

## IN THIS ISSUE



*Simulation: Not just an Educational Tool*

• 2 •



*Faculty Development Workshops*

• 4 •

*Congratulations*

*Congratulations to our grant award winners!*

• 5 •

## Greetings from ACP Chair



Dear all,

This edition of the newsletter is helmed by the education pillar. Our faculty development series has been enhanced to incorporate the Quality Improvement Lecture Series and will eventually include research talks. On a separate note, the simulation group led by Shin Yuet has received a grant to organize customized simulation educator training (SIMSET) workshops for our ACP. They have just successfully completed their first run.

In March, we had our first "Pitch for Fund". Out of 10 applications from our junior researchers, 7 were selected to make oral presentations

to our panel of assessors from the research pillar. 4 junior researchers were awarded the ACP Pilot Research Grant for their projects. We will be showcasing some of their work during the upcoming ACP Academic Day on 30 June 2018. I would also like to congratulate Diana Chan, Singar and Hairil for their recent grants awarded by SingHealth Foundation and NMRC.

We are fortunate to receive a grant to establish our ACP QI repository which will allow us to track all the QI projects that we have embarked on in our departments. We can also share these initiatives across the departments to encourage collaborative QI efforts. The repository will enable faculty and residents to be aware of the quality improvement initiatives within the ACP, encourage participation of interested parties and perhaps spark new quality improvement initiatives. On the philanthropic front, Pain Medicine has been identified as an area of focus. It is also encouraging that the team has engaged our next generation to join us in our philanthropic effort. We look forward to your continued support and participation in our academic medicine journey!

**A/Prof Ruban Poopalalingam**  
ANAES ACP Academic Chair

## Words from ACP Vice Chair



ANAES ACP has grown since its formation 1.5 years ago, and education is still one of the priority for the ACP. For the past one year, we have started a number of initiatives, such as conducting the

monthly faculty development talks across SGH, KKH and CGH, and also our collaboration with AM.EI to customise a workshop just for the ACP.

As we strive to look for more innovative ways to engage our faculty in education, we also hope to build our own pipeline of future educators. You can look out for more customised workshops coming your way, including our very own ANAES ACP Simulation Educator Training workshop that was just recently conducted together with SingHealth Duke-NUS Institute of Medical Simulation.

**Prof Hwang Nian Chih,**  
ANAES ACP Academic Vice Chair (Education)

# Simulation: Not Just an Educational Tool

By Dr Chong Shin Yuet, Director, Simulation Training, ANAES ACP



“Everyone, I suspect this patient has Malignant Hyperthermia. Lorraine, can you go and get the MH cart? Circulating nurse, can you go and fetch the icepacks from the blood bank and the MH box from Recovery 2 fridge?”

“Ok, I am going to fetch the MH cart now, Dr. Wong!”

Malignant hyperthermia is thankfully a rare condition, but the patient’s outcome will depend on how quickly he receives dantrolene and whether the appropriate supportive measures are instituted expeditiously and effectively. Most of us will probably never encounter a case of MH in our entire anaesthesiology career, but if we do, we want to be prepared to be able to handle the crisis according to recognised guidelines, so that our patient will have the best possible outcome. Therein lies one of the most valuable roles of simulation training in anaesthesia, which is to enable us to practise the management of rare events that can occur in the operating theatre, without causing any harm to real patients.

Simulation has been incorporated into the curriculum of medical schools and residency programs worldwide. Education experts agree that simulation-based learning is the best method for bridging the gap between theory and practice. Just as we expect a pilot to be trained to handle all in-flight emergencies, our patients would feel similarly reassured that the anaesthesiologist has been equipped with both the technical and non-technical skills to manage perioperative crises competently. Therefore, our ACP Simulation Committee now run regular simulation workshops that involve senior anaesthesiologists and not just junior residents/ medical officers and medical students.



The focus of our simulation programme has also shifted from merely training our own anaesthesiology doctors and nurses to training interprofessional perioperative management teams comprising surgeons/ procedurists, anaesthesiologists, nurses, allied health professionals because studies have shown that non-technical skill failures in leadership and other teamwork related domains, rather than technical expertise or knowledge, are frequently identified root causes of operating room medical errors. We have been running monthly in situ Perioperative Crisis Team Training workshops and the feedback has been encouraging and positive. These workshops provide professionals from various disciplines the rare and invaluable opportunity to sit down and have an honest and frank discussion about teamwork and communication issues.

