International Emergency Medicine Fellowship

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International emergency medicine (IEM) fellowship training for United States medical graduates (USMGs) provides opportunities for gaining knowledge and skills valuable to physicians interested in pursuing careers in international health. USMG physicians working in IEM have tended to focus their activities on providing international humanitarian relief and developing emergency medicine (EM) training and care delivery systems.

Observational Emergency Medicine fellowships for international medical graduates (IMGs) provide an opportunity for physicians from countries with developing EM systems to gain exposure to administrative, educational, research, and patient care elements of EM systems in the United States. IMG participants in these programs are able to return to their home countries with knowledge and skills valuable for establishing and directing new EM care delivery systems and training programs.

Background

The past decade has seen a worldwide increase in demand for EM services. Global trends toward greater urbanization and increasing
population density have been accompanied by an increasing incidence of death and disability due to acute illness and injury. These factors, plus the increased availability of improved therapeutic options for many acute disease processes and economic growth in many parts of the world, have contributed to an increased demand for emergency medical care.

A range of formal and informal educational experiences and training opportunities exist for United States-trained emergency physicians (EPs) who are interested in international emergency medical work. IEM Fellowship training programs for United States-trained EPs were initially proposed in response to an increased demand for EM services abroad and the absence of formal training in international or public health within EM residency education [1-6]. Opportunities for education and training in EM are also available within the United States for physicians from countries with less-developed EM systems. Observational IEM fellowships, or so-called “observer-ships,” have been proposed as a strategy for providing physicians from other countries with the knowledge and skills to become more effective leaders in the development of EM in their home countries [7]. A variety of institutions and organizations offer short courses on topics relevant to physicians interested in IEM but who do not want to pursue lengthier formal programs (see Table 2 in the article on International Humanitarian Assistance by VanRooyen, Venugopal, and Greenough elsewhere in this issue).

Interest in IEM work is substantial and growing among EPs in the United States and other countries. EM professional organizations in the United States with active member sections devoted to IEM include the American College of Emergency Physicians, the Society for Academic Emergency Medicine, the American Academy of Emergency Medicine, and the National Association of EMS Physicians. Opportunities exist for EPs wanting to participate in short- or longer-term international medical relief work as providers and in leadership roles [6,8-12]. Given their broad clinical expertise in the initial diagnosis and treatment of acute illness and injury and their specific expertise in prehospital care, disaster medicine, and toxicology, EPs are well suited for the demands associated with many types of international humanitarian relief work. EPs have taken on leadership roles in international development organizations such as the Peace Corps, the Centers for Disease Control, disaster management teams, the International Committee of Red Cross Societies, the World Health Organization, and other United Nations organizations [6,13-15]. EPs have taken leading positions within nongovernmental organizations (NGOs) such as Médecins Sans Frontières (MSF), International Medical Corps, Physicians for Human Rights, and International Rescue Committee.

Global expansion of EM care delivery systems and dissemination of EM concepts has been facilitated by international EM conferences, physician exchanges, international EM journals, and Internet-based information exchange. In addition, EPs from countries with well-established EM systems
have been involved with developing education and training programs and in clinical, EMS, and disaster systems in countries with less well-developed systems [16-23]. Whether an individual's expertise is in emergency department (ED) administration, quality improvement, EM residency training programs, EMS, Disaster Medicine, or Toxicology, EPs are ideal content experts for development work.

Although EM residency preparation and clinical practice provide EPs with content expertise that is well matched to international medical relief work and EM development, the challenges of international EM require expertise in areas that are typically not acquired through EM residency training and clinical practice. Such areas include the following:

- Assessment of international health systems; ability to identify pertinent emergency health issues
- Design of emergency health programs that address identified needs
- Skills necessary to implement EM programs abroad and integrate into existing health systems
- Evaluation of quality and effectiveness of international health programs
- Specific skills for involvement in humanitarian assistance medicine

In addition, EPs may not have sufficient understanding of international public health issues, political climate, cultural differences, differences in clinical practice patterns and resource availability, international health administration, and strategic planning to be effective in international practice.

