Trauma & Emergency









Academic Medicine Sentinel

"Proclaiming and Promoting Academic Leadership"

From the Desk of Editor





ear colleagues,

It is indeed pleasure writing to you all again. I hope you all received the message in the first issue. I should thank every one you for the support and encouragement. I did receive overwhelming response from our colleagues across India.

The INDUS ACET is progressing with its new developments of EMTECH a learning resource centre and our journal www.onlinejets.org. EMTECH so far organized two programmes Advanced Hazmat Life Support (AHLS) and Emergency Sonography School at AIIMS New Delhi. .We at PSG Institute of Medical Sciences and Research have an Emergency Medicine Department with structures such as triage point, Medical ER, Trauma room which functions with strict SOPs and protocols. The Aligarh Muslim University has structured an Airway Training School which is going to be a national teaching school on Airway management. The team at Mangalore is gearing up for the annual event INDUSEM 2008. The TEAMS has reached every part of this nation and this year more academic institutions are to participate in the ACET meeting.

The need of Accident & Emergency Dept as a specialty is well felt all over the country. The Medical council of India has recognized A & E as a specialty. I am indeed happy about the moment when we are going to have more representatives from all over the country in this year ACET meeting. I have been selected as Fellow by FAIMER to do a project on "Designing an Emergency Medicine Curriculum for a PG Programme" where I need all your inputs.

Thank you all and I shall be writing more in the next issue.

JAIHIND

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Editor

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Simulation programme at PSG IMS & R, Coimbatore





Simulation programme at PSG IMS & R

Simulation is a unique and new educational tool in a realistic environment without patient risk, standardized, tailored to a specific case scenario which can be repeated ,evaluated and reinforced and accepted globally .Since it is practically impossible to do bed side teaching in Emergency, simulation based learning has been accepted as tool in our institution.

Medical Simulation Training Benefit

Medical Simulation Training for Improved Education

Medical simulators are revolutionizing the practice of medicine.

Risk-free Environments for Improving Patient Safety

Using virtual reality simulation, medical students, residents, and practicing physicians can learn treatment protocols and master basic and procedural skills before touching a real patient

Repetitive Skills Training for Improving Proficiency

Medical simulators allow the clinician to safely learn, practice, and repeat the skill or procedure over and over until proficiency is achieved. Simulation training fosters critical thinking, active learning, and confidence building.

Visual, Physiological, and Tactile Realism

Simulation training offers visual, physiological, and tactile realism that mimics the look and feel of performing the actual procedure

Variety in Clinical Scenarios and Complications

Medical simulators offer immediate training opportunities, overcoming the problem of having to wait for suitable real-life cases to present themselves. Objective Assessment Training New Techniques Effective for Certification and Testing Medical simulators can be useful tools in determining a physician's understanding and their

adoption of best practices, appropriate use of tools and devices, management of patient complications, and overall competence in performing a procedure

We organized a one day CME on "Simulation based Teaching and Learning" on 24th January 2008.Two eminent personalities Dr Ramesh Venkatraman, Director, The Academy of Clinical Teaching (TACT), Chennai and Dr Paul Phrampus, Director, Wiser Institute, University of Pittsburgh took us through the entire course. The course was structured in a way as how to set a simMan, simulator orientation and various scenarios like Airway and Breathing management, Circulatory management and Team work. It opened our eyes towards a different teaching and learning methodology. It is an initiative for our institutions goal of creating a clinical skill lab. The course was well attended by our teaching faculty, Interns, Emergency team as well as the nursing team of our institution. The programme came to an end with the felicitation of the faculty by our Medical Director.

www.indusem.com

"Rescue, Resuscitation & Research"
INDUS-EM 2008

4th INDO-US Emergency Medicine Summit
"A Level One International Academic Meeting on Trauma, Emergency &
Disaster Medicine" &

ACET Annual Assembly 2008

3rd INDO-US Academic Council for Emergency & Trauma- Annual Assembly

"Acute Academic Technology & Leadership Incubator" Invites

Med Students, Residents, Faculty, Nurses, Paramedics, Public Health Experts, Administrators, Policy Makers, Councilors, Delegates & Research Papers

