

# PAROS BULLETIN



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<http://www.scri.edu.sg/PAROS.html>

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Trial  
Coordinating  
Centre:



## PAROS EXECUTIVE COMMITTEE [April 2010 – April 2013]

Chair: Marcus Eng Hock ONG
Co-Chair: Matthew Huei-Ming MA
Co-Chair: Sang Do SHIN
Co-Chair: Hideharu TANAKA
Member: Ridvan ATILLA
Member: Ian JACOBS
Member: Kentaro KAJINO
Member: Muhammad Naeem KHAN
Member: Pairoj KHRUEKARNCHANA
Member: Nalinas KHUNKHLAI
Member: Patrick Chow-In KO
Member: Kyung Won LEE
Member: Benjamin LEONG
Member: Sam LIM
Member: Chih-Hao LIN
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Member: NIK Hisamuddin
Member: Tatsuya NISHIUCHI
Member: Cem OKTAY
Member: SARAH Abdul Karim
Member: THAM Lai Peng

## Welcome Note from the CHAIRMAN

It began as a dream to start the first EMS-centered Clinical Research Network in Asia. My heartfelt thanks to all of you who made this dream a reality. Today, PAROS has been launched and our infrastructure is slowly but surely being built.

With this, it's my great pleasure to present to you the inaugural issue of the quarterly **PAROS BULLETIN**.

Sincerely,

Marcus



Dr Marcus Ong

[Photo by Dr Goh E Shaun]

## PAROS Open Meeting – 9 Jun 2010



After some shepherding, a group photo taken at the end of the meeting. [Photo by Dr Goh E Shaun]

Facing close to 70 attendees at the Open Meeting, presenters took turns to talk on the rostrum in the cosy Meeting Room 309 at Suntec City Convention Centre. Each either gave an introductory talk, an educational talk or presented a study proposal. The nine new study proposals were the highlight of the meeting and ranged from Out-of-Hospital Cardiac Arrests (OHCA), Emergency Medical Services (EMS) Systems, to surveys of the EMS and Emergency Department (ED).

Upon closure of the meeting, participants wasted no time to delve into intellectual discussions and busied themselves with establishing and re-establishing relationships – evident from the endless rounds of bear hugs, handshaking and exchanges of name cards. In no time, the twelve neat rows of velvety red chairs were in disarray. It took three calls over the PA system to suspend the networking (albeit reluctantly) and gather the

crowd for a group photo. The meeting ended on a collegial note and for many, it will be remembered as one that forged new ties amongst the like-minded for future collaborations – a baby step towards PAROS' vision of improving outcomes of pre-hospital and emergency care across the Asia-Pacific. ■

STUDY PROPOSAL	STUDY PI
1. Overcrowding of ED in Asia	Won-Chul Cha
2. EMS Systems – "End of Life" Issues	Chih-Hao Lin
3. EMS Education and Training	Hideharu Tanaka
4. Survey on the EMS System Performance Index	Nik Hisamuddin
5. Adherence of Therapeutic Hypothermia/EGDT	Patrick Ko
6. Paediatric OHCA Study	Tham Lai Peng
7. Incidence of VF in Asian OHCA	Benjamin Leong
8. Regional Variation in Outcomes of Witnessed VF in Asia	Tatsuya Nishiuchi
9. Impact of Supraglottic Airways and Endotracheal Intubation on Outcomes Following OHCA	Kentaro Kajino

Trial Coordinating Centre / Secretariat

Singapore Clinical Research Institute Pte Ltd (Reg No: 200812355Z)

31 Biopolis Way, Nanos #02-01, Singapore 138669 | Tel: (65) 6508 6768 | Fax: (65) 6508 8317 | Website: [www.scri.edu.sg](http://www.scri.edu.sg)



Dr Arthur L. Kellermann  
[Photo from Emory University website]

*“By joining forces with each other, you are creating a powerful team that will not only improve emergency care in your respective communities and countries; but worldwide.”*

## A Special Commentary

By Dr Arthur L. Kellermann, MD, MPH, FACEP

Out-of-hospital cardiac arrest (OHCA) is a leading cause of death worldwide, particularly in middle and high income countries. As the populations of many nations in Europe, North America and parts of Asia age, it will likely grow in importance. Recent research on OHCA has affirmed three important observations that have important implications for successful treatment: 1) OHCA victims who are witnessed to collapse and are found in ventricular fibrillation or ventricular tachycardia are far more likely to survive than those who are not; 2) rapid initiation of bystander cardiopulmonary resuscitation (CPR) doubles or triples a victim's odds of surviving, as does early use of an automated external defibrillator and 3) by far the strongest predictor of who will live and who will die following OHCA return of spontaneous circulation (ROSC) in the field. **When a pulse is restored on scene, the victim is 35 times more likely to survive to hospital discharge than if he or she patient is transported in full cardiac arrest.** This last observation is the most important one. **It means that the battle to save victims of OHCA is won or lost with pre-hospital care. Hospital-based care, no matter how sophisticated, cannot compensate for a failed pre-hospital resuscitation** (Ann Emerg Med. 2010 Mar 4).