Fostering the development of EM leaders among the ranks of physicians in countries with developing EM structures is an essential component of long-term sustainable development of EM systems. EM providers in countries with developing EM systems often have prior training in other allied specialties, such as anesthesiology, internal medicine, surgery, pediatrics, and intensive care, but have chosen to focus their clinical practice on providing emergency care. Establishing EM residency training programs in countries with developing EM systems is one approach that has been used to promote the development of EM systems and the EM specialty [18,24,25]. Physicians from countries without EM training programs have in some cases chosen to pursue EM residency training in countries with established EM systems to gain necessary expertise and credentials for establishing EM systems in their home countries [26]. This option offers in-depth EM training and the added measure of legitimacy through Board Certification; however, EM residency training has become increasingly sought after by United States medical graduates. Positions are competitive and may be difficult for IMGs to obtain. The application process requires a substantial time commitment and preparation in terms of passing the United States Medical Licensing Exam (USMLE) and meeting the requirements for Educational Commission for Foreign Medical Graduates (ECFMG) certification and for medical licensure in the United States (see below).
Other foreign physicians have chosen to participate in shorter "fellowship" programs offered by academic EM institutions in the United States and elsewhere. Although these programs are not substitutes for EM residency training, they can offer opportunities for supplementing the physician's clinical knowledge and skills in areas where they need additional guidance. The degree of "hands-on" clinical exposure available to fellows is dependent on the individual's eligibility for medical licensure in the United States. Fellows can also gain expertise in nonclinical areas of EM department and systems administration, EM education, research, and the mentoring associated with participating in the above activities and life of an academic EM department. Recommendations for these fellowship programs have been proposed in an attempt to provide some standardization of the educational experience [26].

Fellowship training for United States medical graduates (USMG fellowships)

According to the American Board of Emergency Medicine, in the 2002-2003 academic year, there were 130 EM fellowship programs with over 100 enrolled fellows [28]. This is a significant increase from the 2001-2002 academic year, when there were 116 fellowships [29]. An increasing number of EM residents are choosing to spend further time and effort training to further advance the field of EM. Of the 130 listed existing fellowships, nine are focused specifically on the practice of IEM. As the specialty of EM continues to grow locally and abroad, so does the need for IEM-trained physicians [1,2,5,12,17-19,21,22,26].

IEM is a complex and multifaceted field. Examples of some of the different approaches to IEM are listed in Box 1. Box 1 is no means an exhaustive list but provides some insight into the complexity of the term "International Emergency Medicine." Few residents have had extensive experience working in international health, and fellowship training can offer the opportunity for exploration and development into the different aspects of IEM. IEM fellowships help to prepare physicians for career paths focused on IEM [1-6].

Fellowship is an ideal approach to training in IEM because it allows for the combination of education, clinical practice, and hands-on experience needed to work in developing countries and health systems. Adequate training requires significant time to travel, obtain advanced education in public health, conduct research, and continue to work and grow clinically in the ED locally [1-6]. Funding is needed to support these endeavors. IEM fellowships provide the structure, guidance, and mentorship needed to accomplish these tasks. Goals for IEM fellowship training for United States medical graduates are listed in Box 2. In general, most fellowships involve obtaining a Master of Public Health (MPH) degree, working clinically in the ED as an attending, working abroad on international projects, and teaching.
Box 1. IEM activities

Delivery of humanitarian assistance
- Participation in established programs (MSF, PHR, WHO, ICRC, etc.)
- Refugee and Internally Displaced Persons aid
- Disaster management
- Short-term medical missions, intervention work (cataract surgery, malaria bed net programs)

EM systems evaluation and development
- Needs, resource assessment
- Educational activities (certification courses, Training of Trainers, etc.)
- EM residency training programs
- Prehospital care systems
- Physician exchange opportunities, EM immersion programs

Research
- Clinical research (malaria interventions, malnutrition, trauma, etc.)
- Surveillance work (disease epidemiology, monitoring of baseline health indicators, etc.)
- EM systems research

Specialty advocacy
- EM legislation
- Injury prevention
- Specialty status

The specific projects can be tailored to the interests of the individual fellow and the strengths of the department in which they are training. An integral component to this training is working and interacting with international organizations and training in the development and implementation of emergency medicine services and public health interventions.

