Contents

EDITORIAL .................................................. 2
LATEST NEWS ........................................... 2
IEMSIG Survey Results ................................. 3
UPCOMING EVENTS .................................... 5
International EM Opportunities for Fellows & Trainees 6
PACIFIC .................................................. 7
  FIJI – Emergency Medicine in Suva ............... Anne Creaton 7
  PNG - The Tramontina Sign and The Visiting Clinical Lecturer Program, Madang ............. Jocelyn Keage 9
  PNG – Emergency Medicine in Port Moresby ... Zafar Smith 11
  SOLOMON ISLANDS – Emergency Medicine Update ........ Brady Tassicker 14
SOUTH EAST ASIA ................................ 15
  MYANMAR – Emergency Medicine in Myanmar: An Overview .... Fay Clarke 15
SOUTH ASIA ............................................. 17
  BHUTAN - IEM in the Land of the Thunder Dragon ... Tom Morton 17
  NEPAL - Temples for Cafes: A Kathmandu Sabbatical .. Athol Steward 19
  NEPAL - Emergency Medicine in Nepal: An Overview .... Fay Clarke 21
  SRI LANKA – Sri Lankan Journey ................. Sanj Fernando 22
  SRI LANKA - Emergency Life Care Course Update .... Shane Curran 24
AFRICA ................................................... 25
  Rural TANZANIA - a trainee’s experience ........ Helen Kanter 25
**IEMSIG Executive**

Expressions of interest (EOIs) for the expansion of the IEMSIG Executive were sent out to the IEMSIG membership in May 2013. Three applications were received by the closing date of 17 May. The three nominees were ratified at the June Council Executive meeting and are:

- Gerard O’Reilly
- Chris Curry
- Georgina Phillips

The IEMSIG Executive would like to welcome Georgina Phillips in her new role and looks forward to working with her.

**International Scholarship Results**

The inaugural launch of the ACEM Foundations International Scholarship Award in April this year saw 11 applications being received. This was a great response to the new award and made for a hard decision by the IEMSIG Executive to pick just four awardees.

The IEMSIG Executive is pleased to announce the four awardees for the International Scholarship Award are:

1. Dr Pa Pa – Myanmar
2. A/Prof Gyanendra Malla – Nepal
3. Dr Trina Sale – Solomon Islands
4. Dr Trelly Samuel - Vanuatu

**Anne Creaton goes to Fiji**

Anne Creaton has been appointed to the position of Associate Professor Emergency Medicine at the Fiji National University in Suva. Anne has taken on a three year position to help build EM capacity and is currently seeking support from FACEMs to supervise the ED trainees in Lautoka and Labasa regions of Fiji. See Opportunities for Fellow and Trainees section for more information.

**Nepalese Trainee visits ACEM**

In May this year ACEM welcomed Dr Ramesh Maharjan to the college for a tour and presentation of the ACEM training programs. Dr Maharjan is one of the first EM trainees undertaking the newly established Doctor of Medicine Emergency Medicine (DMEEM) program which commenced in Nepal in 2011.

Dr Maharjan was invited to Australia to attend the EMCORE conference and was hosted by local IEMSIG members and fellows of the college. His time in Australia included a visit to the Austin Hospital and St Vincent’s Hospitals in Melbourne and Sydney, the EMCORE Airways course and the EMCORE two day conference held in Melbourne. Dr Maharjan was hosted by Peter Kas, Jamie Hendrie, Michael Augollo and Richard Smith. His flights were sponsored by the International Skills and Training Institute in Health (ISTIH) at UWA.

**Accredited training time**

In the last 12 months a number of trainees have applied for and had their terms in PNG and Nepal accredited towards their training time. Madang in PNG continues to be a popular choice for trainees with three trainees undertaking a term there this year. Nepal has two trainees there this year, and has two applications for next year.

The new IEMSIG Executive will be working toward ongoing Category A Accreditation for identified sites around the world, developing special skills guidelines based on terms situated in developing nations. This will make it easier for trainees to do special skills training overseas and at the same time support the development of EM in these regions. Stay tuned for an update in following editions.

**A website for EM in PNG**

http://www.emergencymedicinepng.com/

Dr Zafar Smith has developed a website promoting the development of EM in PNG. Zafar is an Advanced Trainee of the college who grew up in PNG. After recently visiting his home town and working in Port Moresby General Hospital (PMGH) ED he was inspired to build the website so that other trainees could experience the day in the life of an ED registrar in PNG. The website contains useful information about the EDs at PMGH and at Modilon Hospital in Madang, with video testimonials from staff and other emergency doctors who have spent time there. This site is well worth a look if you are considering volunteering in PNG. Read about Zafar’s experience of PNG in this edition of the newsletter.

**IEMSIG Survey Result**

The IEMSIG Survey was sent to all members of the IEMSIG early 2012. The survey was designed to capture information about International EM involvement by IEMSIG members in the past seven years (2005 – 2012).

Here is a snap shot of some information that was captured in the survey:

**Top 30 Countries Visited by IEMSIG Members 2005 - 2012**

![Graph showing the top 30 countries visited by IEMSIG members between 2005 and 2012.](image-url)
UPCOMING EVENTS

2nd International Care Symposium
Global access to emergency care: priorities and strategies
5 & 6 September 2013 | Melbourne, Victoria
Following the success of the inaugural IEC the 2nd International Emergency Care Symposium will be held once again at the Alfred Hospital, Melbourne. International Emergency Care (IEC) is a rapidly growing field of interest in global health. It encompasses the work done by doctors and nurses in the evolution of emergency care systems in countries at extreme levels of development. Emergency care providers are collaborating across the globe to provide emergency care capacity development, emergency care specialty development and international disaster response.