Despite the importance of pre-hospital cardiac care, some communities do much better than others

(JAMA 2009;301(8):860-2). Published rates of survival in the U.S. range from zero to 46% (JAMA 2009;301(8):860-2). Undoubtedly, similar disparities exist worldwide. **But it is difficult to motivate EMS professionals, physicians and bystanders to try harder if they don't know how well they are doing.**

That's why the PAROS initiative is so important. By coming together and agreeing to collect data in a simple and consistent way, you are creating a powerful tool for improving the pre-hospital treatment of OHCA. And because successful treatment requires every element of an EMS system to function at a high level, OHCA is a valuable “sentinel condition” for improving EMS care across the board.

At the International Conference of Emergency Medicine (ICEM 2010) meeting in Singapore, I saw Asia and Australia's leading emergency physicians come together to create PAROS and brainstorm ideas about how to improve emergency care for tens of millions of people. By joining forces with each other, you are creating a powerful team that will not only improve emergency care in your respective communities and countries; but worldwide. ■

*Dr Arthur L. Kellermann is the Paul O'Neill-Alcoa Chair in Policy Analysis at RAND Corporation & Professor of Emergency Medicine at the Emory University School of Medicine, USA.*

### What can SCRI do as a “COORDINATING CENTRE” ?

- Create a **platform linking** academic leaders.
- Provide **core expertise** in study design methodology clinical epidemiology, protocol writing, project management, data management and data analysis.
- Establish dedicated units responsible for **business management** and **quality assurance**.
- Provide **platforms** and **tools** for education, training, **information sharing** and management of **research operations**.

## About PAROS



The Pan-Asian Resuscitation Outcomes Study (PAROS) Clinical Research Network was formed in early 2010. Supported by the Singapore Clinical Research Institute (SCRI),

it brings together a group of dedicated clinicians from the Asia-Pacific region, committed to conduct quality research in pre-hospital and emergency care settings.

One of PAROS' main thrusts is to use the network as a platform to support and stimulate research into effective strategies to improve survival from sudden cardiac arrests. In US alone, every year,

400,000 to 450,000 sudden cardiac deaths occur, mostly outside the hospital (Circulation 2001;104:2158-2163). The Asia-Pacific region is not spared from this as OHCA is a global health concern. Yet, research into pre-hospital emergency care remains largely inadequate and poorly coordinated owing to the marked variations in EMS systems and outcomes reporting in this region. PAROS endeavours to bridge this gap.

Today, PAROS has emergency medicine professionals from eight participating countries (Australia, Japan, Korea, Malaysia, Singapore, Taiwan, Thailand, Turkey) to support its efforts to encourage research focused on improving outcomes in pre-hospital and emergency care. Its trial coordinating centre is managed by the SCRI. ■

## What's brewing

### Next PAROS EXCO Meeting

The next PAROS EXCO meeting will be held on 9 Oct 2010 in Tokyo, in conjunction with the 38th Annual Meeting of the Japanese Association for Acute Medicine (JAAM). More details will be circulated when available. ■

### Manuscript under Review

A draft of the manuscript entitled "PAROS: Rationale, Methodology and Implementation" has been circulated to the co-authors for further comments. When finalized, the manuscript will be sent to designated EXCO members to spearhead the paper's translation and publishing in various languages. ■

*"As PAROS gains its foothold in the Asia-Pacific region, it seeks to engage business partners in its works."*

### Business Sense

As PAROS gains its foothold in the Asia-Pacific region, it seeks to engage **business partners** in its works. Any support received by PAROS will be used to mainly support cross-national activities and infrastructure, an area poorly supported by grants. Having worked in academia and the pharmaceutical industry in the Asia Pacific region, Dr Sam Lim, Chief Operating Officer of the Singapore Clinical Research Institute, was appointed by the PAROS EXCO on 9 Jun 2010 as the **Industry Liaison Person**. If you are interested in becoming a business partner with PAROS, or know of someone who does, you are most welcome to contact the Network Secretariat at [sweesung.soon@scri.edu.sg](mailto:sweesung.soon@scri.edu.sg). ■

### Code of Ethical Practice

The Code of Ethical Practice reflects **internationally-accepted ethical principles** expected of researchers. Endorsed by the PAROS EXCO on 9 Jun 2010, it offers PIs a tool to set expected parameters of standards for any research conducted under the auspices of PAROS. The Code can be found at the following PAROS website (<http://www.scri.edu.sg/paros/coep.pdf>). ■



### Do U Know: WHO IS SCRI



The Singapore Clinical Research Institute (SCRI) (<http://www.scri.edu.sg>) is an organization dedicated to improving patient care through the design and conduct of high quality, cutting-edge clinical research.

