Training and Research 2014/15

It is important to recognize the hard work and achievements of our staff in ICU.

In addition to our clinical work, we have continued to run highly successful teaching and research programs, and in this Newsletter we highlight some of these achievements over the past 12 months. We have also included a list of upcoming courses, the role of SAICA, travel logs from some of our registrars from overseas, and the imminent move to the new Royal Adelaide Hospital.

This 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 2014 to June 2015, we admitted 3606 patients into the 42 beds (2282 ICU, 1324 Step Down Unit). Of the ICU-level patients admitted during that time, about 21% were direct admissions following cardiac surgical procedures, 11% were trauma, 8% following thoracic surgery, 8% ‘sepsis’, and 7.5% pneumonia without sepsis. Drug overdose, cardiac arrest and ENT surgery accounted for 3% each. The major diagnostic categories for SDU admissions were following neurosurgical procedures (15%), GI surgery (13%), trauma (13%), and sepsis (7%). Operating theatres were the source of admission for 48% of our patients (51% non-elective surgery), 31% were admitted directly from the Emergency Department, 16% from the wards, and 5% were transferred directly from another hospital to our ICU.

The Unit currently has 42.5 Registrars on the roster (16 registered with the College of Intensive Care Medicine) from a variety of backgrounds and training programs, and with very different levels of experience and long-term goals.

http://www.icuadelaide.com.au
Congratulations to Mark Plummer who won the Matt Spence Medal in Melbourne last year at the Australian and New Zealand Intensive Care Society ASM for his paper, ‘Dysglycaemia in the Critically Ill and the Interaction of Chronic and Acute Glycaemia with Mortality’. This is awarded for the best registrar research presentation, and of the 6 finalists, 2 were from the RAH ICU. The other was Palash Kar, who presented, ‘Energy-Dense Feeds May Worsen Enteral Feed-Intolerance’.

Yasmine Ali Abdelhamid was presented (in absentia) with the Don Harrison Medal at the CICM ASM in Darwin for coming top of the CICM Fellowship Exam last year.

The Tub Worthley Travelling Scholarship was won by Palash in May this year. This is awarded for the best registrar research presentation at the annual South Australian ANZICS meeting. Other presenters of their research on the night included Sam Gluck, Mark Plummer and David Reid.

The 30th running of the Australian Short Course in Intensive Care Medicine was held in February this year, with 30 candidates from Australia and New Zealand (photo below). An enormous amount of work goes into the Course, with 30 faculty this year, including 12 from the RAH, 5 from interstate, and Yasmine Ali Abdelhamid, who flew in from Toronto. Hot Case practice sessions were held at the RAH, QEH, FMC and LMHS.

The annual RAH Primary Examination Course was brought forward to May in 2015, and was coordinated as usual by Mark Finnis. There were 24 candidates and a number of the RAH Intensivists were involved in the teaching.

The second South Australian Critical Care Ultrasound Course was held in February for 16 candidates, with another planned for September. It is a 2-day course on focused cardiac, lung, abdominal and procedural ultrasound relevant to critical care.

The first of the Trainee Lecture Series days was held at Ayres House in May, with 4 speakers including Prof Jack Iwashyna (Ann Arbor, Michigan) and Prof Andrew Bersten (FMC), and was attended by 32 registrars from across the State. Hao Wong, one of our Senior Registrars, chaired the event, and we hope to hold it 2 or 3 times a year.

The RAH BICMed Course was recently accredited by CICM as an introductory ICU Course, and can now be counted towards CICM training.

The first Postoperative Care of the Cardiothoracic Patient Course was held in June this year for ICU registrars at the RAH, and included sessions on the surgery itself and cardiopulmonary bypass (given by Justin Chan), common postoperative issues, haemostasis, monitoring, pacing, mechanical cardiac support, cardiac arrest in this group of patients, and scenario discussions. Feedback was very positive, and we plan to run it every 6 months.

We also conducted a BASIC Course at the RAH in November, with another planned for later this year.