Date & Venue

10th October to 12th October 2008

AJ Institute of Medical Sciences, Mangalore
Pre-Summit Mangalore Academic Meet

8th & 9th October 2008

5 Days, 9 Tracks, 16 Workshops, 200 Hours, 100 INDO-US Academic Leaders & Rs 1, 00,000 in Prizes

Joint Conferences

Emergency Nursing Conference (ENCON 2008)
Disaster Conference for India (DCON-INDIA)
Paramedic Parishad of India (PPI 2008)
INDO-US Leadership Meetings
INDO-US Career Conference
EMARCS 2008

In Collaboration with

Kasturba Medical College, Manipal Kasturba Medical College, Mangalore Yenepoya Medical College, Mangalore KS Hegde Medical Academy, Mangalore Father Muller Medical College, Mangalore

INDO-US Academic Promoters
University of South Florida, USA
State University of New York, USA
All India Institute of Medical Sciences, India
World Association of Disaster & Emergency Medicine

Secretary General Dr Sudhesh Rao, MD

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EM-TECH Reporter

EM-TECH was inaugurated in December 2007. EM-TECH was formally shaped after the mammoth success of INDUS-EM 2007. In the past years since the inception of the INDUS-EM program the partner faculty from medical colleges in India always wanted standardized protocols, regular workshops and training opportunities in India and United States. To fulfill the aspirations of the INDO-US partner medical colleges EM-TECH was formulated.

The first inaugural course of EM-TECH was Advanced Hazmat Life Support (AHLS) was held for Academic Councilors in December 2007. 25 Councilors attended the course. The AHLS course was held in collaboration with Centers for Disease Control and Prevention (CDC) and Indian Council for Medical Research (ICMR). The venue was the prestigious Ramlingaswamy Auditorium at AIIMS, New Delhi.

The course duration was three days during which councilors were trained on various aspects of HAZMAT response. The course Director was Dr Brent Morgan from Emory University Atlanta and the course faculties from US were Dr Vikas Kapil from CDC and Dr Sagar Galwankar from University of South Florida. The Indian faculty cadre consisted of Dr Aruna Dewan from ICMR, Dr Praveen Aggarwal, Dr LR Murmu and Dr Sanjeev Bhoi all from AllMS. The course was well received and the core faculty have decided to make AHLS a annual event. HAZAMT response is vital to preparing hospitals, communities and physicians against chemical, biological, nuclear and radiological disasters.

As per AHLS directive the course content is the most comprehensive training program to provide the critical skills needed to treat victims exposed to toxic substances. It is important that physicians, nurses, paramedics, pharmacists and other healthcare professionals be trained in hazmat response to face the medical challenges of chemical spills or toxic terrorism

AHLS is offered in collaboration with the American Academy of Clinical Toxicology (AACT), and was developed by the Arizona Emergency Medicine Research Center (AEMRC), a Center of Excellence at The University of Arizona College of Medicine. Each course involves a board-certified toxicologist and physician and is taught by AHLS verified Instructors. The AHLS program also trains medical personnel to become AHLS Instructors who bring the course to their region.

The **Provider**, **Toxic Terrorism** and **Chemical Burns** courses include small-group interactive case studies. The Provider and Instructor courses conclude with verification exams, and provide a **four-year verification** status with an 80% or higher score on the exam. For more information please visit www.ahls.org

In 2008 January EM-TECH held it's First ever Emergency Sonography School for Indian Emergency Experts. This school was held at AIIMS Apex Trauma Center and was attended by over 50 Academic Directors from over 258 MCI recognized medical colleges in India. The course was held in collaboration with SONOSITE who are the leaders in hand held emergency sonography machines. The course faculty was lead by Dr Michael Stone from SUNY







Downstate. The other trainers were Dr Bradley Peckler, Dr Sagar Galwankar, Dr Simon Kotlyar and Dr M Secko from USF and SUNY. A pre school special course on Emergency Pediatric Sonography was held at AIIMS department of Pediatric and child surgery. This was a maiden course across south East Asia and was well received. The course is pending approval to be conducted at the World Congress of Pediatric Surgeons in 2010 In New Delhi.

The emergency physician (EP) can diagnose life threatening emergency medical problems such as ruptured abdominal aortic aneurysm, traumatic hemoperitoneum, pericardial effusion, and ectopic pregnancy in seconds. Most importantly, the EP can do the ultrasound without the reliance on other, (often reluctant) attendings.