With an experienced team of scientists and research personnel, SCRI offers a full suite of expertise required for clinical project development and execution.

SCRI collaborates in government and industry- sponsored studies ranging from proof of concept to late phase and epidemiological studies. In the longer term, the vision is to develop SCRI and Singaporean scientists as an ASEAN hub for clinical research. To achieve this, SCRI continues to strengthen its expertise in executing multisite research, developing harmonized ASEAN regional study management capabilities, training and education capabilities and continuing its development of clinical research networks. ■



### Data, Data, Data

**1 DATA TRAINING** – A series of PAROS data training sessions was held from 9 to 11 Jun 2010, largely for data personnel from participating countries (except Singapore) to familiarize themselves with the online data capture system (<http://eparos.org/>) and as an avenue to provide their feedback on the system. For others, it also provided an opportunity for meaningful exchanges on the available data variables in their own countries.

**2 DATA DOCUMENTS** – The variables list, case record form (CRF) and data taxonomy documents underwent a round of revision to incorporate comments gathered at the PAROS data training sessions. These versions have been circulated to the data personnel of each participating country for verification. Once finalized, they will be uploaded as "Source Documents" at the PAROS website ([http://www.scri.edu.sg/PAROS\\_SOURCE.html](http://www.scri.edu.sg/PAROS_SOURCE.html))

**3 DATA SYSTEMS & MERGING PLAN** – PAROS offers two ways to capture data: **direct entry online** via ePAROS and an **export field entry** (exported from participating sites' databases to auto-populate the PAROS registry). The list of countries using each method is as follows:

Direct entry online	Export field entry
1. Singapore	1. Australia (WA)
2. Malaysia	2. Japan
3. Thailand	3. Taiwan
4. Turkey	4. Korea
5. Australia (NSW)	

Whenever export field entry is used, data dictionaries (translated to English where applicable) and measures taken to ensure accuracy in data matching would be vital. ■

*“In its first immediate task, each PC would review in detail the assigned studies... and provide recommendations.”*

## The **BIG** Four

No, they are not the Fantastic Four, not the Asian Tigers either. Think about the Big Four in PAROS and four names may intuitively come to mind. Another hint – they are big, organized, and growing.

In a bid to introduce a systematic peer-review of studies proposed under PAROS, the PAROS EXCO approved the formation of four Publications Committees (PCs) in the EXCO meeting on 9 Jun 2010. Led by the four big brothers – Dr Marcus Ong, Dr Matthew Ma, Dr Shin and Dr Tanaka – each PC focuses on a specific domain in pre-hospital and emergency care. The PCs also comprises the Network Statistician Dr Muhammad Naeem Khan and four to seven other PC members.

In its first immediate task, each PC would review in detail the assigned studies (two to three of the nine study proposals presented at the 9 Jun 2010 Open Meeting) and provide recommendations. Approval from the reviewing PC would be necessary before submission of any manuscript for publication.

The Big Four (\*Denotes PC Chairman):

### OHCA

1. Marcus Ong\*
2. Muhammad Naeem
3. Tham Lai Peng
4. Tatsuya Nishiuchi
5. Kyoung Jun Song
6. Ridvan Atilla
7. Paul M Middleton
8. Patrick Ko
9. Taku Iwami
10. Nalinas Khunkhlai

### EMS Systems

1. Sang Do Shin\*
2. Muhammad Naeem
3. Chih-Hao Lin
4. Benjamin Leong
5. Pairoj Khruengkarnchana
6. Sarah Abdul Karim

### ED Survey

1. Matthew Ma\*
2. Muhammad Naeem
3. Won-Chul Cha
4. Patrick Ko
5. Kyung Won Lee
6. Cem Oktay

### EMS Survey

1. Hideharu Tanaka\*
2. Muhammad Naeem
3. Nik Hisamuddin
4. Kentaro Kajino
5. Nalinas Khunkhlai
6. Ian Jacobs

If you would like to join any of the PC, you may contact the Network Secretariat at [sweesung.soon@scri.edu.sg](mailto:sweesung.soon@scri.edu.sg). All PC Chairmen reserve the right to approve or refuse any request. Only EXCO Members and General Members are eligible to sit on any PC. ■

## Of eCARES and ePAROS



Dr Bryan McNally sharing about eCARES at the PAROS Open Meeting [Photo by Dr Goh E Shaun]

“You can’t manage what you can’t measure! The first step to improving survival rates is to begin collecting data in order to better understand performance,” read a key slide from Dr Bryan McNally’s presentation. Speaking at the Open Meeting, Dr McNally from the Emory University School of Medicine stressed on the importance of collecting essential information for OHCA as he introduced the audience to the Cardiac Arrest Registry to Enhance Survival (CARES or eCARES). This registry, first initiated in October 2004, uses web-based software

to allow consolidation of data from EMS, Hospital and Computer-Aided Dispatch (CAD) system. To date, CARES is implemented in 22 US cities and has a combined population of 14 million (Ann Emerg Med. 2009 Nov;54(5):674-683).