In the past several years, EM fellowship opportunities have continued to develop and grow. Although these programs are not ACGME accredited, they offer a unique combination of training, support, and education that draws residents and faculty alike. The longest continuously running program is at Loma Linda University, started in 1994. Since that time, eight more programs have been developed. Current IEM fellowship training programs for United States medical graduates are listed in Table 1. As interest and demand for training in IEM grows, so will the training opportunities and the different career paths that trained individuals will be able to pursue.

Fellowship training provides for the development of leaders in IEM by training individuals with focused goals and expertise. Fellowship graduates
Box 2. Goals of IEM Fellowship training for United States medical graduates

- To develop the ability to assess international health systems and identify pertinent emergency health issues
- To design emergency health programs that address identified needs
- To develop the skills necessary to implement EM programs abroad and integrate them into existing health systems
- To develop the ability to evaluate the quality and effectiveness of international health programs


act as role models abroad and in the United States. They set an example that further training in IEM provides unique opportunities to help develop the specialty of EM worldwide. These new generations of graduates are ideally poised to develop new programs in IEM and new IEM fellowship opportunities and to foster resident and faculty involvement in IEM. Recent fellows have gone on to work with international organizations in war-torn countries such as Afghanistan or have joined academic EM departments as faculty with specific goals related to bringing IEM to their departments and fellowship development.

Although fellowship training in IEM is a relatively new concept, it is an ideal way for United States Emergency Medicine residency graduates to gain valuable experience and training in IEM. By providing an opportunity for mentorship, support, and education, fellowships allow for the development of leaders in IEM and the growth of EM as a specialty locally and globally.

For EPs interested in IEM work but unable to complete a formal fellowship program, there is a range of short courses and other training opportunities that can provide additional knowledge and skills in specific areas. Examples of such courses include the Health Emergencies in Large Populations course [30], the Sphere Project "minimum standards in disaster response" courses [31], and various certificate programs in Tropical Medicine accredited by the American Society of Tropical Medicine and Hygiene [32].

Fellowship training for international medical graduates (IMG fellowships)

An important adjunct to in-country development efforts is to allow physicians from countries with developing EM systems to experience the "big
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<th>Contact</th>
<th>E-mail</th>
<th>Phone</th>
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<tr>
<td>Loma Linda University</td>
<td>Loma Linda, CA</td>
<td>Tamara Thomas, MD</td>
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<td>(312) 942-4978</td>
</tr>
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<td>University of Illinois at Chicago Center for International Emergency, Disaster &amp; Relief Studies, The Johns Hopkins University</td>
<td>Chicago, IL</td>
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<td><a href="mailto:jlin7@uic.edu">jlin7@uic.edu</a></td>
<td>(312) 413-7393</td>
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<td>Baltimore, MD</td>
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<tr>
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<td>(617) 732-5813</td>
</tr>
<tr>
<td>Bellevue Hospital Center, New York University School of Medicine</td>
<td>New York, NY</td>
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<td><a href="mailto:peg.aao@att.net">peg.aao@att.net</a></td>
<td>(212) 263-3743</td>
</tr>
<tr>
<td>University of Rochester Medical Center</td>
<td>Rochester, NY</td>
<td>Katherine O'Hanlon, MD</td>
<td><a href="mailto:katherine_ohanlon@urmc.rochester.edu">katherine_ohanlon@urmc.rochester.edu</a></td>
<td>(585) 275-7362</td>
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</tbody>
</table>

* Currently accepting New York residents only.

picture" of a well-established, well-developed emergency medical system. The goal of these physician exchanges is to prepare individuals from countries without EM training programs for career paths as pioneers and leaders in developing EM programs in their home country. Early experiences with such training programs for foreign physicians have been published previously [27].

