nerve neuropraxia, described as numbness in the front half of tongue. There was no motor involvement, with normal speech, tongue movement, and eating. They had not noticed less taste until they were asked. It was unchanged three days later. A search of the webAIRS database using structured query language revealed that a further 15 cases have been reported making 16 in total. In the webAIRS case series, five were associated with the use of a standard single lumen SGA and 11 with a DL-SGA.

A Google query to gain general information regarding LN palsy revealed that a well-known Australian singer, songwriter, and actress, Delta Goodrem, had also suffered a similar complication in 2020 and subsequently had to relearn how to both speak and sing. It happened that in her case it was a known complication of the surgery performed rather being related to anaesthetic management¹.

Lingual nerve (LN) injury or neuropraxia is a potentially serious but rare complication following general anaesthesia^{2,3,4} or surgery involving the oral cavity or neck⁴. Causes of LN injury after general anaesthesia are multifactorial with possible mechanisms including difficult laryngoscopy^{2,3}, prolonged anterior mandibular displacement, oropharyngeal airways, macroglossia and tongue compression². Airway manipulation³ pressure from an endotracheal tube (ETT)², and pressure from SGAs⁴ are also all implicated as causative factors for LN injuries. Any dental or surgical procedure near the LN might also cause trauma to the nerve either directly, or by pressure, or by stretching the LN during tissue retraction⁵.

Estimated frequency

The overall incidence rate of postoperative lingual neuropraxia in a retrospective matched case-control study was 0.066%, 6.6 cases per 10,000 (36 patients over four years), in patients receiving general anaesthesia with an airway device. Risk factors associated with postoperative LN injury in this study were head and neck surgery, ASA 1 to 2 and young age².

Incident Management

Recommended management of lingual neuropraxia includes supportive psychotherapy in conjunction with medication administration of steroids, antidepressants, and anticonvulsants. Expected recovery is within three months without special treatment and frequently within days or weeks. However, some injuries are reported as permanent. Microsurgical reconstruction of the LN could provide improved sensation when lingual neuropraxia does not spontaneously improve².

Outcomes

All the cases in the webAIRS case series were reported as temporary harm. However, some of these were assumed to be temporary as the patient had not phoned back to report ongoing symptoms. Some of the cases took several weeks to resolve and some cases had reported substantial improvement when followed up but still had some minor numbness. This is in keeping with the literature reviewed^{2,3,4,5}. In Delta's case it was a slow road to recovery, taking almost a year⁶. However, in her case it was surgical trauma and a known risk for the type of procedure rather than pressure from an airway device¹.

Conclusion

In conclusion, future research could be considered regarding the relationship of SGA cuff volume, pressure, and position within the oral cavity to prevent lingual nerve injury⁵.

However, it should be noted that SGAs are not the only cause of LN palsy and that any anaesthetic or surgical device used in the oral cavity has the potential to cause this type of injury.

ANZTADC Case Report Writing Group

1 The Project | Delta's Secret Health Battle. https://www.youtube.com/ watch?v=32gvzMnMvL8&t=11s

2 u Y-K, Wang J-H, Hsieh S-Y, Liu X-Z, Lam C-F, Huang S-C. Incidence and risk factors for postoperative lingual neuropraxia following airway instrumentation: A retrospective matched case-control study. PloS one. 2018;13(1):e0190589-e.

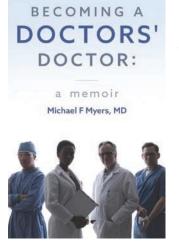
3 Brimacombe J. Bilaterial Lingual Nerve Injury following Tracheal Intubation. Anaesthesia and Intensive Care. 1993;21(1):107-108. doi:10.1177/0310057X9302100127

4 Foley E, Mc Dermott TED, Shanahan E, Phelan D. Transient isolated lingual nerve neuropraxia associated with general anaesthesia and laryngeal mask use: two case reports and a review of the literature. Irish Journal of Medical Science. 2010;179(2):297-300.

5 Ghabriel, M., Takezawa, K. & Townsend, G. The lingual nerve: overview and new insights into anatomical variability based on fine dissection using human cadavers. Odontology 107, 1–9 (2019). https://doi.org/10.1007/s10266-018-0371-4

6 The Project – Channel 10 interview after the Melbourne Cup November 2020. https://10play.com.au/melbourne-cup-carnival-fun/webextras/2020/delta-goodrem-interview/tpv201104qlwxd

Becoming A Doctors' Doctor: A Memoir



This autobiography is an unflinching and heartfelt account of the author's journey to becoming а psychiatrist and a psychiatrist who specialises in caring for physicians. Myers takes us through his own development as an adult and his oftenabsent lawyer father and mother who is struggling with alcoholism.

