



# NEWSLETTER

2018 Edition



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Joining us



## **New members in 2017**

Dr Karen Ka Yan Leung from University of Hong Kong  
Prof Naoki Shimizu from Tokyo Metropolitan Children's Medical Centre  
Dr Tadashi Kodani from Tokyo Metropolitan Children's Medical Centre  
Dr Au Cheuk Chung from Queen Mary Hospital  
A/Prof Cheung Hon Ming from Prince of Wales Hospital  
Dr Wong Chin Pang from Prince of Wales Hospital  
Dr Chuah Soo Lin from University Malaya Medical Centre  
Dr Chong Shu Ling from KK Women's and Children's Hospital  
Dr Fan Li Jia from National University Hospital

## **New members in 2018**

Dr Maznisah Mahmood from Hospital Kuala Lumpur  
Dr Hiroshi Kurosawa from Kobe Children's Hospital  
Dr Atsushi Kawaguchi from CHU Sainte Justine Research Center  
Prof Lu GuoPing from Children's Hospital of Fudan University  
Dr Zhu Xuemei from Children's Hospital of Fudan University  
Dr Ming Meixiu from Children's Hospital of Fudan University  
A/Prof Tang Swee Fong from Universiti Kebangsaan Malaysia Medical Centre

# A Message from our Chairperson ...



Since our last meeting in Singapore at the 9<sup>th</sup> World Congress of Pediatric Intensive and Critical Care Societies, our network has been keeping busy with 3 main studies: (1) pediatric acute respiratory distress syndrome (PARDS); (2) pediatric severe sepsis and septic shock; and (3) pediatric traumatic brain injury (TBI).



Dr Lee Jan Hau  
PACCMAN Chairman

As a very young network, we have done well for our first PACCMAN's study on PARDS. Data collection across 10 centres were completed in a timely manner and we have already published our findings in two articles in two peer-reviewed journals (Judith Wong et al; *Critical Care Medicine* and Gan Chin Seng et al; *Pediatric Critical Care Medicine*). One other manuscript is being considered for publication and we are currently working on submitting another manuscript to be submitted by end of the year. The data that we contributed as a network in PARDS across the region would not have been possible without the commitment from the members of the network.

The other two studies on severe sepsis/septic shock and pediatric TBI, led by Dr. Rujipat Samransamruajkit, Thailand and Dr. Chong Shu Ling, Singapore are making steady progress. Each of them provided a brief update on the studies in this newsletter.

I managed to attend the Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) meeting in Boston in September 2018. At the meeting, I presented the progress made by PACCMAN and proposed the potential for collaboration between our network with PALISI. The executive committee and members of PALISI are excited about this potential collaboration and we will be discussing on this at our 3<sup>rd</sup> PACCMAN meeting that will be held on 24<sup>th</sup> March 2019 at Surakarta, Indonesia. This PACCMAN meeting will be held in conjunction of the 2<sup>nd</sup> Asian Pediatric Mechanical Ventilation Forum (21<sup>st</sup> – 23<sup>rd</sup> March 2019). Do make plans to attend the forum and our annual meeting. We will be discussing on how PACCMAN can send members to PALISI meetings regularly to ensure collaboration on new projects starts and continues as well as to hear updates from studies across the region.

I wish everyone a Happy and Blessed Holiday Season ahead. We have had a busy year and I sincerely look forward to the increasing role that PACCMAN will play in providing important data from Asia in pediatric critical care medicine. Please do write to me or your vice-chairpersons, Dr. Rujipat Samransamruajkit and Dr. Phan Huu Phuc if you have ideas on how PACCMAN can contribute to improving pediatric critical care in the region.

A handwritten signature in black ink, which appears to read 'Jan Hau Lee'. The signature is stylized and fluid.

Jan Hau LEE  
MBBS, MRCPCH, MCI

# ***Note from our Scientific Chair...***



Research in critically ill children is becoming a standard of care reflecting the maturation of pediatric critical care as a medical subspecialty. Children and families have derived benefit from advances in biomedical science and services with improved survival from all types of medical/surgical conditions.

Amidst declining research funding and greater regulatory hurdles, other challenges faced by pediatric critical care researchers include the small number of children with serious diseases, the need to adjust protocols and outcomes for children of different physical/ cognitive/ emotional ages, and the complexities of parental involvement and consent in this stressful environment. Nevertheless, medical advancement is accelerating and keeping abreast will require paediatricians to abandon adult research generalisation and extrapolation methodology.