There are two generally accepted models for emergency medical care: (1) the hospital-based (or the Anglo-American model), whereby paramedics rapidly transport acute patients to the nearest emergency center with only life-saving prehospital care given; and (2) prehospital-based (or the Franco-German model), whereby the role of the EP is to ride in the ambulances and provide more definitive care in the field [33,34]. In this system, care at the hospital is rendered by a variety of specialists, with the EP helping to triage the patient. Training programs for visiting physicians may need to be adapted to meet their specific needs depending on the type of EM system that their home country wishes to develop. For the purposes of this discussion, the features of a hospital-based model of EM are referenced.

Early in the course of a country’s development of EM, decision makers and physician leaders within the health care system can benefit from a short (2-3 wk) observational exchange program. The purpose of such a visit is to give administrators, department heads, and health care officials an overview of the scope of the emergency medical care delivery system, from the prehospital phase until discharge from the ED or admission to the hospital. These visits focus mainly on administrative and system organizational features, such as paramedic protocols, trauma center criteria, ED triage algorithms, and the EP’s scope of practice. Other areas that may be of interest include clinical pathways, quality assurance, Residency Review Committee residency requirements, Poison Control Centers, and ED nursing duties. Examples of potentially useful activities are listed in Box 3. Certain features of the EM system in the United States may need to be tailored to fit the culture and resources of other countries where EM is still developing. The choices about which aspects to adopt and which to modify or disregard are best left to local decision makers. Training can offer them guidance in how best to make these choices.

A number of teaching institutions offer structured observational EM training programs of varying lengths for international medical graduates. Table 2 contains a listing of known programs in North America, the UK, and Australia, adapted from a recent survey sent via e-mail and fax to EPs in these regions who were known to be involved in medical training (Christopher Kabrel, MD, Boston, MA, personal communication, February, 2004). Some of these institutions may accept qualified individuals into clinical training positions (EM residency or clinical fellowship programs).

Once a country has committed to developing its hospital-based EM system, there is a need to train physicians to function in the new role of EP. Although the development of local EM residency training programs is the optimal long-term solution, it may be useful in the short term to send
Box 3. Suggested activities for non-United States physicians participating in observational EM training programs

- EMS: Visit alarm and dispatch centers, ambulance ride-along, review paramedic treatment protocols, review trauma triage criteria
- ED design: Tour several ED, review physical layout issues
- Triage: Observe triage process, review algorithms and guidelines
- ED nursing: Discuss role of ED nurse, training
- Clinical EM: Shadow different providers (attending, resident, nurse) to understand specific roles
- Clinical Practice Guidelines: Review written guidelines and policy manuals
- Quality Assessment/Improvement: Discuss outcome measures (morbidity, mortality, time-motion, etc.)
- EM education: Attend EM Grand Rounds, Morbidity and Mortality conference, didactic lectures
- EM professional development: Attend national EM conferences
- Toxicology: Visit a Poison Control Center, observe use of Poisindex
- Pediatric EM: Review pediatric EM protocols, use of Broselow tapes/color-coded carts
- EM procedures: Attend cadaver or animal lab for training in various EM procedures
- Medical Information Systems: Observe computerized clinical information systems
- Trauma: Visit trauma center, review protocols, observe team approach to care
- Certification courses: Advanced Cardiac Life Support, Pediatric Advanced Life Support, Advanced Trauma Life Support, etc.

physicians abroad for periods of training ranging from several months to 3 to 4 years (if they choose to pursue EM residency training). In addition to the activities listed in Box 3, emphasis should be placed on clinical skills development.