Guest Speakers:
- Professor Peter Cameron – President, International Federation of EM (IFEM)
- Associate Professor Chris Curry – Honorary Secretary IEMSIG
- Assistant Professor Teri Reynolds – Director of the Emergency Medicine Residency Program at Muhimbili National Hospital, Tanzania

Book your place today and join in the discussion. Information and registration

Emergency Medicine Society of South Africa (EMSSA)
Opportunity and Innovation in Emergency Medicine Conference
5 - 7 November 2013 | Cape Town, South Africa
For more information visit: www.emssa2013.co.za

ACEM Annual Scientific Meeting (ASM)
All the Good Stuff
24 – 29 November 2013 | Adelaide, South Australia

Once again the IEMSIG has a dedicated session at the ASM, to be held on Wednesday 27 November in Adelaide. There will also be an IEMSIG dinner on Tuesday night – more information will be available on the ASM website closer to the date of the event.

The four International Scholarship Awardees will present on EM in their region along with Anne Creston presenting on developments in Fiji. This will be followed by the IEMSIG Annual General Meeting (AGM) that will include an update on recent activities by IEMSIG members throughout the world. All members are invited to attend these sessions as they are a great opportunity to meet fellow international EM enthusiasts, make connections and help forward your cause.

Visit the ASM website for more information
Fiji
Can you assist? Fellows wanted for 3 month rotations to supervise ED Trainees in Fiji.
Support is needed at Lautoka and Labasa hospitals from emergency physicians who can be on site to guide the ED trainees. The main focus would be in building the specialty of emergency medicine by collaborating with other departments, guiding the workup of patients and establishing departmental guidelines etc.
The work is very interesting with patients often presenting late with advanced and severe pathologies. The trainees are very enthusiastic and hardworking and you really feel like you are making a difference. It would make a great sabbatical and is a good reminder as to why we entered the specialty in the first place!
In addition there is scope for those interested in Critical Care and those dual qualified in ICU as there is a shortage of anaesthetists/ICU doctors.
For expressions of interest please contact Anne Creaton: anne.creaton@fnu.ac.fj

Solomon Islands
Exam preparation support for EM Trainees
Solomon Islands currently have three trainees in the Masters programme through the University of Papua New Guinea. Can you assist with helping them prepare for their exams?
Ongoing visits by experienced clinicians needed.
One to two week trips, ideally by doctor-nurse combinations would be particularly useful in assisting with EM development in Solomon Islands.
Please contact Brady Tassicker for more information at: brady.tassicker@dhs.tas.gov.au

PNG
For trainees wanting to secure a proven accredited training post at Modilon Hospital in Madang contact Katryna Denning at: kdening@med.usyd.edu.au
For more information for Fellows and trainees wanting to assist in Port Moresby visit: http://www.emergencymedicinepng.com/

Nepal
Emergency Medicine is expanding rapidly in Nepal, with two more institutions joining the pioneering Tribhuvan University to launch training programs this year. Commensurately, opportunities for FAcEMs and advanced trainees to contribute to EM training are increasing. Advanced trainees can have time accredited toward their training requirements.
Anyone interested is invited to contact Chris Curry at chris@chriscurry.com.au

I am a FACEM who has recently moved to Suva to take up the position of A/Prof Emergency Medicine with the Fiji National University (FNU). Development of Emergency Medicine (EM) in Fiji is progressing at a lightning pace. This development has been driven by the herculean efforts of Professor Ian Rouse (Dean of the Fiji School of Medicine, FSM) and Dr Craig Adams (Emergency Medicine program director) with strong support from the Minister of Health, Dr Neil Sharma.
The one year diploma in EM is now in its second year and the three year Masters program in EM is due to start before the year is out. The enthusiasm for a career in EM in Fiji is enormous among medical graduates, with applications to join the program surpassing those of most other specialties.
A significant milestone was the opening of the new Emergency Department (ED) at the Colonial War Museum Hospital (CWMH) in Suva at the beginning of the year. It is now equipped with cardiac monitors, defibrillators and an ultrasound machine. Despite this modern equipment we regularly run out of key consumables and linen is in short supply.
Emergency nursing is in its infancy, with the charting of vital signs only occurring at CWMH in the past month. Recent progress has given cause for optimism and nurses are now choosing to work in the Emergency Department rather than being sent there for punishment! Recent initiatives include:
- Triage workshops
- IV cannulation training
- Monthly joint medical/nursing CME
- Plans to rotate nurses to other critical care areas (ICU & CCU)
I am the first resident Emergency Physician (EP) in Fiji. Education in EM prior to my arrival was being provided by visiting EPs from the USA. There is an ongoing commitment from the US consortium to provide educational support which also involves special skills training e.g. point of care ultrasound, trauma and short courses e.g. ACLS. The visiting specialists also provide support to US residents who undertake placements at Labasa Hospital.
One of the challenges in Fiji is how to provide education to trainees in a number of locations. Information technology is one way to address this issue. There is an excellent website (www.pacificdocs.com) and onsite education is supplemented by online case studies, articles and discussion. Trainees are provided with portable devices such as ipads with high speed internet to facilitate this. Presentations have
PNG - The Tramontina Sign and The Visiting Clinical Lecturer Program, Madang

Jocelyn Keage | jocelyn.keage@gmail.com

Papua New Guinea (PNG) is a place where sorcery and modern medicine coexist and where enormous natural wealth lies beneath people living in poverty with inadequate health care. It is also a place where a bush-knife is as much a tool for mischief as it is for work. So I was quick to learn my first lesson in PNG emergency medicine, the Tramontina Sign (radiological diagnosis of a compound fracture caused by PNG’s preferred brand of bush-knife).