With the aim of improving outcomes in critically ill children through research, PACCMAN is dedicated to develop synergistic collaborations. The pediatric acute respiratory distress syndrome (PARDS) study involving ten Asian PICUs was completed in 2017 and is poised to generate data not only for validation of the Pediatric Acute lung Injury Consensus Conference PARDS definition, but for evaluating the clinical differences between pulmonary and extra-pulmonary PARDS, the use of high-frequency oscillatory ventilation and non-invasive ventilation. This study has given us great insight to the epidemiology and management of PARDS in Asia. The study protocol is currently being modified to become an on-going PARDS registry to facilitate future trials. Adopting, standardised best practices in mechanical ventilation particularly in subjects susceptible to ventilator induced lung injury, the network will be better geared to facilitate interventions.



With the aims of determining the clinical presentation, risk factors, management and outcomes of pediatric sepsis and septic shock, the Pediatric Sepsis Asian Collaboration (PEDSAC) in collaboration with PACCMAN was initiated in November 2017 and is currently recruiting. Indeed, sepsis epidemiology in Asia is unique this study will put Asia up to speed to tackle problems/ controversies such as anti-microbial resistance and hopefully molecular host-pathogen interactions in the future. PACCMAN is also strategically studying pediatric traumatic brain injury from emergency room presentation through to intensive care. Interventional opportunities to improve outcomes for this time-sensitive devastating injury extend beyond the PICU setting. Appropriately, bringing evidenced-based neurocritical care to the emergency room could potentially impact neurological recovery.

The success of PACCMAN is highly dependent on the commitment of members to remain pro-active and inclusive. We have a strong representation from 35 members at 22 centers across Asia. Impactful research requires intense focus, strong mentorship and willingness to seize opportunities for scientific growth. In our infancy, learning from established networks like Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) and Australian and New Zealand Paediatric Intensive Care (ANZPIC) may be critical. It remains our hope that tailored regional evidence derived from PACCMAN would add knowledge and change practice globally.



*Dr Judith Wong  
PACCMAN Scientific Lead*

# Study Updates 1 ...



## **Paediatric Traumatic Brain Injury (pTBI) Study 1: Retrospective design**

**Title: Variation in intensive care practices for moderate to severe traumatic brain injury: A multi-national initiative**

Paediatric head injuries are critically important because of the high mortality risk. Among survivors, the potential for lifelong neurological devastation could result in years of compromised quality of life and dependence on others for activities of daily living. A significant proportion of severe paediatric head injuries occur in Asia, yet surveillance in this region remains inadequate.

We intend to perform a retrospective chart review performed in participating PACCMAN centres between Jan 2014 to 31 October 2017. The following will be recorded: Primary mechanism of injury, results from the computed tomography (CT) brain and type of neurosurgical intervention. Management of TBI: Endotracheal intubation, use of hyperosmolar therapy, anti-epileptics, sedative and paralytic medications, and temperature control. Among those with intracranial monitoring, intracranial pressure (ICP) and cerebral perfusion pressure (CPP) values will be documented. The primary outcome measures are: Mortality, Duration of ICU and hospital stay, functional outcome after discharge.

As per today, KK Women's and Children's Hospital, National University Hospital, University Malaysia Medical Centre, Children's Hospital of Chongqing Medical University, Sarawak General Hospital and Children's Hospital of Fudan University have entered the data entry with altogether **107** cases.





## **Paediatric Traumatic Brain Injury (pTBI) Study 2: Prospective design**

**Title:** Does 3% hypertonic saline decrease mortality and improve long-term neurological outcomes among children with traumatic brain injury?

### *Objectives and Hypotheses:*

We aim to compare 30-day mortality risk among children < 16 years with moderate to severe traumatic brain injury (TBI) treated with 3% hypertonic saline (HTS), compared to mannitol.

We hypothesize that the use of HTS compared to mannitol, after adjusting for injury severity and concomitant medications, will result in a 12% decreased risk of mortality.

We aim to compare neurological outcomes using the 3-month Extended Glasgow Outcome Scale (GOS-E Peds) among children < 16 years with moderate to severe TBI treated with 3% HTS, compared to mannitol.