A list of upcoming local ICU Courses is included at the end of this Newsletter.

http://www.icuadelaide.com.au

ICU Registrar Positions

If you are interested in a position as an Intensive Care Registrar at the RAH, further details are available at http://www.icuadelaide.com.au, or contact Dr Alex Wurm at Alex.Wurm@health.sa.gov.au.

If you are thinking about ICU as a career and would like to discuss your options, Dr Nick Edwards (chopper45@iprimus.com.au) and Dr Peter Sharley (peter.sharley@internode.on.net) are the ICU (CICM) Supervisors of Training at the RAH – and we are always happy to have a chat.
Research


http://www.icuadelaide.com.au
Royal Adelaide Hospital Intensive Care Unit


42. Deane AM, Guyatt GH. Primum non nocere and challenging conventional treatment Intensive Care Medicine 2015 Apr 14 [Epub ahead of print].


50. Deane AM and Horowitz M. Comment on: Is Incretin-Based Therapy Ready for the Care of Hospitalized Patients With Type 2 Diabetes? Diabetes Care 2014 Feb;37(2):e40-1.

http://www.icuadelaide.com.au

Book chapters 2014/2015

Attainment of PhD 2014/2015
Ben Reddi - ‘Vascular reactivity in sepsis and platelet dysfunction in septic shock'
Matt Maiden – ‘Tri-iodothyronine (T3) therapy in a pre-clinical model of septic shock’

Summary of other recent achievements
Nimmo Professor Prize awarded to the best presentation by a part-time Masters-level postgraduate student at the Royal Adelaide Hospital Alice O’Connell 2015 (Supervised by Arthas Flabouris)

Tub Worthley Travelling Scholarship Palash Kar 2015
Australian & New Zealand Intensive Care Society (ANZICS) Matt Spence Medal Mark Plummer 2014

Tub Worthley Travelling Scholarship Mark Plummer 2014
Florey Postgraduate Medical Research Prize Mark Plummer 2014

David Murray Prize for the student who has achieved the most outstanding final results in the Bachelor of Medical Science - Honours year Shane Selvanderan 2014

Nimmo Professor Prize awarded to the best presentation by a medical trainee at the Royal Adelaide Hospital undertaking full time research Mark Plummer 2014

Honours Students

http://www.icuadelaide.com.au
Current Research Funding

2012-17: NHMRC Centre for Research Excellence Grant
Title: Centre of research excellence in translating nutritional science to good health.
Value: $2,499,990

2015-19: NHMRC Project Grant Title: The Augmented versus Routine approach to Giving Energy Trial (TARGET)
Investigators: Chapman MJ, Peake S, Bellomo R, Horowitz M, Davies AR and Deane AM.
Value: $3,534,236

2015: Royal Adelaide Hospital Research Fund Project Grant
Title: The effect of critical illness on gallbladder motility, lipid absorption and plasma cholecystokinin concentrations.
Investigators: Plummer MP, Deane AM, Jones KL and Hausken T.
Value: $49,565

2015: Australian Society for Parenteral and Enteral Nutrition (AusPEN) Project Grant
Title: Nutritional status, nutritional intake and energy requirements in non-invasively mechanically ventilated critically ill adult patients – A pilot study.
Investigators: Yandell R, Yaxley A, Hodges C and Deane AM.
Value: $20,000

2015: Intensive Care Foundation Trainee Project Grant
Title: Gallbladder motility in critical illness.
Investigator: Plummer MP.
Value: $5,000

2015: Maurice Sando Foundation Grant
Title: A state-wide study to determine whether hyperglycaemia during critical illness identifies survivors at risk of subsequently developing diabetes.
Investigators: Plummer MP, Deane AM, Finnis ME, Shaw JE, Moodie S and Biradar V.
Value: $10,000

2015: Maurice Sando Foundation Sponsorship Scheme
Title: Psychological stress in intensive care survivors.
Value: $10,000

2015: Australian Society for Parenteral and Enteral Nutrition (AusPEN) Project Grant
Title: The provision of energy and protein in adults with moderate-severe traumatic brain injury: the relationship between nutrition provision and long-term outcomes.
Investigators: Costello L, Chapman M.
Value: $10,000