I was the most recent ACEM trainee to occupy the Visiting Clinical Lecturer (VCL) position at Modilon General Hospital, Madang. This brilliant College accredited term combines mind-boggling medicine with hands-on teaching experience. It also provides the chance to live and breathe the vivid and complex place that PNG is; Australia’s immediate geographical neighbour that can feel a universe away.

For a detailed description of the VCL program please read the Emergency Medicine Australasia article cited below. And for some partially digested thoughts from a trainee in PNG, please read on.

Emergency Medicine at Modilon combined the familiar with the entirely foreign. Recognisable were the rhythms of changing shifts, the daily battles with bed-block and stubborn admitting registrars, and the camaraderie of committed departmental staff. Less familiar were frequent power blackouts, an unpredictable water supply, and even the threat of after-hours ‘hold-ups’. Shortages of equipment and medicine are commonplace and any form of patient investigation and management. At times I felt Modilon had little to offer those who had gone to great effort and expense to seek medical attention, like patients with metastatic disease who were discharged to their village to die. However, on many occasions I saw the basics of emergency medicine, being good management of the airway, breathing and circulation, save lives.

The clinical medicine at Modilon was only part of the learning curve. I experienced a near vertical learning ascent in teaching the Health Extension Officer students. Without previous teaching experience I took twice weekly tutorials, conducted ward-round and bedside teaching, and undertook their clinical and written assessments. I set off with teaching guns blazing but quickly realised I was often misfiring. It took a long time to understand what was actually important for these students to know in the Modilon setting. I hit several teaching hurdles, the largest of which was probably my fledgling teaching skills.

There were many unexpected joys during this term, such as learning Tok Pisin (the most widely used of over 800 languages in PNG). Although slow to embrace it, I later revelled in its literal expression. Another delight was conducting outreach clinics in
In PNG, I thought it was normal to ride in the back of a ute standing up, to throw rocks at your neighbour’s mango tree to get lunch, to have 3 big bolts on your front door and to have a pet crocodile in a backyard bathtub. It was when I moved to New Zealand to get to University that I realized life is different in PNG. Being raised there allowed me to see life in perspective, to feel the “spark” of being alive and realize that even small actions can have a huge impact on other people’s lives.

My trip back home to Moresby in March this year (2013) was the first time I had been back to PNG for six years, and the first time to go back as a doctor. I stayed with my parents who still live in Moresby after six years, and the first time to go back as a doctor. I had moved to New Zealand more than 30 years ago. During my four week stay I volunteered as a registrar moving from New Zealand to Port Moresby General Hospital (PMGH) Emergency Department (ED).

The PMGH ED has been recently renovated and was re-opened in December 2012. The new department has approximately 31 beds including 1 designated resuscitation room, 3 resuscitation bays, 7 acute beds, 10 short stay beds, and 10 “isolation” beds. There are no accurate statistics, but there is an estimated maximum of 180 presentations per day with a maximum of 65,000 emergency presentations per year. There are 5 full time enthusiastic emergency consultants, roughly 12 registrars and 5 residents that are on the emergency roster. There is a high percentage of patients with trauma related injuries (stabbings, falls or motor vehicle accidents) and infectious diseases (malaria, tuberculosis and HIV). There is a growing prevalence of diabetes, ischaemic heart disease and stroke. There are twice daily consultant ward rounds with a robust registrar teaching program every Tuesdays and Fridays from 9.00am to 10.00am.

The cases I got to see were phenomenal. In the 4 weeks I was there I did not see a single patient with an ankle sprain, sore throat or runny nose. What I did see included:

- an 8 year old with flaccid paralysis from snake bite envenomation requiring intubation,
- an 8 year old girl with opisthotonic posturing from cerebral malaria,
- a 48 year old woman with cardiac arrest and death from severe multi-valvular rheumatic heart disease,
- a 22 year old with descending paralysis from wound botulism requiring intubation,
- a 29 year old woman with paraplegia from spinal tuberculosis (Pott’s disease),
- a 62 year old female with cryptococcal meningitis confirmed with India ink staining on CSF,
- and an 8 year old boy with right intracerebral and subarachnoid bleed from a fall out of a mango tree...

Resources were scarce. But even with limited resources, the medical staff did an amazing job to keep the department running and get patients seen in a timely manner.

There were patients being intubated nearly on a daily basis, and not enough ventilators in the department. The main ventilator being used was the “wantok ventilator” (the word “wantok” means “family” in the most widely used language, Tok Pisin) which involved a family member being taught how to squeeze an ambu-bag every few seconds. On one occasion I was mortified to see the patient’s teenage brother texting on his phone instead of ventilating his intubated sister!

