We finally moved into the new RAH in September 2017 (pictures within....), and it is evidently the 3rd most expensive building in the world! It was an enormous logistic exercise moving a hospital of that size and was an interesting experience for all involved. It is still in the centre of Adelaide, at the opposite end of North Terrace to the old hospital, and incorporates a total of 3.8 hectares of landscaped environment, including more than 70 internal themed (eg Aboriginal and Spinal Garden) courtyards and sky gardens across the 9 levels. This creates a 1.6 hectare footprint of greenspace within the hospital. There are 700 overnight beds and 100 day beds. Right next door is the South Australian Health and Medical Research Institute (SAHMRI), which is South Australia's first independent health and medical research institute, and is home to more than 700 researchers.

Training and Research remain major foci of our Unit, and in this Newsletter we highlight some of our achievements over the past 12 months. We have also included some information about the new hospital and ICU, the role and activities of SAICA, travel logs from some of our registrars from overseas (and tips for future registrars), our mentoring program, and a list of upcoming local courses. This is an annual publication, so if you are aware of any other achievements that we have unfortunately omitted, please let us know!

**RAH ICU Facts and Figures**

The Royal Adelaide Hospital ICU is the busiest Level 3 Unit in South Australia, and in the 12 months from July 2017 to June 2018, we admitted 3466 patients. Of all the patients admitted during that time, 68% were unplanned. About 14% were direct admissions following cardiac surgical procedures, 10% were trauma, 7% following neurosurgery, 7% thoracic surgery, 9% ‘sepsis’, 5% pneumonia without sepsis, 4% drug overdose, 3% ENT surgery, 3% following cardiac arrest, and 2% gastrointestinal bleeding. Operating theatres were the source of admission for 49% of our patients, 32% were admitted directly from the Emergency Department, 14% from the wards, and 4.4% were transferred directly from another hospital to our ICU.

The Unit currently has 44 Registrars (42 FTE) on the roster (17 registered with the CICM) from a variety of backgrounds and training programs, and with very different levels of experience and long-term goals.
Education and Training

Congratulations to Nikki Yeo who passed the CICM Fellowship Exam in October, and has now moved to Cambridge for 12 months to work as a Clinical Fellow in the Neurosciences and Trauma Critical Care Unit in Addenbrookes in London.

After also passing the Fellowship Exam last year, Jacob Abraham left us in August to work as a Senior Registrar at Flinders Medical Centre (FMC), before taking up a 12 month Critical Care Echocardiography Fellowship at St George and St Vincent’s Hospitals in Sydney this year.

Congratulations also to Tim Webber for passing the CICM Primary Exam.

The Eleventh Annual Tub Worthley Travelling Scholarship was won by Kristin Hayres (FMC) in May this year for her presentation, ‘Objective measurement of physical function prior to and following critical illness’. This is awarded for the best registrar research presentation at the annual South Australian ANZICS meeting. Registrars from the RAH who presented their research on the night were Sam Gluck, Emily Gannon, Nikki Yeo and Minny Ohja. As an aside, Kristin joined us from FMC in August for the next 12 months, and we welcome her to the Unit.

The 35th running of the South Australian Intensive Care Fellowship Exam Course was held in February this year, with 30 candidates from Australia and New Zealand (photo below).

There were once again over 30 faculty, including 11 from the RAH and 7 from interstate. Hot Case practice sessions were held at the RAH, QEH, FMC and LMHS. The 2019 Course was flooded with applications, filling up within 24 hours. Increasing numbers of trainees are sitting the Fellowship Exam, and so if you are planning to sit in 2020, make sure you apply for the course as soon as registrations open in September next year or you are likely to miss out. However, it is important to note that it is very much focused on preparing candidates for the Exam, rather than trying to teach the intensive care curriculum in 3 days. Candidates are therefore expected to have done significant preparation beforehand.

The South Australian Primary Examination Course was held twice in 2018, but this will be reduced to only one course in 2019. Mark Finnis has been coordinating it for many years now, with assistance from a number of the RAH and FMC Intensivists. It is an intensive 5 days, but excellent preparation for the CICM (and ANZCA) Primary Exam. Places are limited to 24 and it also invariably over-subscribed - so make sure you register early.