Recognising that a uniform dataset would form the cornerstone of any future attempt to benchmark or conduct quality research, PAROS has closely studied the CARES model to develop an online data capture system called the ePAROS (<http://eparos.org/>).

Since the work on datasets commenced about a year ago, Ms Susan Yap and Ms Shahidah, research nurse and research coordinator of the Singapore General Hospital respectively, have worked with the eight participating countries and Sansio (system developer) on the design of the system, data variables and collection methods. Even with the launch of ePAROS, both of them are not resting on their laurels, and they will be actively involved in site training in the coming months. ■

*“You can’t manage what you can’t measure! The first step to improving survival rates is to begin collecting data in order to better understand performance”*



# Becoming One of Us

As a progressive network, we are constantly seeking opportunities to grow. We offer two types of registration: (1) General Member and (2) Guest. As a General Member (only offered to PAROS participating countries), you will receive updates from PAROS and you will be able to contribute data and propose studies at PAROS events; if you are from a non-participating country, or would only like to be in our mailing list, you are most welcome to join PAROS as a guest.

<b>APPLICATION TO PAROS</b> (You may select more than one option)	<input type="checkbox"/> General Member* <input type="checkbox"/> Site Principal Investigator (PI)* <input type="checkbox"/> Data Personnel/Study Coordinator* <input type="checkbox"/> Guest (in the mailing list for updates on PAROS)
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\* Applicable only if you are from one of the PAROS participating countries - Australia, Japan, Korea, Malaysia, Singapore, Taiwan, Thailand, Turkey

<b>REGISTRANT DETAILS (please provide full details)</b>	<b>Instructions:</b> Please complete this form and submit it to the Network Secretariat at <a href="mailto:sweesung.soon@scri.edu.sg">sweesung.soon@scri.edu.sg</a> . You will receive a confirmation once we have processed your application. If you are applying as a Site PI, upon confirmation of application outcome, please let us have your CV for our retention.
Country	_____
Full name	_____
Position	_____
Department	_____
Institution	_____
Office Mailing Address	_____
Email Address	_____
Contact No. (Office)	_____
Contact No. (Mobile)	_____
Skype Contact (if available)	_____
Fax No.	_____

<b>SITE INFORMATION (only applicable to Site PI)</b>	
Country	_____
State	_____
City/EMS District	_____
Population Size of City/State	_____

<b>PRE-HOSPITAL INFORMATION (only applicable to Site PI)</b>	
No. of EMS Systems in City/State	_____
Competency of Basic Life Support	<input type="checkbox"/> First Responder <input type="checkbox"/> EMT-Intermediate <input type="checkbox"/> Others, please specify: _____
Competency: Advanced Life Support	<input type="checkbox"/> EMT-Paramedic <input type="checkbox"/> Physician-led <input type="checkbox"/> Nurse-led <input type="checkbox"/> Others, please specify: _____
No. of EMS Personnel in City/State	_____
No. of Ambulance Vehicles in City/State	_____

<b>EMERGENCY DEPARTMENT INFORMATION (only applicable to Site PI)</b>	
No. of Acute Hospitals in City/State	_____
No. of Tertiary Hospitals in City/State	_____



<b>PAROS participating countries</b>	
Australia	Japan
Korea	Malaysia
Singapore	Taiwan
Thailand	Turkey

**Mission**  
 To improve outcomes from pre-hospital and emergency care across the Asia-Pacific by promoting high quality research into resuscitation

**Vision**  
 Improving outcomes from pre-hospital and emergency care across the Asia-Pacific

**Website**  
<http://www.scri.edu.sg/PAROS.html>

**Trial Coordinating Centre**



Singapore Clinical Research Institute (based in Singapore)

**SCRI's Support in PAROS**  
 PAROS EXCO member,  
 Industry Liaison Person:  
 Sam Lim  
 PAROS EXCO member,  
 Network Biostatistician:  
 Muhammad Naeem Khan  
 Network Research Informatics:  
 Teoh Wei Lun  
 Network Secretariat:  
 Enny Kiesworo, and  
 Soon Swee Sung

**Contact details of Secretariat**  
 Contact No. (Office): (65) 6508 6768  
 Fax no.: (65) 6508 8317  
 Email: [sweesung.soon@scri.edu.sg](mailto:sweesung.soon@scri.edu.sg)  
 Mailing address:  
 Singapore Clinical Research Institute  
 31 Biopolis Way, Nanos #02-01,  
 Singapore 138669