There were multiple chances for central line catheters. There were adequate numbers of portable oxygen cylinders but we were limited to using one cylinder at a time because there was only one portable oxygen regulator device in the department. There were several IV pumps donated from Australia, but we had run out of the IV tubing giving sets that would fit the pumps. There was a CT scanner machine but it had been shut down for a few days after a power surge meant it needed time to “re-boot”. There were X-ray facilities, but every time there was a water cut, the X-ray films could not be processed – which seemed to be all too often. The ED itself closed down once while I was there due to a water disconnection. There were no computers in the department (yet), so every medical assessment was documented in an exercise book purchased by the patient themselves. If you lost your exercise book, you lost all your medical records.
“Bed block” had a different meaning at PMGH... you were lucky if you even got a bed. The problem was not the ED, but the lack of inpatient beds and staff in the rest of the hospital. As a result, the “4 hour rule” could often stretch out to be the “4 day rule”. There was not enough space in the ED so often stable patients would wait for an inpatient ward bed while sitting on the floor of the ED corridor. Many patients would have travelled long distances from outside villages and almost had an expectation that they had to wait... and wait patiently they did. There was no food provided for patients by the hospital, so people relied on relatives bringing food from nearby markets or shops in the city. If you had no relatives, then... well I'm not actually sure how you got food!

The local emergency staffs were very experienced in pattern recognition. Just by looking at the village name on the ambulance door as it pulled up, the time of day, and the recent weather patterns they could often make the correct diagnosis - “Here comes another snake bite”. During the days after a heavy rain storm, there was often an increase in the presentations of snake bites. At one point in a twenty-four hour period we had 4 patients with snake bites present to the ED, all of whom were under the age of 21. Two out of these four patients required intubation and ICU admission. Thankfully, most intubated snake bite patients recover and walk out within one to two weeks from presentation. Exciting progress is being made in snake bite research with a new double blinded randomised controlled trial being conducted in Port Moresby. This trial will compare a new taipan antivenom against the current CSL-brand taipan antivenom. I was fortunate enough to meet Simon Jensen, David Williams, Ken Winkel and Professor David Warrell who were all in Port Moresby helping with the taipan antivenom trial. Along with the snake bite group of physicians, there was a surprisingly large number of FACEMs who visited Moresby during the 4 weeks to offer their support - Georgina Phillips from Melbourne, Colin Banks from Townsville, and Will Davies from Oilsearch. One of my registrar colleagues from Brisbane, Mark Trembath, was also able to visit Port Moresby for 1 week. When I was not seeing patients I was able to help out with bedside teaching for medical students and nursing students through Desmond Asi (Co-ordinator of Academic Programs). Dr Asi very kindly took Mark and I on a tour of one of the outer district hospitals - Kwikila District Hospital. It was fantastic to get out of the city and see a rural hospital in action.

The aim of the website is "to help promote emergency medicine in Papua New Guinea by providing detailed information to assist emergency doctors from Australia, New Zealand and overseas to work in a PNG emergency department." On the website you will find video testimonials from visiting overseas doctors, video interviews with local staff, photos of interesting cases, detailed medical registration information, a video tour of the ED and much more.

I would like to sincerely thank all the medical and nursing staff in PMGH ED, particularly Sam Yockopua (the Director of Emergency Medicine in PNG), for allowing me to visit and work in the department. I would also like to especially thank Desmond Asi who kindly took me under his wing and showed me around Kwikila District Hospital on his day off. If you would like to learn more about experiencing emergency medicine in Papua New Guinea, please see the new website www.emergencymedicinepng.com.

They say that Papua New Guinea is “the land of the unexpected.” But one thing you can expect if you go to PNG is that you will gain an appreciation of what you have as a doctor in Australia or New Zealand and be reminded of how important it is to use your skills, resources, and passion to help others less fortunate.
The past several months have seen a flurry of activity in Solomon Islands. First came a series of earthquakes, one of which generated a tsunami. This caused significant damage in Temotu province, but fortunately had minimal effect in Honiara.

Next came an outbreak of dengue fever. This has predominantly affected Honiara, although it has spread a little to the provinces. While there have been previous dengue outbreaks, the primary vector, *Aedes egyptii*, is not endemic to Solomon Islands. A related species, *Aedes albopictus* was probably responsible for previous outbreaks, but is relatively inefficient at virus transmission. *Aedes egyptii* is now present in Honiara, but so far has not been detected elsewhere.

At the time of writing, 5% of the Honiara’s 65,000 residents had been seen through the ED of the National Referral Hospital with dengue fever. In the early stages the admission rate was approaching 50%, although this later dropped to about 3%. Just pause for a moment... Contemplate your own ED, your own hospital... How well do you think you might cope with a sustained 40% increase in patient numbers, with a 50% admission rate in that increase?

Perhaps unsurprisingly, the burden of these cases on an already overstretched health service overwhelmed local resources. I know it would overwhelm the capacity of the institution in which I work.

At the invitation of the Solomon Islands Government, AusAID deployed teams from the National Critical Care and Trauma Response Centre, based in Darwin. Medical, nursing, logistics and laboratory staff formed the early response. Together with the staff of the National Referral Hospital, they worked to create a dedicated dengue pathway, with formalised testing regimes, review criteria and admission criteria. They provided surge capacity and covered a large part of the clinical workload. The bulk of the dengue pathway was nurse run, with medical input at fixed points in the process.

I had the privilege of being part of the second wave of staff deployed, consisting of two doctors and two nurses. Our brief was to return the dengue pathway back into the normal functioning of the ED, while preserving its functions intact, as well as to provide capacity building opportunities within the department.

The work was challenging but immensely satisfying. Between us we provided additional clinical workforce for 18 hours per day, six days per week, for two weeks. We ran teaching sessions, provided strategic oversight of the department, and acted as a conduit for information between the “shop-floor” and high levels within the ministry and the development sector.