Many non-United States physicians from countries with EM systems that are “multi-specialty” oriented may be unfamiliar with the role of the EP in the United States “single-specialty” model. They may wonder how one physician can function as an internist, a surgeon, a pediatrician, a cardiologist, an ophthalmologist, an obstetrician, and an intensivist all at the same time. Observing during clinical ED shifts allows the non-United States
<table>
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<tr>
<th>Institution</th>
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<th>Duration</th>
<th>Minimum level of training required</th>
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<td>University of Alberta</td>
<td>Alberta, Canada</td>
<td>Ivan Steiner, MD</td>
<td>U, A, E, O</td>
<td>CF</td>
<td>3-12 mo</td>
<td>Emergency Medicine MD (including residents)</td>
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<tr>
<td>Bellevue Hospital Center, NYU Medical Center</td>
<td>New York, NY</td>
<td>Peter Gordon, MD</td>
<td>PC</td>
<td>E (Toxicology)</td>
<td>1 mo</td>
<td>Medical student</td>
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<td>University of California at Irvine</td>
<td>Orange, CA</td>
<td>Antoine Kazzi, MD</td>
<td>U, E, C</td>
<td>O, D</td>
<td>8 wk</td>
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<td>Washington, DC</td>
<td>Jeffreys Smith, MD</td>
<td>U, A, P, PH, E, O, PC</td>
<td>O, R, CF, RF, VP</td>
<td>O = 2-26 wk, CF = 1-2 y, RF = 1-2 y, R = 3-4 y</td>
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<td>Beth Israel Deaconess Medical Center, Harvard Medical School</td>
<td>Boston, MA</td>
<td>Philip Anderson, MD</td>
<td>U, A, R, O, PC, E</td>
<td>O, R, CF, RF, E, VP</td>
<td>1-12 mo</td>
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<td>Mark Davis, MD</td>
<td>U, A, PH, E, PC, O</td>
<td>R, RF, CF</td>
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<td>Johns Hopkins University</td>
<td>Baltimore, MD</td>
<td>Michael VanRooyen, MD</td>
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<td>O</td>
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<td>Oregon Health Sciences University</td>
<td>Portland, OR</td>
<td>Jerris Hedges, MD</td>
<td>C, O</td>
<td>O, V</td>
<td>No set</td>
<td>Attending MD (any specialty)</td>
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<td>Pennsylvania State University/ Hershey Medical Center</td>
<td>Hershey, PA</td>
<td>James Holliman, MD</td>
<td>U, E, O, PC</td>
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<td>Royal National Surgical Hospital</td>
<td>New South Wales, Australia</td>
<td>John Vinen, MD</td>
<td>U</td>
<td>R</td>
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<td>Emergency Medicine MD</td>
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<tr>
<td>Royal Sussex County Hospital</td>
<td>Brighton, England</td>
<td>John Ryan, MD</td>
<td>P</td>
<td>O, CF</td>
<td>No set duration</td>
<td>Resident MD</td>
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<td>Stanford/Kaiser Emergency Medicine Program</td>
<td>Stanford, CA</td>
<td>Barbara Dahl, MD</td>
<td>U, A, E</td>
<td>O</td>
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<tr>
<td>Western Hospital</td>
<td>Victoria, Australia</td>
<td>Michael Bryant, MD</td>
<td>U</td>
<td>R</td>
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Abbreviations: Setting: U, university hospital; A, affiliate hospital of University; P, private/public non-university hospital; R, clinical research area; L, laboratory; PH, public health school; E, EMS service; PC, Poison Control Center; O, emergency department administrative office; C, computer laboratory. Training: O, observational position; R, residency position; CF, clinical fellowship; RF, research fellowship; V, visiting professorship; D, didactic; E, specialty elective.

physician to see the variety of cases encountered in the typical United States ED and to understand the role of the EP in providing direct care, how and when consultants are involved in providing definitive care, and when patients are referred for follow-up care.