2014: Royal Adelaide Hospital Research Foundation, Clinical Project Grant
The effect of routine pantoprazole administration when compared to placebo on gastrointestinal bleeding, ventilator-associated pneumonia and Clostridium difficile infection in enterally-fed mechanically ventilated critically ill patients: A prospective randomised study.
Investigators: Plummer MP, Deane AM, Chapman MJ and Rayner C.
Value: $49,139

2014: Intensive Care Foundation Project Grant
Title: Intestinal GLP-2 as novel target in critical illness-induced malabsorption.
Investigators: Young RL and Deane AM.
Value: $50,900
Current Research Funding Scholarships

2014-16: Royal Adelaide Hospital AR Clarkson Scholarship
Investigator: Kar P. Value: $300,000

2014-17: NHMRC Early Career Fellowship
Title: The effects of acute and chronic hyperglycaemia on short and long-term outcomes in the critically ill.
Investigator: Deane AM. Value: $255,217

2014-15: NHMRC Postgraduate Scholarship
Title: Patient safety and therapeutic implications of a new glucose lowering agent for type 2 diabetes and high blood glucose states in the critically ill.
Investigator: Plummer MP. Value: $80,000

ICU Registrar involvement in Research

Registrars, and ICU 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 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.

We have had a number of winners of the Matt Spence Medal for the best registrar research presentation at the ANZICS Annual Scientific Meeting – including last 2 years!

South Australian Intensive Care Association (SAICA)

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.

This has been a busy year for SAICA, with activities including:

• awarding scholarships to Dr Mark Plummer (RAH ICU) and Dr Palash Kar (RAH ICU) to present their PhD research at the Intensive Care Society State of the Art Meeting in England in December 2014, and travel assistance to Dr Sam Gluck (RAH ICU) to also present at the same meeting

• sponsorship of research seminar - Critical Care and Gastrointestinal Disorders - coinciding with the visit of the 2014 Nimmo Professor (Prof Jan van Lanschot)

• covering the cost of this Newsletter!

Application forms for these scholarships can be downloaded from the RAH ICU website at www.icuadelaide.com.au/saica.html.

Any questions should be directed to;
Nick Edwards
C/- ICU, Royal Adelaide Hospital
Email: chopper45@iprimus.com.au

http://www.icuadelaide.com.au
START Foundation Ride for the RAH

Congratulations and thanks to Kerryn Harvey and the START Foundation for their successful ‘RIDE FOR THE RAH’.

Kerryn was an inpatient in the RAH ICU in 2013 after being knocked from her bike, and underwent 11 operations and spent nearly 3 months in hospital before returning home to Melbourne. She is the Founding Director of START, which raised $80,000 over the 5 weeks of a series of rides from Perth to Melbourne in April/May this year. Kerryn rode the whole 3602km herself, and Sonya Kloeden, one of our ICU RN’s rode the Ceduna to Adelaide leg. START have kindly donated $40,000 of this to the RAH Research Unit which will go toward the purchase of a peripheral Quantitative Computed Tomography scanner (pQCT).

Initially the pQCT will be used to measure muscle mass in critically ill patients to document muscle mass loss over time, with a number of studies utilising this information to determine whether different calorie intakes can improve not just patient survival rates, but also enhance functional outcomes, and thus reduce long term disability. The pQCT scanner will then be used in a number of other planned studies on improving functional recovery after critical illness.

If you would like to know more about START, you can find it at startfoundation.org.au.

Marathon Madness

In April this year, Paul MacLure, one of our ICU Registrars from the UK, completed (survived) the Marathon des Sables, a six-day, 251 km ultramarathon in the desert of southern Morocco. In doing this, he also raised money for the Les Bourgs Hospice in Guernsey where he grew up – and is grateful for the donations received from doctors and nurses on the Unit.

http://www.icuadelaide.com.au
Travel Stories from some of our ICU Registrars

Kristian
I was born in Bergen, Norway, where I also studied medicine. After moving around Norway for some years after medical school, I ended up in my wife's hometown, Stavanger. I received my specialty in anesthesia and intensive care in 2008 and went on to do some years of research followed by further ICU training in the Scandinavian post-specialty program. I have taken a leave of absence for 2015 from my position as an intensivist at Stavanger University Hospital in order to work at the RAH.