We hypothesize that the use of HTS compared to mannitol, after adjusting for injury severity and concomitant medications, will result in a 10% higher proportion of children with good outcomes (GOS-E Peds 1-3).

### *Methodology:*

**Design and Setting:** This is a prospective observational multicentre study across different intensive care units (ICUs) in the Pediatric Acute & Critical Care Medicine Asian Network (PACCMAN) between July 2018 and June 2020.

**Inclusion and Exclusion criteria:** We will include all children < 16 years with moderate to severe TBI (Glasgow Coma Scale [GCS]  $\leq 13$ ) admitted to the pediatric ICU. Children with minor head injuries will be excluded.

**Variables:** Demographics, mechanism of injury, presenting GCS, injury severity score, computed tomography brain finding, time of first administration of hyperosmolar therapy, use of sedative and paralytic medications, hyperventilation, temperature control, and neurosurgical intervention will be documented. The main clinical outcome measures are 30-day mortality and 3-month GOS-E Peds.

## Words from the study PI ---

### Major accomplishments for both the retrospective and prospective studies



Dr Chong Shu-Ling  
pTBI study PI

With both TBI studies, we hope to understand the variation in TBI management for paediatric patients in Asia. While HTS has been demonstrated to reduce intracranial pressure, it has not been proven to improve clinical outcomes among head-injured children. The latter is recognised as an important research priority by the international community. This study has the potential to contribute to best practices in TBI management.

**IMPORTANT  
NOTICE**



**We are still  
recruiting for the  
2 studies!**

To join, please contact Dianna  
([Dianna.Sri.Dewi@kkh.com.sg](mailto:Dianna.Sri.Dewi@kkh.com.sg)) and Dr  
Chong Shu-Ling ([Chong.Shu-Ling@kkh.com.sg](mailto:Chong.Shu-Ling@kkh.com.sg)).

# Study Updates 2 ...



## PEDSAC- A Retrospective Epidemiologic study in Paediatric Sepsis in Asia



Dr Rujipat Samransamruajkit  
Study PI

The study lead by Dr Rujipat Samransamruajkit from King Chulalongkorn Memorial Hospital aims to look at the clinical presentations, risk factors and management of paediatric sepsis & septic shock in Asia.

Current recruitment is at 125 patients. 75 more patients to go before the preliminary analysis.

### Sites pending agreement & ethics approval ...

s/n	Site	Country
1	Prince of Wales Hospital	Hong Kong
2	Siriraj Hospital	Thailand
3	Ramathibodi Hospital	Thailand
4	Prince Songklanacharin University Hospital	Thailand
5	Maharaj Nakorn Chiang Mai	Thailand
6	The National's Children Hospital of Vietnam	Vietnam
7	Pediatric Critical Care Medicine- Kobe Children’s Hospital	Kobe, Japan
8	Aichi Children's Health and Medical Center, Japan	Japan
9	University Kebangsaan Malaysia Medical Centre	Malaysia



## Recruitment to date ...

s/n	Site	Country	Recruitment
1	King Chulalongkorn Memorial Hospital	Thailand	45
2	Hat Yai Medical Center	Thailand	15
3	Sarawak Hospital	Malaysia	24
4	KK Women's and Children's Hospital	Singapore	41
5	National University Hospital	Singapore	Just approved; Ready to start
TOTAL			125



## Great Work!

Please continue to recruit.  
Hope to have the pending  
site join force soon...

# ***Publications ...***



## **Risk Stratification in Pediatric Acute Respiratory Distress Syndrome: A Multicenter Observational Study.**

Wong JJ, Phan HP, Phumeetham S, Ong JSM, Chor YK, Qian SY, Samransamruajkit R, Anantasit N, Gan CS, Xu F, Sultana R, Loh TF, Lee JH; Pediatric Acute & Critical Care Medicine Asian Network (PACCMAN).

*Crit Care Med.* 2017 Nov;45(11):1820-1828. doi: 10.1097/CCM.0000000000002623.

## **Differences Between Pulmonary and Extrapulmonary Pediatric Acute Respiratory Distress Syndrome: A Multicenter Analysis.**

Gan CS, Wong JJ, Samransamruajkit R, Chuah SL, Chor YK, Qian S, Anantasit N, Feng X, Ong JSM, Phuc PH, Phumeetham S, Sultana R, Loh TF, Lum LCS, Lee JH; Pediatric Acute and Critical Care Medicine Asian Network (PACCMAN).