We left Solomon Islands last week with the dengue pathway now integrated back into the functions of the ED. The absence of the clinical coverage we provided will be felt, but we believe capacity does exist within the hospital, and we worked closely with the staff of the hospital to explore alternative staffing options for after our departure.

The economist Paul Romer is credited with the phrase “a crisis is a terrible thing to waste”. The development of emergency medicine in our region has often been spurred following disasters (e.g. Sri Lanka, Myanmar). So what positive benefits may have originated from this?

There has been recognition with the Ministry of Health of the importance of local emergency medicine capabilities to address future disasters. This may result in changes in resource allocation. Emergency trainees and nurses have worked closely with experienced Australian emergency clinicians, and closer bonds have been formed. AusAID has been working closely with members of the EM community, and this may be reflected in their activities in other nations.

So what additional support is needed? Solomon Islands currently have three trainees in the Masters programme through University of Papua New Guinea. The first of these is hopefully sitting the exams later this year. The other two plan to sit next year. The effort needed to get through the clinical exams is considerable. I have been providing exam preparation from afar, but more support is needed than I can provide. If anyone wishes to assist in exam preparation, it would be much appreciated by all – please contact me to discuss.

Further visits by experienced clinicians would prove invaluable. There are a number of possible models for this. While there may be official support at some stage, until this eventuates, further visits will need to be self-funded. One-to-two week trips, ideally by doctor-nurse combinations, would be particularly useful. There is already existing experience within the department in finding ways to facilitate such trips, and awareness of possible funding strategies. If you have an interest, please ask myself or Sarah Smith (Administration Officer for IEMSIG).

The past several months have seen a flurry of activity in Solomon Islands.
Volunteers International (AVI) has undertaken to support two emergency physicians and two ambulance trainers in aid of this. This training will be an important component of Phase Three of the overall EM development program, which will build up infrastructure and capacity to deliver appropriate pre-hospital care. The phase is vital to support the delivery of in-hospital emergency medicine and is running concurrently with Phase One. It will encompass the training of ambulance crews, nurses, and junior doctors.

Michael Augello and Shona McIntyre followed as lead coordinators in residence in February, and were succeeded in May by Georgina Phillips. Antony Cheshall will succeed Georgina Phillips, ensuring the role will be filled until the end of Phase One and the conclusion of clinical skills training for the first cohort of DipEM candidates in October 2013. The M18 are making pleasing progress, with a number of potential future leaders for Myanmar’s nascent EM specialty among them.

Enquiries about the Myanmar program can be directed to Chris Curry chris@chriscurry.com.au; Michael Augello and Shona McIntyre michaelshona@gmail.com; or Georgina Phillips drgeorgina@gmail.com.

BHUTAN - IEM in the Land of the Thunder Dragon

Tucked away at the eastern end of the Himalayan chain lies Bhutan, a peaceful Kingdom sandwiched between the two mighty powers of India and China. The Bhutanese have been very careful to prioritise their heritage as well as the physical environment - it is written into the constitution that 65% of the country must remain forested and TV only arrived there less than 15 years ago. Bhutan is now a country with one foot feeling for modernity and the other firmly anchored in ancient traditions.

The United Nations Human Development Index ranks Bhutan 141 out of its 185 member states. The Human Development Index is a comparative measure of life expectancy, literacy, education, standards of living and quality of life. Thimphu, the capital city with a population of about 80,000, has the only tertiary hospital in the country, the Jigme Dorji Wangchuck National referral Hospital (JDWNRH). Referrals are made to JDWNRH from the surrounding and remote districts, with patients often travelling for days to access a higher level of care. Many arrive without basic investigations, or converse arrive having been hospitalised for days without improvement. The ED is estimated to see about 15,000 patients per year, and work is ongoing to enhance data collection to capture more accurate figures.

Amongst the Bhutanese population medical literacy is poor and a large reliance on traditional medicine still exists. This results in patients presenting very late into their illnesses - often beyond the point of no
return. There is minimal primary care, with hospital specialists providing this in their overcrowded clinics. Trauma makes up a smaller percentage of ED cases compared with Australasia — many of the orthopaedic presentations are siphoned off to a separate outpatients area due to historically low levels of ED medical staffing. However major trauma, especially head trauma, is relatively common due in no small part to alcohol as well as poor building practices that would see an Australasian Occupational Health and Safety team waltz at the mere sight. Bamboo scaffolding is ubiquitous and when combined with workers pushing wheelbarrows up 6 stories in flip-flops, you get the picture. Seat belts are not mandatory as there is a widely held belief that if your car happens to plunge down a mountain ravine, then you stand a better chance of surviving by quickly opening the car door and jumping out without the hindrance of being strapped in! There are many anecdotes testifying to this, but unfortunately the same does not hold true in the urbanised centres. In addition severe sepsis, chronic decompensated renal failure, alcoholic liver disease and TB are prevalent and make up a large part of the ED workload.

The ED is under the auspices of the surgical department and is fortunate to have strong leadership from the country’s only neurosurgeon. The concept of EM is well understood however the infrastructure required to develop a training program is yet to be established. Resident training programs in medicine, surgery, paediatrics and O&G have recently been approved, with ED to follow at a later (but yet to be agreed upon) date. This was favoured over progressing plans to commence a medical school — all graduates in Bhutan are currently trained outside the country. The ED is staffed by General Duty Medical Officers (GDMO’s) who are PGY 2-5 with commensurate knowledge. Where there have been significant shortages of ED GDMO’s in the past, this no longer seems to be an issue, with many shifts now being double staffed. First year doctors (interns) have recently started working in the hospital and an official attachment to the ED was approved in May this year.