We have also been using simulation to prevent problems that could arise in real life by identifying latent threats in our healthcare delivery system during our in situ simulation workshops. Recent examples include an inaccessible location for the MH cart such that retrieval would take an inordinate length of time; and the defibrillation machine being kept separately from the crash cart such that two separate trolleys had to be pushed to the resuscitation location instead of just one. We have been working closely with the Clinical Services and Quality Committee, which implements measures to mitigate or remove these latent threats. Reciprocally, the CSQ Committee feeds us real life critical incidents on which we then base our simulation scenarios on, as these are the scenarios that would be most relevant to our staff. In fact, simulation has been shown to be useful in root cause analysis of critical events.

Moving forward, we hope to use simulation to solve problems that we encounter in our clinical practice. As our simulation programme matures, we hope to do more of translational simulation. The term translational simulation describes healthcare simulation focused directly on improving patient care and healthcare systems, through diagnosing safety and performance



issues and delivering simulation-based intervention. For example, we have identified that patients are not receiving adequate and timely analgesia in the PACU because there are not enough nurses who are deemed qualified to administer nurse-controlled analgesia (NCA). We hope to increase the number of nurses who are permitted to give opioid analgesics through the use of simulation training. This will ensure that patients receive timely and appropriate analgesia, without compromising their safety.



We are also working on faculty development among our simulation educators, as the quality of our simulation training is dependent on the quality of the debriefing. Our faculty have attended several workshops in recent months

e.g. 'Advanced Scenario Writing' and Advanced Debriefing' by Dr Michael Seropian, and most recently, "Yoda Conversations: Debriefing Difficult Situations" by Prof Ian Curran. Some of our faculty are also working towards obtaining the Certified Healthcare Simulation Educator (CHSE) qualification awarded by the Society of Simulation in Healthcare.

Simulation-based research is another area we hope to develop further in the coming months. We have some exciting ideas and enthusiastic faculty who are interested in education research. An invited expert from UK, Dr Gabriel Reedy, shared his experience and gave us many useful tips at a recent workshop on simulation-based research in April.

All this would not have been possible without the support of our ACP Chair & Vice-Chairs, the roster planners of all the Singhealth Anaesthesia Departments (who set aside protected faculty and learner time) and our colleagues. When they come up to tell us that our simulation training has helped them become better at crisis management, or that they applied what they learnt during a real-life crisis, it makes our efforts meaningful and worthwhile.

## Singapore National Airway Programme

25 - 26 August 2018,  
Saturday to Sunday  
7.30am to 5pm | Academia

### COURSE OBJECTIVES

To ensure hands on basic airway training to all, and hands on familiarization of advanced airway techniques to the more experienced practitioners.

### WHO SHOULD ATTEND

All medical practitioners interested in hands on airway management.

The course is partitioned in such a way that relevant hands on training can be applied to various levels of training and various medical disciplines.



## SIMULATION ACTIVITIES IN ANAES ACP

### Singapore General Hospital

- Perioperative Crisis Team Training In-Situ Simulation Workshops
- New Medical Officer Crisis Training
- SGH Baxter Anaesthesia & SIM workshop
- Simulation Training for Exam
- Simulation OSCE (Orientation Module) for R1 Residents

### KKH Women's Anaesthesia

- Core Obstetric Training
- Obstetrics Crisis Simulation for R3 residents

### KKH Paeds Anaesthesia

- Sedation workshop
- R2 Simulation sessions
- Multidisciplinary Trauma Mock Code
- In-situ OT simulation
- Workflow simulation

### Changi General Hospital

- Cadaveric Advance Airway Workshop
- ARMOR (AiRway Management for Resident) series
- Level 1 Simulation for Anaesthesia R1 residents
- ACTION (Anaesthesia Crisis Training in OR Novices)
- Ultrasound for Vascular access and FAST ICU In-situ simulation

### Combined Activities

- SHARP R1 and R3 Simulation Workshops
- SIM Challenge (*Nationalwide simulation competition for all 3 Anaesthesiology Residency Programs from SingHealth, NUH and NHG*)

# REGISTER BY 11 JULY

For Registration and enquiries,  
please visit:  
[www.singhealthacademy.edu.sg](http://www.singhealthacademy.edu.sg)  
or email:  
[sims.sssc@singhealth.com.sg](mailto:sims.sssc@singhealth.com.sg)