*Pediatr Crit Care Med.* 2018 Oct;19(10):e504-e513. doi: 10.1097/PCC.0000000000001667.



## Oral Presentations by Our Members

- **46th Critical Care Congress January 21-25, 2017** — Dr. Judith Wong from PACCMAN presented on *“Epidemiology of Pediatric Acute Respiratory Distress Syndrome in Asia: A Multicenter Study”*.
- **46th Critical Care Congress January 21-25, 2017** — Dr. Li Jia presented on *“Risk Stratification in Pediatric Acute Respiratory Distress Syndrome: A Multicenter Study”*.
- **28th Annual Meeting of the European Society of Paediatric and Neonatal Intensive Care (ESPNIC 2017) in Lisbon, Portugal, from 6-9 June 2017** — Dr. Rujipat Samransamruajkit gave a presentation on *“Outcomes of extrapulmonary Pediatric ARDS”*.
- **9<sup>th</sup> World Federation of Pediatric Intensive and Critical Care Societies Congress (WFPICCS 2018) in Singapore, from 9-13 June 2018.**
  1. Dr. Qian Suyun gave a talk on *“Pediatric Lung Health and the Need for Clean Air”*.
  2. Dr. Judith Wong was awarded the Pediatric Critical Care Medicine (PCCM) Early Investigator and In-Training Award for her oral presentation, *“High Frequency Ventilation in Pediatric Acute Respiratory Distress Syndrome: A Propensity Score Adjusted Study”*.
  3. Dr. Zeng JianSheng gave a presentation on *“Non-Invasive Ventilation in Children with Pediatric Acute Respiratory Distress Syndrome”*.

# Upcoming Events ...



**Abstract submission opens!**  
Deadline: 1 Feb 2019

For more information, please refer to the link, <http://2ndapmvforum2019.com/>

## Registration Fee:

WORKSHOP						
PCW 1-4 FOR DOCTORS			PCWN 1-2 FOR NURSE			
Type	Early Bird until 31 Dec 2018	Late 1 Jan - 20 March 2018	Type	Early Bird until 31 Dec 2018	Late 1 Jan - 20 March 2018	
Specialist	Rp 2,000,000	Rp 2,500,000	Nurse	Rp 1,850,000	Rp 2,350,000	
GP/Student	Rp 1,850,000	Rp 2,300,000				

  

THE 2 <sup>ND</sup> ASIA PEDIATRIC MECHANICAL VENTILATION FORUM (APMVF) 2019			
Type	Early Bird until 31 Dec 2018	Late 1 Jan - 20 March 2018	On Site 21-23 March 2019
INDONESIAN			
Specialist	Rp 3,000,000	Rp 3,500,000	Rp 4,000,000
GP/Student/Murse	Rp 2,500,000	Rp 3,000,000	Rp 3,500,000
INTERNATIONAL			
Specialist	Rp 3,500,000	Rp 4,000,000	Rp 4,500,000
GP/Student/Murse	Rp 3,000,000	Rp 3,500,000	Rp 4,000,000

## Program at a glance:

PRE CONGRESS WORKSHOPS Thursday-Friday, 21-22 March 2019		PRE CONGRESS WORKSHOPS FOR NURSE Thursday, 21 March 2019	
<b>PCW 1</b> Difficult Airway Management in Critically Ill Children		<b>PCWN 1</b> Basic Mechanical Ventilation in Children	
<b>PCW 2</b> Non-Invasive Ventilation in Children		<b>PCWN 2</b> Nursing Care for Children with Mechanical Ventilation	
<b>PCW 3</b> High Frequency Ventilation in Children			
<b>PCW 4</b> Monitoring of Mechanical Ventilated Children: What Should We Know?			

