

years of clinical practice, and practice specialty), international background (volunteer work, disaster relief), global health education interest (obtaining training, specialties desired), and course specifics (length, format, and cost).

**Results:** A total of 624 surveys were returned for a 10.6% response rate. Of that group, 88.1% expressed interest in global health and 75.8% in a training course. Data analysis of this group showed that it consisted largely of physicians practicing for 15–34 years (mean = 23.8) and 45–64 years of age (mean = 55.8). Answers to course-specific questions indicated physician concerns about course time and educational interests based on differing clinical background.

**Conclusions:** Oregon physicians are interested in international healthcare education. To meet this need, a global health course has been developed at the Oregon Health and Science University (OHSU).

**Keywords:** curriculum; education; global health; physicians; training  
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### (M7) Emergency Medicine International Observational Fellowship: An Educational Model for International Academic Emergency Medicine

*Amy Marr; Ross Bryan; Patrick Brunett; Mohamud Daya*  
Oregon Health and Science University, Portland, Oregon USA

**Introduction:** Emergency medicine continues to grow as an international specialty. With >30 countries developing emergency medicine training, supporting international physician education is imperative. The proposed Emergency Medicine International (EMI) observational fellowship is a systematic model for the academic and experiential training of future leaders.

**Methods:** This program is a result of interest in academic emergency medicine and the responsibility of the educational institution. A literature review on the international development of emergency medicine was performed and the weaknesses were assessed. Based on this review, the goals for EMI are providing: (1) leadership; (2) exposure to education training models; and (3) research instruction. The EMI structure consists of four blocks: (1) emergency medicine clinical rotations; (2) emergency medical services (EMS) experience; (3) medical toxicology exposure; and (4) emergency medicine operations/administration. All blocks are tailored to the training background and interests of participants such as focusing on education methodology (conference organization, simulation) or departmental operations (quality improvement, faculty development). Overlapping all blocks is crucial to education in research methodology and evidence-based practice of medicine.

**Results:** Assessment of the program includes pre-/post-survey completion by participants and yearly post-fellowship contact tracking the development of emergency medicine in their country.

**Conclusions:** While different types of organizations can assist in other ways, only academic emergency medicine can help grow and mentor faculty to expand the specialty worldwide.

**Keywords:** education; educational model; emergency medicine; Emergency Medicine International; international; training  
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### (M8) Sri Lankan First Responders Trained in the United States

*Paul Bollinger*

Medical Teams International, Tigard, Oregon USA

**Introduction:** Following the response to the devastating 2004 tsunami, Medical Teams International's (MTI) Emergency Medical Services (EMS) program has worked directly with the Government of Sri Lanka to develop a comprehensive EMS system. In September and October 2008, a delegation of eight Sri Lankan EMS instructors visited Oregon and Washington for advanced instructor training in EMS skills and observation of local and governmental EMS agencies. The delegation participated in >1,300 hours of combined classroom education and direct provider observation experiences. Following the visit, the delegation was given a 10-question post-event survey to measure their perception of the effectiveness of this type educational exchange.

**Methods:** A Web-based survey tool was utilized to elicit responses from the participants. Questions consisted of open-ended and ranked questions. The survey period was 30 days and there was a 60% response rate.

**Results:** The participants felt this opportunity was useful and beneficial to the ongoing development of the EMS system in Sri Lanka. Additionally, participants indicated that the classroom experience was the most important aspect of the visit. An unanticipated response was that the participants were impressed with the concept of collaborative teamwork and unity that exists within US fire departments and EMS agencies.

**Conclusions:** Future exchange programs should focus more on classroom experiences and less on ride-along type experiences. Additionally smaller groups may allow for greater one-on-one peer education opportunities. This exchange provided participants with opportunities that are not currently available in Sri Lanka. The participants in this exchange will utilize the knowledge from this exchange for many years to come.

**Keywords:** emergency medical services; education; exchange; Sri Lanka; training  
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### (M9) Simulation Exercise in International Disaster Relief for Graduate Students

*Setsuko Umezaki; Kazue Kawahara; Bei J. He; Hitomi Sugimoto; Kazuyuki Akinaga; Yuji Fujimoto; Naruyo Kanzaki; Koichi Shinchi*

Faculty of Medicine, Saga University, Saga, Japan

**Introduction:** Education of graduate students in international disaster relief (IDR) is important. The authors introduced this practical education in Saga University in Japan.

**Methods:** The authors performed a mass casualty disaster exercise involving the simulated IDR from 06 October to 08 December 2008 (every Monday, for two hours/week, for a total of 12 hours). The exercise was designed to simulate the medical relief operation of the Indian Ocean tsunami that occurred in December 2004. Logistical functions also were involved. Thirteen students participated the exercise, and they

were assigned to one of two groups. Each group included one Indonesian doctor who was a PhD candidate, while the remaining students were achieving a Masters in nursing. The official language used during the exercise was English. This study reports on the experience and evaluation of the students. **Results:** More than 90% of the students answered that this exercise was very instructive and interesting. They rated the simulation exercise very favorably and believed that the knowledge gained through the exercise would be beneficial in the near future.