The South Australian Critical Care Ultrasound Course is a 2-day course on focused cardiac, lung, abdominal and procedural ultrasound relevant to critical care, and is held twice a year.

Registrar Mentoring Program

We run a formal mentoring/support program for all trainees in ICU at the RAH. This process is separate from any skill or competency-based assessment and is aimed purely at providing psychological, emotional and practical support for our junior doctors. Our aim is therefore for it to remain completely separate from any formal College assessments. This program and any discussions or conversations are confidential and will not be shared with any external person or group unless at the express wish of the trainee concerned.

A number of the Consultants have volunteered to participate and feel this is worthwhile. They will work in pairs and each trainee will be assigned to one pair in the first instance. We hope that this will ensure easy availability and access to at least one of their mentors at all times and also addresses any potential personality differences which may arise. This is not designed to limit access to any of the consultant group, as it is recognised that trainees will have multiple mentors over their career, often with a specific focus at a particular time. They are therefore encouraged to use any and all opportunities to communicate and engage with any consultant as they need. The main purpose of this formal process is to help and support trainees in whatever way possible and to try to ensure that nobody falls between the cracks.

www.icuadelaide.com.au
Research Publications July 2017 - June 2018


www.icuadelaide.com.au


A selection of presentations at scientific meetings


PhD Students
2016 - Yasmine Ali Abdelhamid (University of Adelaide)
2017 - Samuel Gluck (University of Adelaide)
2018 - Tej Murthy (University of Adelaide)

Simulation Sessions
Multidisciplinary simulation sessions involving ICU Registrars are held twice a week in our Sim Lab. They are facilitated by ICU Simulation Clinical Nurses and our Chief and Senior Registrars. Registrars complete an on-line BLS/ALS Moodle, and at least one practical simulation every 3 months.
Research Grants

  Project Title: Protein Absorption and Kinetics in Critical Illness (APP1144496)
  Value: $1,233,268

2018-19 Chapman MJ, Deane AM, Young PJ. Hospital Research Foundation; Translational Project Grant.
  Project Title: The effect of protein dose on clinical outcomes in critically ill patients (TARGET_Protein)
  Value: $250,000

  Project Title: The effect of standard versus energy dense feeds on gastric emptying and glucose metabolism in critically ill patients.
  Value: $25,000 USD

  Project Title: An open-source smartphone application to monitor patients prior to and following elective coronary artery bypass grafting: A prospective cohort study (The SMART-HEART Study).
  Value: $16,805

2018 Chapple L, Summers M, Weinel L, Chapman M. Royal Adelaide Hospital Clinical Project Grant.
  Project Title: Resolution of Elements Influencing Nutritional Status After critical Illness (REINSTATE trial).
  Value: $49,959

2018 Gluck S. Society Of Critical Care Medicine.
  Project Title: Thrive Peer Support Collaborative (ICU Survivors).
  Value: $1,000 USD

2018 Raith E, Bellette J, Starney L, Millar J, d'Udekem Y. WCH Foundation MS McLeod Departmental Grant.
  Project Title: The characteristics and outcomes of children undergoing cardiac surgery in Australia.
  Value: $10,000

  Project Title: Intensive nutrition in critically ill adults: A pilot randomised controlled study.
  Value: $2,400,000

  Project Title: Re-Evaluating the Inhibition of Stress Erosions (REVISE): Gastrointestinal bleeding prophylaxis in ICU
  Value: $2,955,164

  Project Title: Liberal glucose Control in critically Ill patient with pre-existing type 2 Diabetes (LUCID): a phase IIb multi-centre single-blinded parallel group randomised control trial.
  Value: $25,000

  Project Title: Prevalence, mechanisms and impact of post-prandial hypotension in elderly survivors of ICU.
  Value: $49,207

  Project Title: Protein absorption and kinetics in critical illness.
  Value: $57,205

  Project Title: Acute hypoglycaemia and gastric emptying – ‘dose-response’ and impact on oral drug absorption.
  Value: $30,000
Project Title: Magpix multiplex for analysing gut hormones. 
Value: $25,000

2017 Chapman M, Deane A, Soenen S, Chapple L. The University Of Adelaide Investment For Success NHMRC Near Miss Grant. 
Project Title: Ultrasound probe for Measurement of muscle thickness. 
Value: $10,080