For non-United States physicians to participate directly in patient care during EM training programs in the United States, they must meet requirements for medical licensure in the United States. Graduates of non-United States medical schools recognized by the Foundation for Advancement of International Medical Education and Research and listed in the International Medical Education Directory may obtain limited United States medical licenses for participating in clinical training programs in the United States. Applicants must first obtain certification through the ECFMG, which requires successful completion of Parts 1 and 2 of the USMLE, the Test of English as a Foreign Language (TOEFL), and the Clinical Skills Assessment examination. After completing requirements for ECFMG certification, individuals who have been accepted at an ACGME-approved training program can then apply for the J-1 visa program and medical licensure in the state where they wish to train. Complete details of this process are available from the ECFMG web site [35].

Although this route is somewhat arduous, it allows for a much richer learning experience for the applicant and eligibility for EM residency training. Prospective hosts should contact their institutional international student affairs office for more specific and up-to-date requirements before arranging any formal visitations. Arrangements for even observational visits for an individual may take 6 months or more, with the entire process of setting up an international visitation program requiring a year of preparing documentation. Visas, malpractice coverage, and personal health insurance are other logistic issues that need to be addressed before arranging a clinical rotation involving patient care. The requirements for a rotation of an international medical student through a United States medical school are different from the requirements from residents; the requirements may be as stringent with questions of credits and tuition but do not require ECFMG certification. If assisting in developing EM in a specific country, with formal agreements signed between medical schools, it may be easier to bring medical students who are interested in EM (rather than residents) to the United States for additional training.

Positions in Emergency Medicine residency training programs have become increasingly competitive in the U.S. However, institutions may choose to offer residency positions to qualified IMG applicants based on availability of spots, or agreements with sponsoring institutions in the applicant's home country. In some cases, programs can be approved for additional residency positions depending on institutional resources and patient volumes, as long as these do not compromise the core residency program. After completing residency, this person would then ideally return to their home country as a leader in developing EM there. Although more
difficult, this pathway obviously provides the greatest opportunity for training in EM and has been employed successfully by some countries [27].

Discussion

A wide range of training opportunities exists in the United States for United States medical graduates and international medical graduates interested in pursuing careers in IEM. There is no standardization of training curricula for USMG or IMG programs, although suggestions for each have been proposed [3,27].

IEM is not recognized by the ACGME as a subspecialty area of training within EM. Recognized subspecialties include Toxicology, Pediatric Emergency Medicine, Sports Medicine, and Undersea & Hyperbaric Medicine. One of the barriers to accreditation for IEM fellowship programs is that the body of knowledge relevant to the practice of IEM is not well defined. This is due in part to the broad range of international activities that EPs are involved with, ranging from response to complex humanitarian crises, such as an earthquake in Iran, to setting up treatment protocols for rural health workers in Sudan, to developing EM training programs in Italy.

In general, IEM activities tend to lie along an axis with the goal of delivering international humanitarian relief on the one end and developing emergency medical care delivery systems on the other. Although these goals may seem closely aligned, the contexts in which they are pursued and the skills necessary for achieving them often are not. Prospective USMG fellows should consider where their own interests lie along this axis and should consider the interests of the program director when choosing a fellowship program. The focus of each of the current IEM fellowship programs is somewhat different, with some being more focused on international medical relief work and others being focused more on the development of EM systems and residency programs abroad. As a first step toward accreditation, a consensus needs to be developed among IEM fellowship programs as to what the IEM body of knowledge consists of. An ACEP working group with representation from many of the IEM fellowship programs is currently developing a core curriculum consensus document.