**Conclusions:** This kind of practical education is valuable in disaster medicine and disaster nursing training for graduate students in Japan.

**Keywords:** education; graduate student; international disaster relief; Japan; training

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### (M10) Institutional Self-Response to a Disaster Drill: A Descriptive Study

Bonnie Arquilla,<sup>1</sup> Vineet Gupta,<sup>2</sup> Baruch S. Fertel,<sup>2</sup> Patricia M. Roblin,<sup>1</sup> Stephan A. Kohlhoff,<sup>1</sup> Michael H. Augenbraun<sup>1</sup>

1. State University of New York, Downstate Medical Center, New York, New York USA
2. New York University School of Medicine, New York, New York USA

**Introduction:** Predisaster Drill Activities (PDAs) may act as predictors of preparedness, but have been studied inadequately. To address this gap, a descriptive study of PDAs was conducted at two large hospitals.

**Methods:** A longitudinal study was conducted at two large academic hospitals (A: a tertiary care university hospital, and B: an urban, municipal, Level-1 Trauma Center) in Brooklyn, New York. Both were equipped with disaster plans. Over a period of five weeks preceding a full-scale drill of a simulated pandemic influenza outbreak, eight sequential public health alerts were issued. Hospital responses to pre-identified components were recorded: (1) training; (2) equipment; (3) communications; (4) incident command centers; (5) supplies; (6) staffing; (7) infection control measures; and (8) miscellaneous. A descriptive statistical analysis was performed.

**Results:** The overall response rate to all the alerts for Hospital A was 67%, while that for Hospital B was 40% ( $p < 0.009$ ). The median delay in responding to alerts for Hospital A was six days (range = 0–19 days), and B was seven days (range = 0–21 days). Training was the most frequently cited component ( $n = 20$ ), however the median delays (days) were two (range = 0–13), and nine (range = 4–21) for hospitals A and B, respectively. Responses to communications, supplies and incident command center components were delayed or inadequate. Some additional unexpected responses such as supplemental meetings ( $n = 4$ ) and additional infection control measures ( $n = 3$ ) were elicited at both hospitals.

**Conclusions:** There were disparate responses to identical triggers at similar sites. Pre-disaster Drill Activities may

help identify emergency response preparedness gaps and augment available resources for optimal utilization.

**Keywords:** alert; disaster; drill; pre-disaster; preparedness

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### (M11) Managing a Simulated Disaster using Radio Frequency Identification Technology versus the Use of SMART Cards

Jorma Jokela,<sup>1</sup> Monica Rådestad,<sup>2</sup> Ville Harkke,<sup>3</sup> Dan Gryth,<sup>2</sup> Markku Luoto,<sup>4</sup> Helen Nilsson,<sup>5</sup> Anders Rüter,<sup>5</sup> Leif Svensson,<sup>3</sup> Maaret Castren<sup>6</sup>

1. Centre for Military Medicine, Finnish Defense Forces, Lahti, Finland
2. Prehospital Centre, Södersjukhuset and Department of Clinical Science and Education, Karolinska Institutet, Södersjukhuset, Stockholm, Sweden
3. Institute of Advanced Management Systems Research/Åbo Akademi University, Turku, Finland
4. Logica CMG Company, Helsinki, Finland
5. Centre for Teaching and Research in Disaster Medicine and Traumatology, Linköping University, Linköping, Sweden
6. Department of Clinical Science and Education, Södersjukhuset, Karolinska Institutet, Stockholm, Sweden

**Introduction:** Disaster management systems constantly are challenged to improve situational awareness during mass-casualty incidents. In this study, a system that utilizes commercially available, low-cost components, including Radio Frequency Identification (RFID) and mobile telephone technology was evaluated.

**Methods:** The feasibility and direct benefits of the system were evaluated in two separate simulated mass-casualty incidents; one in Finland involving a passenger ship accident resulting in multiple drowning/hypothermia patients, and an airplane crash scenario at Arlanda airport in Sweden. Both simulations involved multiple authorities and functioned as a test setting for comparing the situational awareness of disaster management using the RFID-based system. In this system, triage was performed using a mobile telephone, and information was sent automatically to the command center and hospital. The traditional method of using SMART cards also was used. The development of situational awareness could be measured directly by comparing the availability of up-to date information at different points in the care chain using both systems.

**Results:** The RFID system proved to be easy to use and the situational awareness of the disaster management improved significantly. Information about the number and status of the casualties was available at the coordinating units >60 minutes earlier than with the traditional method.

**Conclusions:** The proposed system was easy to use, quick, stable, and proved to work seamlessly even in harsh field conditions. It surpassed the traditional systems in all respects. It also dramatically improved the general view of mass-casualty incidents and enhanced medical emergency readiness in a multi-organizational medical setting.

**Keywords:** disaster management; mass-casualty incident; mobile technology; Radio Frequency Identification; simulation; situational awareness; triage

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