# ANAES ACP Faculty Development Workshops



By A/Prof Soh Chai Rick, Academic Deputy Vice Chair (SGH), ANAES ACP

The education group organized a half-day faculty development workshop in March this year. The workshop was led by Professor Sandy Cook, Senior Associate Dean and Deputy Head, Office of Education in the Academic Medicine Education Institute. She was assisted by our faculty which included Dr Negar Asadi, Dr Evangeline Lim, A/Professor Ong Biau Chi, Dr Leong Choy Kuen and Dr Tan Kian Hian. During the first

half of the morning, participants were introduced to the key elements on how to craft MCQs for the MMED exams. Using MMED-type questions, participants learnt about blue printing and how questions could be revised to improve their reliability and validity. The second half of the morning was devoted to learning about how to beef up the academic portfolio. Professor Cook shared her experience on what academic promotion panels looked for in candidates presenting for promotion. For the second half of the year, the ACP education group will be organizing an introductory qualitative research course. Additional details will be released closer to date.

## UPCOMING FACULTY DEVELOPMENT TALKS

Month	Date	Venue	Topic	Speaker
May	2 May (Wed) 7.15am	KKH OT Seminar Room Women's Tower, Level 2	Mentoring	Farida Ithnin
	3 May (Thurs) 7.15am	SGH Anaesthesia Conference Room		
	14 May (Mon) 7.30am	CGH Boardroom, Level 2 (Beside the U-Clinic)		
June	6 June (Wed) 7.15am	KKH OT Seminar Room, Women's Tower, Level 2	Root Cause	Annellee
	7 June (Thurs) 7.15am	SGH Anaesthesia Conference Room	Analysis (RCA)	Camet
	18 June (Mon) 7.30am	CGH Boardroom, Level 2 (Beside the U-Clinic)		
July	4 July (Wed) 7.15am	KKH OT Seminar Room, Women's Tower, Level 2	OT Management	Aaron Lee
	9 July (Mon) 7.30am	CGH Boardroom, Level 2 (Beside the U-Clinic)	Unit / Systems	
	18 July (Wed) 7.15am	SGH Anaesthesia Conference Room		

# Congratulations!

We congratulate all our doctors who have been awarded the following grants!

## ANAES ACP Pilot Research Grant 2018

**DR LEE YI LIN**

**Project Title:** Can the use of ear plugs and eye masks help to improve sleep quality after major surgery in the monitored postoperative unit?

**DR JOLIN WONG**

**Project Title:** Smartphone app versus physician based preoperative assessment: a prospective observational pilot study

**DR RODERICA NG**

**Project Title:** The use of pre-operative urine protein:creatinine ratio for early identification of the at-risk acute kidney injury patient undergoing cardiac surgery

**DR JASON CHAN**

**Project Title:** Autoantibody profile in postnatal depression

**DR JASON CHAN**

**Project Title:** Investigating pain outcomes after Caesarean (POC) delivery: a prospective cohort study

## ACP Programme Funding - FY18 Cycle 1

CLINICAL INNOVATION SUPPORT

**A /PROF SNG BAN  
LEONG**

**Project Title:** The use of preoperative Virtual Reality to reduce anxiety and pain on gynaecologic patients undergoing surgery

EDUCATION SUPPORT

**DR CHONG SHIN  
YUET**

**Project Title:** Customised simulation educator training workshop for Anaesthesiology ACP for faculty, residents and nurses (SIMSET)

CLINICAL INNOVATION SUPPORT

**DR ONG YEE YIAN &  
DR LEE YI LIN**

**Project Title:** Controlled Medicine Access and Management System (CMAMS)

SingHealth Foundation - Special  
Category  
(HSR - Health Outcomes)

**DR HAIRIL RIZAL**

**Project Title:** Predicting postoperative morbidity in adult elective surgical patients using the CARES surgical risk prediction model

SingHealth  
Foundation Grant

**DR NAGARAJAN  
SINGARASELVAN**

**Project Title:** Development of advanced double intravenous vasopressor automated (ADIVA) system with improved hemodynamic trend control during spinal anaesthesia for Caesarean section

NMRC Research  
Training Fellowship

**DR DIANA CHAN**

**Project Title:** Regulation of Chronic Pain and its co-morbidities by targeting intraseptal nerve growth factor (NGF) pathways and synaptic mechanisms in the forebrain medial septum