  

THE 2 <sup>ND</sup> ASIA PEDIATRIC MECHANICAL VENTILATION FORUM (APMVF) 2019		
DAY 1 Friday, 22 March 2019	DAY 2 Saturday, 23 March 2019	DAY 3 Sunday, 24 March 2019
Opening Ceremony Plenary Session Symposia Free Paper  Poster Presentation & Exhibition	Meet The Experts Plenary Session Symposia Lunch Symposium Free Paper  Poster Presentation & Exhibition	The 3 <sup>rd</sup> Pediatric Acute and Critical Care Medicine Asian Network (PACCMAN) Meeting 2019



For more information, please refer to the link, <http://sg-anzics.com/>

## Important dates to note:

- ❖ Abstract Submission Opens: 30 September 2018
- ❖ Abstract Submission Deadline: 31 December 2018
- ❖ Registration for Early Bird Opens: 15 December 2018
- ❖ Early Bird Deadline: 28 February 2019
- ❖ Registration for Regular Rate: 1 March 2019
- ❖ Online Registration closes: 12 April 2019

## Registration Fee:

REGISTRATION TYPES	DAY – PASSES (Day 1 or Day 2)	Early Bird (Until 28 February 2019)	ISRRS 2019 Delegates* Early Bird (Until 28 February 2019)	Regular Rates (From 1 March 2019 to 12 April 2019)	ISRRS 2019 Delegates* Regular Rates (From 1 March 2019 to 12 April 2019)	Onsite/Late (From 13 April 2019 onwards)
Doctors	SGD 650	SGD 800	SGD 640	SGD 850	SGD 720	SGD 1,200
Nurses/Allied Healthcare	SGD 400	SGD 550	SGD 440	SGD 650	SGD 550	SGD 1,000
**Students – Medical/Nursing/Allied Health	SGD 250	SGD 350	SGD 280	SGD 400	SGD 340	SGD 1,200
Trainee Doctors	SGD 550	SGD 600		SGD 650		SGD 1,200
Doctors - *Low Income and Lower Middle Income Level Countries	N.A.	SGD 550		SGD 600		SGD 1,200
Nurses - *Low Income and Lower Middle Income Level Countries	N.A.	SGD 350		SGD 350		SGD 1,200
Gala Dinner	SGD 180	SGD 80		SGD 90		
Accompanying Person	SGD 180					



# Past Events ...



## ***Pediatric Acute & Critical Care Medicine Asian Network (PACCMAN) Inaugural Group Meeting, April 2017***

PACCMAN (Pediatric Acute & Critical Care Medicine Asian Network), a collaborative research network formed by pediatric intensive care providers held their first group meeting on 22 April 2017 at KK Women's and Children's Hospital.

During the meeting, Dr. Lee Jan Hau, PACCMAN Chairman, gave a brief introduction about PACCMAN and also discussed the constitution governing the network with the members. Dr. Judith Wong from KKH did an update on the current PACCMAN studies. The feasibility of 3 other potential studies by Dr. Rujipat (King Chulalongkorn Memorial Hospital), Dr. Gan Chin Seng (University Malaysia Medical Centre) and Dr. Naoki Shimizu (Tokyo Metropolitan Hospital) was also discussed during the meeting.



The team in 2017



Chillaxing after the meeting

## 2<sup>nd</sup> Pediatric Acute and Critical Care Medicine Asian Network (PACCMAN) Group Meeting, June 2018

In conjunction with the 9th Congress of the World Federation of Pediatric Intensive & Critical Care Societies (WFPICCS 2018), the Pediatric Acute and Critical Care Medicine Asian Network (PACCMAN) held their 2<sup>nd</sup> annual group meeting on 9 June 2018 at the Suntec Singapore Convention & Exhibition Centre.

The PACCMAN group meeting consists of 2 sessions; the first session is a scientific forum open to all. The speakers from Australia and USA share with the team about their experiences in running a pediatric trial and registry. After which, the PACCMAN team presented the status of the current and upcoming PACCMAN studies.

The second session is a closed meeting attended by PACCMAN members only. At the meeting, new members were being introduced to the team. Issues about the studies and suggestions on the running of the network were also discussed.



PACCMAN 2<sup>nd</sup> Annual Group Meeting



Dr Lee Jan Hau, PACCMAN chair opening the meeting



Dr Vinay Nadkarni from USA teaching how to design a pediatric resuscitation trial



# Join Us ...



To become one of us, please go to:

<https://www.scri.edu.sg/crn/pediatric-acute-critical-care-medicine-asian-network/members/> to download the registration form. Kindly submit the completed form to [patricia.tay@scri.edu.sg](mailto:patricia.tay@scri.edu.sg).

If you have any feedback or would like to feature updates from your country in the PACCMAN newsletter, kindly write to Ms Patricia Tay, PACCMAN secretariat, at [patricia.tay@scri.edu.sg](mailto:patricia.tay@scri.edu.sg).