So far I have travelled to Cairns, which was a great place for exploring the reef and rainforest. I have also visited Kangaroo Island and Melbourne via the Great Ocean Road. My next planned trip is to Bali.

Niels
I'm a Belgian anaesthetist, just finished my training in Anaesthesia in Ghent, Belgium, and now doing my postgraduate training in Intensive care. My aim was to practice a year overseas, to finish my training in ICU and to experience a different way of working and living abroad. Because of the excellent work-life balance over here we are able to have a lot of days off, which translates itself in a lot of trips around Australia. My partner and I visited so far Kangaroo Island, Flinders Ranges, Lake Eyre, Sydney, Blue Mountains, Melbourne, Great Ocean Road, the Whitsundays and a lot of short trips around Adelaide.

We still have a huge bucket list to accomplish which includes Brisbane, Noosa and Fraser Island (July), Alice Springs + Uluru Rock (August), Darwin and Kakadu National Park (August), Cairns, Port Douglas, diving tour and Daintree Forest (September and November again), Perth and Margaret River (probably December) and Tasmania to finish in January.

Top 3 so far: 1) Whitsundays 2) Flinders Ranges 3) Kangaroo Island

Sofie
I was born in Hasselt, a city in the east of Belgium, and lived my whole life in a small adjacent village called Diepenbeek. When I was 21yo, I moved to Leuven (30km east of Brussels and home to AB InBev, the world's largest brewing group, making it the beer capital of Belgium) for my studies. Leuven also has one of the largest hospitals of Europe, Gasthuisberg, where I was working.

After my medicine studies, I spent most of my time there working as an anaesthesia registrar. The decision to come to Australia grew over the last couple of years but as we were only allowed to spend one year of our training in another hospital (which I already did), I decided to start training in intensive care medicine abroad instead of settling down already.

During my time here, I have already travelled to Tasmania, Brisbane, Noosa, Sydney, Melbourne, the Great Ocean Road, Flinders Ranges, Victor Harbour, the Barossa region, Kangaroo Island, Alice Springs with Uluru, Kata Tjuta, Kings Canyon, and to Port Douglas with a visit to the Great Barrier Reef and Daintree Rainforest. It's really hard to choose a favourite destination as everything is so diverse...

But I think the Red Centre gives me the best memories, maybe because it was a complete new experience to me, something I never saw before, one of my first big travels, the feeling of being in the middle of nowhere, hard to catch the expanse of nature ...

On my to do list, I still have for the next couple of months: driving in the NT top end, sailing the Whitsunday Islands and discovering Western Australia.

Jens
I grew up on a farm in Denmark and after internship, did 16 months Anaesthetic/ICU and 17 months Cardiology in Denmark. I came to Australia in October 2012 with my wife and 8 year old son on a tourist visa, and got a job as an ICU Registrar at Port Macquarie Base Hospital in Queensland. We then moved to Adelaide where I continued in ICU at the Royal Adelaide Hospital. RAH ICU has a great teaching program every week and all registrars have a professional development account that can be used for exams, courses and conferences. I have just finished 6 months as a Retrieval Registrar with MedSTAR, doing road, helicopter and fixed-wing retrievals, and am returning to RAH ICU in August to gain more experience.

There are heaps of places to see when working on a flexible roster. Guess my favourite place is the Great Barrier Reef followed by Sydney Harbour. A sailing trip to Manley Beach really ranks high. A year ago we experienced the outback driving Adelaide to Cooper Pedy and Uluru, returning to Adelaide via Alice Springs. Locally I often drive south to Sellicks Beach to swim followed by food at the historic Victory Hotel. On my way back to Adelaide I stock up on local produced olives and Shiraz from McLaren Vale.
Royal Adelaide Hospital Intensive Care Unit

**Paediatric Rotation**

The requirements for successful completion of the College of Intensive Care (CICM) training program changed for trainees joining after January 2014 – the details of which can be found on the CICM website. One of these changes is a requirement to gain some exposure to Paediatrics.