Ultrasound is the technology of choice for emergency physicians for a variety of medical conditions. Technological advances have allowed for better image resolution with basic operator skills, thus allowing the emergency physician the capability to use sonograms to help with patient management at the bedside.

The objectives of the EM-TECH Sonography School were jointly exercised and achieved with SONOSITE Ultrasound Manufacturing and Educating Corporation. The course success was analyzed by the enormous satisfaction amongst the trainees and the technical experts from SONOSITE. Mr. Paval Behl, Mr. Brad Willamson and Mr. Anil Srivastava played a key role in shaping this maiden INDO-US Emergency Sonography School which is destined to become an annual event.

The Next Training Program from EM-TECH will be held from 11th May 2008 onwards and will focus on Clinical Research. The course director for the course is Dr Laxminarayan Rajaram from University of South Florida Biostatistics. The course will be held over 6 Days for 8 Hours a day and will cover key fundamentals of Clinical Research Design, Data Management and Core Analytical interpretation.

EM-TECH continues to foster the growth of academics and academicians in the field of Emergency and Trauma in India. For further details please visit: www.indusem.com

For More Information about EM-TECH and its courses please contact Officer in Charge:

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Bench to Bedside Research

Clinical investigation with human subjects in which knowledge obtained from basic research with genes, cells or animals is translated into diagnostic or therapeutic interventions that can be applied to treatment or prevention of disease. The mission of bench to bedside research is to translate the basic science discoveries into clinical applications and to use the clinical observations to generate research foci for basic science. Why is it critical? Basic scientists need to have an understanding of the realities of the human condition. Without that intersection between basic science and the clinic, discoveries made at the research bench may have little relevance or application to the real-life human situation and developing effective therapies.

Think about it: There are mice walking in labs all over the world. Sadly, the same can't be said for those who are spinal cord injured. Why? Certainly one of the reasons is that it is very difficult to translate lab successes to humans. Lab animals are not people and their injuries don't faithfully mimic the chaos of a human injury or anticipate the human response to injury and subsequent interventions.

Trauma and emergency care research has its foundation in basic laboratory science. But translational research-the process of applying ideas, insights, and discoveries generated through basic scientific inquiry to the treatment or prevention of human disease-is the most active area of this discipline. In 2005 "better translation of findings into patient care through guidelines" was at the top of the list of seven research priorities of the CDC updated Acute Care chapter of the 2002 agenda. Trauma is a complex disease that involves direct mechanical injury to tissues as well as systemic disturbances of the entire organism. The field of inquiry involves many disciplines and crosscutting themes. Transport and admission to a trauma center of one trauma patient may involve paramedics, trauma and burn surgeons, trauma nurses, personnel from radiology, blood bank, respiratory therapy, rehabilitation and other ancillary disciplines, along with selected physicians from 16 specialties ranging from neurosurgery to OB/GYN. Unlike many other areas of medical research, it is not strictly defined by organ systems or types of conditions. Rather, it is uniquely defined by the urgency and location of treatment. Thus, the entire spectrum of trauma research begins in the acute setting at time of injury (prehospital EMS and hospital emergency department settings with significant extensions into prevention), proceeds to care of the patient in the hospital (ICU, OR and surgical departments), and on to rehabilitation. It is one of the most interdisciplinary fields in all of medicine, involving the collaboration of trauma surgeons, numerous medical specialties, engineers, behavioral scientists, and epidemiologists. Urgent subject areas of translational research include: injury prevention, triage, hemorrhage control, resuscitation, orthopedics, burn care, head injury, critical care, tissue engineering, rehabilitation and recovery, with categories devoted specifically to the extremes of age within each subject area.

To succeed, research must be based on the establishment of large-scaled multicenter research collaborations as well as cohesive approach of a team of basic scientist and clinicians. Multicenter networks enable researchers from the diverse disciplines of trauma and emergency care research to assemble sufficiently large data sets to establish robust research findings. This means the quickest return of funding investments to the care of patients. One such example is the Centre for Surgical Research (CSR) model at University of Alabama, Birmingham, USA headed by Prof. Irshad Choudry. His innovative idea and able mentorship has paved the way of setting up a similar model at All India institute of Medical sciences, New Delh with a major emphasis on Trauma inflammation and shock biology.

Submitted by

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