Nepal’s first Emergency Medicine training programme was launched at the Tribhuvan University Teaching Hospital (TUTH) Kathmandu in 2011. Although a version of EM has been practised there for many years through the Department of General Practice and Emergency Medicine, their energetic leader Prof. Pratap Prasad realised the need for specialty focused care. With support from ACEM’s IEMSIG and the devoted efforts of Chris Curry, the trainee programme was designed. With a Nepalese style EM curriculum and two trainees, the programme went live.

A variety of ingredients are required to support the emergence of EM in a developing country. One of those ingredients is a number of pioneers, in this instance the trainees. They in turn need guidance, support, tutoring, mentoring and encouragement, encouragement to navigate unchartered territory. This is where volunteer EPs are invaluable. If you have the means, time, a sabbatical or loads of leave, then head to TUTH for an enduring life experience where you will be stimulated, challenged and amazed. It is like discovering a whole new world!

In Kathmandu, on most street corners cafes are replaced by shrines or temples. In this city of 5 million, the day starts with prayers and various ceremonial religious behaviours (lighting butter candles, mantras, spinning prayer wheels and bell ringing) at about 4.30am. Bells and the bustle in the streets became our new alarm clock, not to mention the barking dogs.

Getting ready for work involves showering with your mouth closed and gargling with bottled water. Then weave your way to work as a pillion rider dodging cars, buses, trucks, cattle, dogs (a handful of the...
estimated 40,000 in KTM and pedestrians. I always had the camera handy for that crazy shot.

You knew you were in for an interesting day at the office as you shouldered your way through a thronging crowd of patients and family - the "patient party" - at the security-manned entrance to ED. Passing by office as you were, features of the ED which is entirely open plan, where the numbers of patients exceed the number of beds – "top 'n tail" is surpassed by, "top, tail 'n top again".

The 9 – bedded resus bay, designated the "red" area, was consistently at full capacity. On average 2-3 intubated hand ventilated cases populated this section which was staffed by a mere 2 nurses, 2-3 doctors and equipped with 2 monitors, one resuscitation trolley, a portable pulse oximeter and in juxtaposition a resident CT scanner. Now you were poised to manage some fascinating pathology. For example, your choice of CNS infection, where you regularly venture beyond pneumo' and meningococcal infection. You are guaranteed to encounter malarial, herpetic, HIV or tuberculous meningitis, to list a few. And in addition, advanced malignant, hypertensive, diabetic and autoimmune pathologies. One also encounters challenging toxicology like organophosphate and aluminium phosphate poisoning. Your role with the trainees while managing these intriguing diseases is to teach and be taught.

In guiding their management it was necessary to expose them to current evidence rather than allowing them to rely on habit or stagnant dogma. In addition, I found myself insisting on a greater degree of discipline, structure and method in their processing of clinical information.

Just to keep you on your toes over the 6 day week (instead of Church on Sunday it was work) there were daily tutorials, departmental and inter-departmental meetings. The trainees would regularly consult your daily tutorials, departmental and inter-departmental meetings. The trainees would regularly consult your opinion about their research projects and clinical dilemmas. But expect the unexpected as well. For instance, I was asked by Prof. Prasad to prepare an entire new cache of MCQs for the entry exam to the trainee programme. But it is all worth it, as in return the respect you are shown and the gratitude you receive is huge.

The training programme is now into its second year. Undeniably the programme and the development of EM in Nepal continue to face many challenges. Some of these include:

- Peer scepticism and the lack of understanding of the role of EM in a developing country
- Relative lack of resources to support training and trainees. The main concern is the absence of permanent EM specialists to supervise trainees. This is in no way a criticism of the gallant efforts of Prof. Prasad, the head of department, Chris and visiting EM specialists. But trainees need consistently available supervision to develop specialist standard knowledge and skill.
- A paucity of systems and processes (nursing and medical) to facilitate the development of EM.
- The vulnerability of the current trainees who battle the demands of rostering (high volume high acuity case-mix and long hours) versus the academic demands of training i.e. limited opportunity for recovery and preparation.

Despite this, progress is being made. Can you help?

The quality of emergency care provided to a nation of warm-hearted but largely poverty stricken people will benefit as EM evolves in this fascinating country. Talking of country, the Himalaya is the top of the world, but that's another story...
such as triage, risk assessment in the ED, and medical ethics. Chris Curry, one of the principal organizers, led sessions on the scope of EM practice in Asia and on toxicology.

Chris Curry is now involved in recruiting EPs to contribute to developments at BPKIH. It is hoped that the specialty program will commence in July 2013, and will run as a two year course under the leadership of Prof Gyande Malia, a generalist and anaesthetist who spent a year training in EM at the Royal Adelaide Hospital.

Following the success of NEMsem13, it is hoped that short courses being delivered in Myanmar and Sri Lanka can be provided at Nepalese institutions.

The EM development projects in Nepal are supported by the International Skills and Training Institute in Health (ISTIH) within the University of Western Australia.

Anyone interested in contributing to EM in Nepal is invited to contact Chris Curry at chris@chriscurry.com.au

In March I was invited to discuss the Sri Lankan experience of building EM, and the input from AECM, at the Nepal Emergency Medicine Seminar 2013 (NEMsem13). It was an opportunity to collate the activities of a variety of groups active in Sri Lanka.

I have personally been involved with two groups assisting Sri Lankan doctors with critical care skills and EM development.