We have previously helped facilitate 6-month terms for our trainees in the Paediatric Intensive Care Unit at the Women and Children’s Hospital, and have recently formalized this link. The feedback from previous trainees has been very positive, and we strongly recommend it during the latter years of training. We also assist our trainees with the organization of their medical and anaesthetic terms, and now with rural placements.

**New RAH**

Construction of the new RAH is well underway, with the move to the new site planned for April/May 2016. The new site is still on North Terrace, and so remains in the heart of the city.

Costing over A$2.2 billion, the hospital will have 700 inpatient areas, consisting of 600 high acuity and acute recovery beds, 60 intensive care beds, and 40 mental health beds, and will be co-located with the new South Australian Health and Medical Research Institute.

The ICU will remain a mixed, general ICU and will open with 48 beds (4 pods of 12), with the capacity to expand to 60 in the future.

Further information can be found at

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**Christian**

I’m from Stockholm, Sweden. I’ve been working as a Specialist in Anaesthesia and Intensive care since 2012. I’m currently in the process of becoming a full-time intensivist. I will be sitting the EDIC (European Diploma in Intensive Care) in October this year. Main reason to come to RAH ICU was to gain some international experience, but it’s also an adventure for the whole family, my wife Linda + our 2 kids. We’re planning to stay in Adelaide for at least 1.5-2 years and are currently living in Henley Beach. So far we’ve mostly been around Adelaide but we’ve also visited Kangaroo Island and recently made it to the Great Barrier Reef up in Cairns. During the same trip we stayed a few nights in Brisbane and took the train down to the Gold Coast (Dreamworld theme park).

SOUTH AUSTRALIAN INTENSIVE CARE FELLOWSHIP EXAM (TUB’S) COURSE

February 2016 (Dates to be confirmed)
30-32 candidates. For ICU Registrars within 12 months of CICM Fellowship Examination.
Aimed at CICM trainees planning to sit the Fellowship Examination in the next 12 months, and is conducted over 3 days. It includes 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.
Applications open 8 September 2015.
Enquiries to Dr Nick Edwards, c/- ICU, Royal Adelaide Hospital.
Email: chopper45@iprimus.com.au

SA CICM PRIMARY EXAMINATION COURSE

4-8 July 2016
24 candidates. For Registrars preparing for CICM Primary Examination.
Enquiries to Dr Mark Finnis, c/- ICU, Royal Adelaide Hospital.
Email: mark.finnis@adelaide.edu.au

SOUTH AUSTRALIAN CRITICAL CARE ULTRASOUND COURSE

17-18 September 2015
16 candidates. 2-day course on focused cardiac, lung, abdominal and procedural ultrasound relevant to critical care.
Enquiries to Dr Michael Farquharson, c/- ICU, Royal Adelaide Hospital.
Email: michael.farquharson@health.sa.gov.au

BASIC INTENSIVE CARE MEDICINE (BICMED) COURSE

An introductory course for junior and general trainees rostered to the RAH ICU for 3-6 month rotations.
Runs over a 12 week cycle, repeating 4 times per year, with the intention of allowing all trainees rostered to the unit the opportunity to attend. The course is run on Friday afternoons from 15:00-17:00, with most sessions having a significant ‘hands-on’ component. Accredited towards CICM training.
Enquiries to Dr Alex Wurm, c/- ICU, Royal Adelaide Hospital.
Email: Alex.Wurm@health.sa.gov.au

BASIC ASSESSMENT AND SUPPORT IN INTENSIVE CARE (BASIC) COURSE

15-16 October 2015 (at Queen Elizabeth Hospital)
Enquiries to Dr Ken Lee, c/- ICU, Royal Adelaide Hospital.
Email: imipenam@yahoo.com

http://www.icuadelaide.com.au
POSTOPERATIVE CARE OF THE CARDIOTHORACIC PATIENT (PCCP) COURSE
February and August 2016 (Dates to be confirmed)
A 1-day Course for RAH Registrars who will be looking after cardiothoracic patients in the ICU.
Enquiries to Dr Nick Edwards, c/- ICU, Royal Adelaide Hospital.
Email: chopper45@iprimus.com.au

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).

http://www.icuadelaide.com.au