Project Title: Long-term effects of critical illness on energy intake, appetite, gastric emptying and appetite-regulating hormones in adult survivors of intensive care unit admission. 
Value: $20,000

Project Title: The Augmented versus Routine approach to Giving Energy Trial (TARGET). 
Value: $3,534,236

Project Title: The Augmented versus Routine approach to Giving Energy Trial (TARGET). 
Value: $1,200,000 NZD

Project Title: Centre of Research Excellence in Translating Nutritional Science to Good Health. 
Value: $2,499,990

Current Research Funding Scholarships

Investigator: Chapple L. Value: $327,192.00.

Investigator: Chapple L. Value: $240,000.

2018 - 2020: Faculty of Health and Medical Sciences Divisional Scholarship (University of Adelaide). 
Investigator: Murthy T.

2017 – 2018: European Society of Parenteral and Enteral Nutrition Fellowship 
Investigator: Chapple L. Value: €49,988

2017 - 2019: Royal Adelaide Hospital AR Clarkson Scholarship 
Investigator: Gluck S. Value: $150,000

2016 – 2018: Royal Adelaide Hospital AR Clarkson Scholarship 
Investigator: Ali Abdelhamid Y. Value: $300,000

Tuesday Journal Club and Registrar Teaching

Journal Club is held every Tuesday afternoon, where 3 registrars present and critique a combination of recent and seminal journal articles. This is followed by a Registrar Teaching Session which varies in content between registrar-led presentations, senior registrar-led topic teaching, and ECHO/ultrasound teaching. Sanjeev Grewal is seen here sharing pearls of wisdom...
ICU Registrar Involvement in Research and Clinical Audits

Research

Registrars, and ICU (CICM) trainees in particular, are actively encouraged to participate in research on the Unit, both in terms of personal research and larger trials. Significant support is also available for CICM trainees for their Formal Project requirements, and they are encouraged to present and publish their results.

The Tub Worthley Travelling Scholarship Dinner is run annually in May with the support of Pfizer, and provides trainees with an excellent opportunity to present their research to Intensive Care colleagues from across the State, and compete for the Scholarship.

Trainees are also encouraged to present their research at the annual Australian and New Zealand Intensive Care Society (ANZICS) ASM and the CICM ASM.

Clinical Audits

It is also an expectation that all CICM trainees at the RAH will undertake a clinical audit every 6 to 12 months in an aspect of critical care practice that interests them, which they will present at one of the weekly ICU Clinical Audit meetings. We also recommend that residents and registrars not in the CICM training program take the opportunity to undertake a clinical audit and they will be actively encouraged and supported to do so.

Upon successful completion, registrars may also have the opportunity to present their findings further afield depending on the quality and findings of their audit. They will be presented with a formal document of completion that can be used in support of future competitive applications.

This audit activity will also form an important component of the training assessment for CICM trainees.

More About the New RAH

The ICU is an adult, quaternary-referral, general Unit, with a very broad casemix, including Cardiothoracic Surgery, Neurosurgery, Spinal Surgery, Vascular Surgery, Gastrointestinal and Hepatobiliary Surgery, ENT, Trauma, Burns, Cardiology, Respiratory Medicine, Gastrointestinal Medicine, Oncology and Haematology, and Renal Medicine (including transplantation). The Unit currently runs as 4 pods of 12 beds, but is expandable to 60, and then 72 beds, in the future. Hopefully, a long time in the future.... We work in teams, and during the day, each Pod has its own ICU Consultant, Chief or Senior Registrar, 2 other Registrars, and often 5th or 6th year medical students. A further Registrar performs a Consult role, reviewing patients on the wards or in the Emergency Department. At night, there are 6 Registrars in house, one in each of the Pods, and a further two who have oversight and consult roles.
Emily

What an amazing year!... I moved over from the UK to Adelaide nearly a year ago for an Australian adventure, and so far everything has exceeded my expectations!

Work is great, everyone in the unit is welcoming and friendly and I’ve never worked in a department that gets along so cohesively. And to top it off the RAH covers a multitude of specialties so the ICU experience is priceless.