Most input has been via two entities, the Sri Lankan Society for Critical Care and Emergency Medicine (SSCCEM), and the Sri Lanka Post Graduate Institute of Medicine (SLPGIM) - from which the Society had sprung. These two entities have provided the platform and invitations to run a number of courses which have had proven benefit in Australasia and elsewhere.

I was fortunate to be involved in the 2010 SSCCEM Annual Scientific Symposium along with a group of other EPs from Liverpool and Campbelltown hospitals in South West Sydney. This group was led by A/Prof. Richard Cracknell, and Dr. Sellapa Prahalath.

A relationship between Campbelltown Hospital, the SLPGIM and the Sri Lankan College of Anaesthetists, had arisen through the personal connections of Dr Prahalath, co-director of the ED. There was opportunity to bolster the medical workforce at Campbelltown while also meeting the need of the SLPGIM to have specialist trainees undertake an overseas component of training. Once this relationship had been strengthened by an exchange of training and doctors it was a small step to run training courses in Sri Lanka. The first of these was an emergency ultrasound course run in 2009. There have subsequently been a number of courses run by this group on a number of topics including the 2010 radiology interpretation course that I was involved with.

There have been a variety of other courses run by Australian FACEMS. Jeremy Raftos has run a number of APLS courses, which are now run entirely by local faculty. Andy Ratchford ran an ALS course in 2012. There have also been other groups providing educational resources to Sri Lanka, including a group from Tasmania running ATLS courses, and a multistate group running the “BASIC” ICU course.

In 2012 the first Emergency Life Care (ELC) course run by A/Prof Shane Curran (Wagga Wagga Base Hospital, NSW) and Prof. Chula Gunasekera (Peradeniya University, Kandy, Sri-Lanka) was conducted. I was fortunate to be part of the experience of bringing this modified ELS course to Sri Lanka for the first time. It was a very rewarding experience with practical skills taught to many junior doctors working in unsupported environments. Again, the model has been to train the local medical professionals to run their own courses.

The 2012 and 2013 ELC courses had an instructor training component, with the new local instructors then being supervised on the provision of the next candidates course.

Through a diversity of international courses (most of which have been sponsored by the SSCCEM) and through ongoing training associations with the SLPGIM, the Sri Lankan medical community has been exposed to how acute care is delivered in an Australian ED. Concepts around triage, trauma care, pre-hospital care, and management without a diagnosis have been introduced and refined.

This has been achieved in a much more robust fashion by another group led by A/Prof. Mark Fitzgerald and Gerard O’Reilly (The Alfred Hospital, Melbourne). This group is focused on the south of Sri Lanka and on one hospital in particular – Teaching Hospital Karapitya in Galle. Following the review of emergency services post the 2004 Boxing Day tsunami it was identified that deficits in ED capacity and trauma care were elements contributing to high morbidity and mortality. The Victorian Government and the Sri Lankan Ministry of Health embarked on the “Health for the South” project. This was a four step project which involved improving ED capacity (from a 2 to 6 bed Emergency Treatment Unit - ETU), visits by EPs and senior nurses to train ETU staff, training of one nurse and three physicians from Sri Lanka at The Alfred, the building of a trauma-emergency centre and finally the implementation of principles learnt to successfully run this new emergency reception centre. The exchange visits were mostly funded by AusAID, including the provision of extra overseas time to train nursing staff in the principles of triage. The Emergency Trauma Centre comprises 4 resuscitation beds (ETU), 21 acute beds, acute radiology, 4 operating suites, an 8 bed ICU, and 36 short stay beds. It currently sees over 200 patients a day.

The next step for Sri Lanka is the progression of postgraduate specialty training towards an MD(EM). This program has been initiated by the SSCCEM and the SLPGIM, with a curriculum developed with the aid of Shane Curran and Chris Curry.

Based on the success of the Karapitya model and the improvements in postgraduate training, the WHO has expressed an interest in directly funding similar projects throughout the country. This will hopefully provide more training facilities for EM trainees in Sri Lanka.
SRI LANKA - Emergency Life Care Course Update

Shane Curran | shane.curran@gsahs.health.nsw.gov.au

The Emergency Life Care (ELC) course continues its roll out in Sri Lanka with 2 series of courses being held in the last 12 months. After the initial pilot course there have now been 4 courses in all, with 2 instructor courses and 2 candidate courses (in October 2012 and April 2013). The programme in cooperation with the Sri Lankan Society of Critical Care and Emergency Medicine has been well received by local Sri Lankan medical officers.

The ELC course is modelled on the ELS (Emergency Life Support) course in Australasia. Australian faculty members have self-funded their own costs and have all been overwhelmed by the enthusiasm for the course and the positive feedback. Future plans are for 2 series of courses a year with a combination of Australian and local faculty. Some local faculty have been identified and have already run some skill stations and lectures in one of the courses. Any Australian FACEMs or senior registrars with an interest in assisting are welcome to contact Shane Curran for courses in 2014.

On the last course Jacqui Irvine and Shane Curran visited the hospital of one of the original candidates who had written to us 2 days after the previous course had finished outlining how she had used “the blueprint” in a successful resuscitation. A patient with chest pain presented to her small Emergency Treatment Unit (ETU) and had a VF arrest. Having defibrillated, intubated and stabilised the patient she then arranged appropriate transfer to a higher level facility successfully.