Myers, who is a professor of psychiatry takes the reader on an emotional journey as he draws on his thirty years of

experience working with doctors as patients. A raw and honest memoir that is often a heart-breaking narrative of the unique challenges faced working with doctors and the struggles of burnout, depression, alcoholism, addiction, suicide, and various mental health issues.

The stories of these patients/doctors allow us to explore the stigma often attached to mental health and doctors, that often prevents them from seeking life-saving treatment and care, instead often turning to self-diagnosis and treatment. The book takes us through his first interest in caring for doctors, with the suicide of a roommate in his first year of medical school, to working with medical students, senior medical officers, and the families of his patients through relationship and family therapy.

Myers takes us along during his time working with HIV and AIDs patients in Vancouver, working with Dr Peter Jephson-Young, for me a personal interest having also worked with HIV/ AIDs patients in the nineties. There are heart wrenching stories from patients who lived through many years of treatment and therapy with the highs and lows of their treatment journey. There is the rawness of mourning his colleagues lost in the Covid-19 pandemic as well as his work with the LQBTQ+ community and the struggles faced as they navigate the world of medicine and relationships.

Beautifully written, with patients' stories wonderfully wound throughout this book offering readers a first-person account of the suffering and isolation felt by doctors with mental health difficulties, and I openly to admit weeping tears at some of these brutally honest personal stories.

Whilst this review may sound like this is a book that will leave you feeling sad, it's the complete opposite with hope, care and love shining through every page. A long, far reaching, and varied career affords Myers a unique perspective. Myers' frank and open memoir left me feeling his passion to care for the carers and is a wonderful account of humanity with all its flaws and beauty.

Review by NZSA Chief Executive Officer Michele Thomas

Join over 30,000 Research Review subscribers

Anaesthesia and Pain Management RESEARCH REVIEW

with experts Dr John Barnard and Associate Professor Gwyn Lewis covers critical research with commentary on the impact to local practice.





Sign up at no cost online at www.researchreview.co.nz

Delivered by email to your inbox



Join the KiwiSaver provider driven by purpose, not by profit.

The KiwiSaver provider that's inspiring healthier communities and a healthier planet. Join today. mas.co.nz/kiwisaver



Medical Funds Management Limited is the issuer of the MAS KiwiSaver Scheme The PDS is available at mas.co.nz.



Kia ora!

Obstetric care has continued unabated throughout this pandemic and in that spirit OASIS22 is pushing on too! We hope that you will be able to join us for our exciting face-to-face meeting to explore the latest trends and current controversies in obstetric anaesthesia that challenge us every day.

Friday 4 November, Clinical Education Centre at Auckland City Hospital

- Obstetric Haemorrhage and Anaphylaxis Emergency Response workshops

- Perioperative Communication and Shared Decision Making workshop Saturday 5 November The Maritime Room, Auchland Viaduct

Our scientific session will draw on the combined knowledge of the multidisciplinary team of Auckland's National Women's Health and expert speakers from related specialties, and will address a broad range of topics relevant to delivering world-leading care to our wahine.

OASIS Obstetric Anaesthesia Special Interest Symposium

For details of our programme please visit: <u>www.oasis-conference.org.nz</u>



Innovative and flexible Maximum efficiency in performance and cost



The Atlan A350 Anaesthesia Workstation

- ✓ Precise EVent piston ventilator
- ✓ Optional Quick Swappable Integrated Gas Monitoring
- ✓ Electronic Gas Mixing
- ✓ Optimised for Low and Minimal Flow anaesthesia
- ✓ Standard or Large size

Safety and Scalability - All in one!

- ✓ Heated breathing block to decrease humidification
- ✓ Back up manual mode
- ✓ Tool-free removal of breathing block for easy cleaning
- ✓ Seamless integration of monitoring
- ✓ Consumption-free oxygen monitoring
- ✓ 15" color touchscreen
- ✓ Automated machine test with novice and expert modes
- \checkmark Low flow anaesthesia decision support
- ✓ Easy to service
- ✓ Fail-safe capability

For further information, please contact Jan Lewandowski on +64 21 194 9285 or Graham Singer on +64 27 603 0599