The work-life balance is perfect, giving me the time to explore both Adelaide, (currently working my way through cellar door bingo) and wider Australia (nearly all states checked, territories still to go!)

Adelaide is an excellent place to live; it’s such a friendly city with great restaurants and bars. It’s surrounded by gorgeous beaches and amazing wine country - why would you want to be anywhere else?

Australia is blessed with incredible variety; from the outback’s dry red deserts to the tropical rainforests of the east coast. You’d need a lifetime to explore it all but some of my travel highlights include:

- Sailing through the Whitsunday islands and diving the Great Barrier Reef; swimming with turtles, stingrays and sharks!
- Road-tripping up the West coast, bush camping and swimming with whale sharks in Ningaloo WA.
- Kangaroo Island is definitely my favourite though ... a best-bits mini Australia! Gorgeous beaches with white sand and crystal seas, wild kangaroos (obviously), koalas, echidnas and dolphins, beautiful wineries with delicious wine and amazing views!

Valerie

Before moving to Australia I finished my training in Anaesthetics and ICU in Belgium. After spending a year working and living in South Africa, I thought it'd be a good idea to get another experience abroad and so I packed my bags and came to Adelaide.

As convinced as I was that I came here to work, turns out that's just an excuse to get as much travelling done as is humanly possible. Certain rules must be followed, or not, depending on your level of adventuring. Night drives are good for seeing kangaroos from up close in the spotlight of your car, drives after night shift are good for sponsoring the caffeine industry, and camping in 40 degree weather will get you an AKI!

But look on the bright side, Australia has something to offer for everyone! Just on Adelaide's doorstep there is enough wineries to keep you going for a few years, lots of kayaking opportunities in Second Valley, the Coorong and even Port Adelaide, hiking around Deep Creek or Flinders Ranges, and definitely go to Kangaroo Island for a combination of all of the above.

But there's so much more, if you are willing to drive the distance! My favourites were definitely whale shark diving in Exmouth, the views in Tasmania, swimming through gorges in Karinjini National Park and sailing the Whitsundays!

Some advice that I would like to share though:

- It doesn't matter what SPF you use, just reapply often, and even Aussies get it wrong.
- As some consultant (whose name I won't mention) believes, vitamin B does not work against midges.
- You will not die in Coober Pedy! Unless you're blind and do manage to fall in a hole.
- You might get murdered in Salt Creek, do not go camping by yourself!
- If anyone would have died in Australia, it would've been me, so you are all good! Enjoy!

Laetitia

I moved to Australia in February 2017 after I have finished my training in anaesthesia in Belgium. My initial plan was to stay in Australia for one year and then go back home to start working in a hospital where I could do both anaesthesia and ICU.

Because of an unexpected change in my life, I decided to stay longer in Australia. I have been here for 1.5 years now and I am having the time of my life. The colleagues in ICU have been very supportive and I made friends for a lifetime.

I have never had so much time in my life to travel. I love living in this country. The people are lovely, the weather is great, the nature is awesome and I love my job.

My favourite places are: Cairns, Western Australia, Flinders Ranges and Tasmania. But to be honest, every place in Australia is unique and amazing. What I love about Adelaide is that it is one big town. Living here is not as expensive as Melbourne and Sydney and there are many stunning places close by: Barossa, Clare Valley, McLaren Vale, Port Noarlunga, Victor Harbour.

Thank you all for these precious memories.
SAICA is a not-for-profit association that oversees a number of educational courses in South Australia as well as promoting, encouraging and financially supporting educational and research activities in the area of Intensive Care Medicine.

It also awards travel scholarships to assist Intensive Care registrars and Honours/PhD students to present their research at international or national meetings.