Here is part of her feedback to us:

“My story is that during my internship I did paediatrics and GYN & OBS and in the post I was put in to the ETU as MO/ETU... It was scary. I had no idea of what I’m doing. We didn’t have consultant in our hospital. So I’m all alone... My only objective was to keep the patient alive, not to treat her. During my night-off days I used to follow behind anaesthetic MOs asking them ‘pleases please can you teach me to hold the oxygen mask, can you teach me oxygenation of a patient’.

Sir that was what I was going through and now after the course I feel that I’m walking to the ETU as a NEW MO. I have confidence. I know what I’m doing now. And the good things that I do from now will fall on to you and the team. Each life that I’m going to save I will think of you all. Wish you good health and happiness.

And I’m teaching the Blueprint to my colleagues as well and I have pasted it in our ETU. We are really using it and thank you again and again for everything.”

Seeing the small size of the unit and the extreme enthusiasm for Emergency Medicine of the staff of the unit was indeed gratifying. The success of the “blueprint” approach could be judged by the fact that the poster has been stolen off the wall 4 times.

The most exciting development is the intake of the first candidates into the Emergency Medicine specialty training programme, the Masters of Emergency Medicine, this year. There are 15 candidates for this who will be undertaking a rotation through various hospitals in Sri Lanka and who must complete an overseas year. We hope to take all 15 candidates through the ELC course in October.

One of the universities in Colombo is also building its own hospital with the creation of a purpose built ED with an Emergency Medicine stream in their curriculum, with the aim of training doctors competent in EM. The time frame for this is the next 3-5 years.

All of these developments along with the work being done by The Alfred Hospital (Melbourne) in Galle and the Liverpool Hospital (Sydney) team is contributing to the development of EM in Sri Lanka.

With the EM Primary Exams behind me I finally arrived in Murgwanza village, Kagera region, Tanzania. I had organised to work here for 3 months by contacting Rose Skalicky FACEM, Medical Officer in Charge at the hospital (Dr Skalicky’s article appeared in the last edition of this Newsletter).

Emergency medicine is very new to East Africa, and while major cities hospitals are starting to develop EDs and training programs, basic emergency care concepts are still quite foreign to most staff at rural and remote hospitals. Murgwanza District Hospital operates an ED in conjunction with an OPD. Patients arrive with acute or chronic problems, and after looking in with clerical staff are essentially seen in order of arrival.

Despite the local staff reporting that they use triage, patients only receive urgent care if their problem is immediately obvious without the need for a formal brief assessment. For example, an MVA victim obviously haemorrhaging from open wounds would be taken for treatment to the emergency room, but a child with fever, concealed in its mother’s kanga could be moribund and await being seen for a prolonged time due to lack of triage assessment. The use of the emergency room, which is better equipped than the standard consulting rooms, is also a relatively new practice, first encouraged by Dr Skalicky.
During my time in Murgwanza as well as being involved in direct medical care, I began developing triage guidelines for the hospital under Dr Skalicky’s supervision. We used a combination of WHO paediatric treatment guidelines which were adopted as national guidelines during my time in Tanzania, and the Australasian Triage Scale. As the national paediatric guideline stratifies presenting children into 3 categories of urgency, we used a similar system for the adults to achieve consistency. Adjustments also had to be made to the local context. For example, as there is no thrombolysis available for ischaemic CVA and no neurosurgical capabilities for intracranial haemorrhage, there is no point in triaging a stroke presentation as urgent. After developing the triage guidelines I was involved in teaching sessions to introduce them to nursing students (there is a nursing school affiliated with the hospital).

While I hope to have been of some use to the community in which I worked, I have gained much more than I gave. While the high standards of care in Australia lead to excellent patient outcomes, working overseas highlights our often wasteful use of resources, our over-reliance on technology and the practise of “defensive medicine”. Simply put, I found it rewarding to use clinical skills to arrive at a diagnosis, and treat what I thought was actually wrong with the patient, rather than investigating for a myriad of less likely possibilities. Often the best treatment was not available, and it was a rewarding challenge attempting to use available resources to suit the needs of the situation. This could involve using older pharmaceutical agents, superseded in the west by more effective or safer medications, making inhaler spacer devices from soft drink bottles, or sitting by a patient’s bedside and manually adjusting the drip rate on an adrenalin infusion in the absence of an infusion pump.

I was exposed to a very interesting range of conditions. While my local colleagues were eager to learn from me about “exotic” conditions such as hypertension and diabetes, I in turn was fascinated by the cases of malaria, HIV, TB, typhoid, tetanus, meningitis, worm infestations and malnutrition, which for them were so routine. Conditions familiar from Australia were present in extreme forms due to delayed presentation or lack of available treatment (eg I experienced anaemia in a new light when the patient who sat on her bed talking to me, undistressed, turned out to have a Hb of 27).

There are many opportunities for ED trainees to work in developing world settings. While sometimes it can be hard to get in contact with a particular hospital to organise a work rotation, there are now a number of Australian FACEMs working overseas, and contacting them might be an easy first step (see previous IEMSIG newsletters for contact details). Increasingly it is possible to have time overseas accredited, as either ED time or a special skills post, depending on the work setting and supervisors. Certainly I found the College straight forward to deal with in this regard (if only I could say the same for the various Tanzanian authorities). As stated by others in these Newsletters, I think emergency physicians and also trainees are among the best suited doctors for work in developing world settings. We have a broad clinical knowledge and skills base, and are used to expecting the unexpected, adapting to changing situations, working in often hectic environments and creating order in the chaos. For a trainee, there is likely no better way to develop these skills than to work in resource constrained settings overseas.