The pursuit of interests in IEM can require a significant input of time, effort, and money, without a clear career pathway at the conclusion of the fellowship. One- and 2-year IEM training programs require the fellow to spend a significant portion of their time overseas, usually doing unpaid or poorly paid “volunteer” work. (Most fellows’ salaries are paid by doing part-time clinical work in the ED at their home institution.) Frequent international travel, especially “post-911,” can be difficult for spouses and disruptive for an individual’s personal life. Although full-time positions with large aid organizations do provide a salary, that income is usually much less than an EM physician can earn in doing clinical emergency medicine. These positions usually require permanent residence outside the country in the
region where the program is taking place. Short-term relief work is usually unpaid (except for food and travel expenses). If a project has a large grant associated with it (e.g., USAID, WHO, etc.), then there are usually funds to pay consultant fees (standard USAID rates are $550 dollars per day plus expenses). These project grants are competitive and are usually awarded to aid organizations with the most experience in a particular activity or region. Graduates from IEM fellowships can aspire to fill these positions, and the experience gained in a fellowship can serve to make these graduates ideal candidates for these positions. Physicians with a great deal of overseas experience can sometimes participate in paid shorter (2-3 wk) projects working with large aid organizations. These physicians are often used to do a brief "needs assessment," surveying a region shortly after a natural disaster or complex humanitarian emergency (e.g., a refugee movement after a war). The goal is to outline the medical needs of the affected population to assist the aid organization in allocating its resources. Graduates of IEM fellowships would also be well suited to apply for these positions. Because of these constraints, the majority of the past graduates of IEM fellowship programs are employed at academic institutions as academic emergency physicians. This allows them to use IEM as an area of academic focus for advancement, receiving grants and publishing articles within the realm of IEM. Being associated with a large university gives the individual more credibility when applying for large aid grants and allows access to the university's greater resources. Most of the current IEM fellowships operate out of a university Center for International Emergency Medicine, which allows for cooperation among numerous individuals who are interested in IEM.

Fellowship training should provide additional knowledge, skills, and expertise for individuals interested in pursuing career paths where this expertise is necessary or significantly enhances their professional career potential. IEM fellowship programs (e.g., USMG) were developed with the goal of training EPs for international relief work, predominantly in the developing world [3]. Although no data have been published on the professional experiences of graduates of IEM fellowship programs, anecdotal experience suggests that a large percentage remains in academic EM practice, often with the goal of establishing new international programs based at United States academic medical centers. Further data need to be gathered on the career paths that graduates of IEM fellowships are choosing so that curricular goals and objectives can be tailored to meet the needs of prospective fellows. Because the potential career paths are varied, IEM fellowship programs are most useful when they offer programs that are flexible in accommodating individual backgrounds and needs.

One of the issues regarding USMG fellowship programs that have been debated is whether or not an MPH degree is necessary. Including an MPH degree mandates a minimum time commitment of 2 years because it would be difficult to fit in all of the other elements of a fellowship, including
fieldwork and clinical ED practice, in less time. An MPH degree is widely perceived as a necessary prerequisite to full-time employment with many international health and development organizations (eg, WHO, ICRC, UN, etc.). However, not having an MPH does not disqualify individuals from working as periodic providers, consultants, or subcontractors for international aid organizations and NGOs. MPH training provides detailed insight into the complex political situations, resource availability problems, and cultural complexities that underlie the health care systems in other nations. Epidemiologic training provides quantitative skills valuable in needs assessment and program evaluation. Expertise in these areas is valuable to individuals participating in international health projects as short-term providers and as long-term professionals.

For individuals who are interested in IEM but unable to participate in a fellowship program, there are several other options. Faculty at academic institutions can concurrently pursue an MPH while doing clinical work. Many institutions provide free tuition for the faculty, and the flexibility of the EM schedule can work around classes. This can be done over an extended period of time. Individuals can arrange to participate in established international organizations, such as MSF or PHR, but need to arrange the time commitment with their departments. Another option is to volunteer for the local disaster management team or relief rescue team. Although fellowship is an ideal way to prepare for IEM work, there are several other viable options for training in IEM.

Summary

The active interchange of intellectual ideas in the quest to improve health care globally will likely be best served by active interchange among physicians around the world. Subspecialty fellowship training programs for United States and foreign graduates will provide a focused path to development of a global network of physicians dedicated to the delivery of high-quality emergency health services.

References