Activities this year have included;
- upgrade of ALS resuscitation model (iSimulate) for QEH and FMC ICUs
- purchase of 2 cardiothoracic re-opening mannikins
- purchase of 2 ultrasound probes
- sponsorship of Echopraxis website upgrade
- sponsorship of Hot Case phone app for CICM trainees
- sponsorship of ICU Trainee Lecture Series day
- sponsorship of first Cardiac Advanced Life Support (CALS) Course to be held in South Australia
- Departmental Crit-Iq website subscription for ICU Registrars and Consultants
- Survey Monkey and Dropbox subscriptions
- financial assistance for the transport of obsolete equipment and supplies from the old RAH to areas in need in Papua New Guinea (see below)
- covering the cost of this Newsletter

Application forms for travel scholarships can be obtained by contacting;
Nick Edwards
C/- ICU, Royal Adelaide Hospital
chopper45@iprimus.com.au

When the old RAH closed in 2017, a considerable amount of medical equipment and supplies was not required in the new hospital and was donated in kind by the South Australian Government to interested organisations. SAICA was approached by Shila Paia, a PhD candidate at Flinders University, who established the Soil Child Program which aims to address poverty in remote communities in Papua New Guinea. Soil Child and its partnering organisations (Fulcrum Aid and Women in Development Foundation (PNG)) were keen to access some of the equipment, but there was no funding to actually transport it.

SAICA therefore agreed to donate funds for the purchase of a shipping container, land and shipping transport costs, and customs and other costs, to move the supplies from Adelaide to Lae Port in PNG, and then to health facilities in two provinces. In these provinces, there are 2 regional hospitals, 56 rural health centres and 158 community aid posts.

In addition, following an earthquake in the PNG Highlands earlier this year, a number of fundraisers gathered a large stock of blankets, clothes, toys and books. Accordingly, when the container was packed in August 2018, the remaining space was filled with these items.

The container has recently left Adelaide, and hopefully a shipment of this size will make a significant difference for those communities.

Upcoming Intensive Care Courses 2018 / 2019

SOUTH AUSTRALIAN INTENSIVE CARE FELLOWSHIP EXAM (TUB'S) COURSE
30 candidates. For ICU Registrars within 12 months of the CICM Adult Fellowship Examination.
Conducted over 3 days, with sessions on the written paper, vivas, investigation interpretation, paediatrics and hot cases (at 4 hospitals). There is little didactic teaching, with the focus very much on practical sessions and trial exams. Further information at http://www.icuadelaide.com.au/course_fellowship.html
Applications are closed.
Enquiries to Dr Nick Edwards, c/- ICU, Royal Adelaide Hospital.
Email: chopper45@iprimus.com.au

SOUTH AUSTRALIAN CICM PRIMARY EXAMINATION COURSE
1 course in 2019 (July) - dates to be confirmed.
24 candidates. For Registrars preparing for the CICM (or ANZCA) Primary examination.
Enquiries to Dr Mark Finnis, c/- ICU, Royal Adelaide Hospital.
Email: mark.finnis@adelaide.edu.au

SOUTH AUSTRALIAN CRITICAL CARE ULTRASOUND COURSE
6-7 September 2018. And March 2019 (date to be confirmed).
16 candidates. 2 day course on focussed cardiac, lung, abdominal and procedural ultrasound relevant to critical care.
Enquiries to Dr Michael Farquharson, C/- ICU, Royal Adelaide Hospital.
Email: michael.farquharson@sa.gov.au

BASIC ASSESSMENT AND SUPPORT IN INTENSIVE CARE (BASIC) COURSE
November 2018 and February 2019 (dates to be confirmed).
Enquiries to Dr Ken Lee, C/- ICU, Royal Adelaide Hospital.
Email: Kenneth.Lee@sa.gov.au

POSTOPERATIVE CARE OF THE CARDIOTHORACIC PATIENT (PCCP) COURSE
9 August 2018 and February 2019 (date to be confirmed).
An internal 1 day course for RAH Registrars who will be looking after cardiothoracic patients in the ICU.
Enquiries to Dr Jon Fraser, c/- ICU, Royal Adelaide Hospital.
Email: jdfraser62@gmail.com

CARDIOTHORACIC ADVANCED LIFE SUPPORT (CALS) COURSE
2 courses in November / December 2018 (dates to be confirmed). 6 courses per year.
14 candidates. 1 day course for RAH medical and nursing staff.
Enquiries to Dr Jon Fraser, c/- ICU, Royal Adelaide Hospital.
Email: jdfraser62@gmail.com
Some Recent Celebrations and Farewells

Contact

Any feedback about this Newsletter, or achievements/details you would like included in the next Newsletter, should be directed to Dr Nick Edwards (chopper45@iprimus.com.au).